Annex 12 Training slides on Certification, implementation and accreditation – an overview and introduction



Session 11

Certification, Implementation & Accreditation – An Overview & Introduction



Purpose of the Module

- To create an understanding of the concepts of certification and accreditation
- To get an overview of how to implement GAP leading to certification
- To understand the relation between certification, implementation of certification criteria by producers and the concept of accreditation
- To be in a position to assist countries to work out certification modalities



Contents of the Module

- Terminology and definitions certification and accreditation
- An overview of certification GAP certification, certification body, certification benefits
- An overview of accreditation accreditation boards, benefits of accreditation
- Understanding the steps of implementation in order to get certified
- Interrelation between certification, implementation of certification criteria by producers & accreditation



What is Certification (ISO)

- **Certification**: Third-party <u>attestation</u> related to products, processes, systems or persons
- Attestation: <u>issue of a statement</u>, based on a decision following <u>review</u> (verification of the suitability, adequacy, effectiveness of <u>selection and determination</u> activities, and the <u>result</u> of these activities, with regard to <u>fulfilment of specified requirements</u> by an object of conformity assessment), that fulfilment of specified requirements has been demonstrated



What is Certification (ISO)

- Certification: Third-party <u>attestation</u> related to products, processes, systems or persons
- Attestation: issue of a statement, based on a decision following <u>review</u> that fulfilment of specified requirements has been demonstrated
- Review: verification of the suitability, adequacy, effectiveness of <u>selection and</u> <u>determination</u> activities, and the <u>result</u> of these activities, with regard to <u>fulfilment of</u> <u>specified requirements</u> by an object of conformity assessment



What is Certification (Codex)

<u>Certification</u> is the procedure by which official or officially recognized certification bodies provide written or equivalent assurance that foods or food control systems conform to requirements.

Certification of food may be, as appropriate, based on a range of inspection activities which may include continuous on-line inspection, auditing of quality assurance systems, and examination of finished products



(V) Certification

- · Conducted by an independent third party
- An initial full assessment of GAP implementation followed up by surveillance visits



(W) What is GAP Certification

GAP Certification is verification of practices on the farm that minimize contamination during the production process of farm produce. It covers verification for compliance with all sections of GAP requirements (ASEANGAP or National GAP).

It certifies farmers respect for food safety, environment, safety of farming worker and produce quality.



GAP Certification

Why we need to get certified

- Regulatory requirement
- Voluntary buyer requirement Who can conduct GAP certification
- Government body e.g. SALM, Department of Agriculture, Malaysia; QGAP & – Department of Agriculture, Thailand.
- Private body e.g. JGAP Japan; ThaiGAP - Thailand



Benefits of GAP Certification

- Ensuring quality and safety of product throughout the food chain
- · Gaining market access
- Protection of own-brands of super markets
- Maintaining consumer confidence in products
- · Environmental protection and social welfare an added advantage



Certification Scheme - what it means?

Certification Scheme is the provisions pertaining to GAP Certification or Criteria for recognition of GAP Certification in order to build up the confidence in issuing of certificate.

Criteria to be implemented by producers

- GAP standards requirements
- Certification Body requirements



GAP certification options

- Option 1 Individual farm certification
- Option 2 Group certification

Annex 13 Training slides on Certification – Requirements (individual and producer groups)



Session 12

Certification – Requirements (Individual and Producer Groups)



(Purpose of the Module

- · To create awareness and understanding of the requirements of GAP certification for CB & producers
- To increase the capacity of national governments/ focal points in countries to develop certification requirements for GAP



Content of the Module

- Certification process general requirements (for individual producer and producer group)
- Group certification Certification requirements for producer groups: Management and internal controls
- · Activity on certification process



Certification Scope & Options

Certification to the GAP scheme developed by a country, government or certification body

Scope: the produce, quantity and activities to be included in the verification/review in order to grant the certificate

- 2 Options of certification
 - ➤ Individual/Producer certification
 - ➤ Group/Producer Group certification



Criteria for certification to GAP

- Compliance to the GAP requirements of the country/ scheme (includes regulatory requirements)
- May require samples for analysis under specific conditions
- Compliance to certification body requirements for specific options of certification



GAP Certification

Composed of 2 integral parts, namely

- >GAP requirements or criteria
- ➤ Certification body requirements
 - √ General Requirements for Certification (individual producers and producer group)
 - √ Procedures for Group Producers (Group Certification)



Process of Certification



(Applicant for Certification

Applicant under the Certification Scheme is the producer which can be classified into two categories:

- Individual producer and
- Producer group



Rights & Obligations of Producers

Rights

- Timely services
- Rights to appeal
- Select Options
- Cancel or temporary suspension
- Right to change

Obligations

- Accept auditing plan/requirements
- Select options
- Compliance with requirements
- Notifying change



Application for GAP Certification

Producer information

- ➤ General information name, address and contact details; proof of legal entity or certified identity, details of land held and whether under ownership/lease, details of manpower
- > Production information type of produce, production site, annual production area, whether green house or field production, single harvest/ multiple harvest, since when area under cultivation



Scrutiny by CB

Reviewed for Adequacy

- ➤ If correction needed, immediate notification to applicant
- ➤If complete, acknowledged and Producer ID given by CB



GAP Assessment Process

- Adopt practices for three months at least
- Conduct Self Assessment
- · Once producer is registered, CB proceeds as follows:
 - ➤ Pre assessment (optional)
 - Evaluation(assessment)

Evaluation timings – preferably during



Assessment for option 1

Individual Certification

Producer shall be subject to external audit annually right after producer registration



(Assessment for option 2

Producer subjected to 2 types of audits

- ➤Internal audit by Producer Group on
 - internal control system of producer group
 - · each members of producer group
- External audit by Certification Body on
 - internal control system of producer group
 - selected members of producer group



Criteria for Assessment

Producer or producer group assessed for requirements of

- ASEANGAP and/or National GAP and/or GlobalGAP for all elements
- Certification Body requirements for individual and group certification



(Grant of Certification

- Grant of Certification is based on compliance to certification criteria
- Term of certification
- Certificate needs to specify
 - ➤ General Information:
 - ➤Term of Certification and
 - Scope of Certification



Certification Mark

Application of Certification Mark

Producer, importer, exporter of produce from a GAP certified farm can use the certification mark or logo along with the registration number given by the CB on the publicity materials, websites, brochures, etc but not on the produce or its package



Surveillance

- Surveillance is done annually
- During surveillance following is verified:
 - > Status of compliance to GAP requirements
 - ➤ Internal audit report
 - > Handling & disposal of nonconforming products
 - > Actions taken on nonconformities
 - > Handling of customer complaints
 - > Re-dressal of complaints, if any
 - ➤ Use of Certification Mark
 - ➤ Information on quantity of produce & consignee

Generally at least 1 produce in field/storage



Verification without notification

- For individual certification, verification is annually and may be without notification.
- For individual producers all requirements of scope of certification and for producer groups only ICS need to be verified
- Sample number of producers to be varified is given in scheme (but in many schemes are 10%)



Extension of Certification

Renewal of Certification

- > Submission for renewal of certification by producer
- > Reassessment procedures same as initial assessment
- > CB to review performance based on:
 - ✓ GAP requirements
 - ✓ Certification body requirements
 - ✓ Surveillance audits performance (producer/producer group)



Non- Compliance, Corrective Actions & Sanctions....1

Non Compliance (NC)

Non fulfillment of requirement is called non compliance/deficiency

- Types of Non-Compliance
 - -Non-compliance with GAP requirements criteria
 - Non-compliance with Certification Body requirements



Non- Compliance, Corrective Actions & Sanctions....2

Corrective Actions (CA)

Actions taken on cause of nonconformity to ensure it does not reoccur

- Taken for each identified non conformity
- Taken within declared time



Non- Compliance, Corrective Actions & Sanctions....3

Sanctions

- If corrective actions to NC not taken 3 sequential level actions:
 - Warning
 - Suspension
 - Withdrawal
- Decision on sanctions
- · Certification Body not changed unless non-compliance is corrected



(Appeal and Complaints

Appeal/Complaint can be made if:

- producer does not agree with the assessment decision or sanction
- >producer is not confident of CB

Cancellation of Sanction

>If corrective action taken effectively within prescribed period and notified accordingly



(Activity – Certification System

- Continue with the same groups
- Assume that you are to start a GAP certification body, write what steps you would require for certification of individual farmer certification (option1). Give briefly what documents you would need for each step
- Present to the other groups and open for discussion



Recap of Certification Process

- Applicant
- Application & scrutiny/ review
- GAP assessment/evaluation process
- Grant of certification, surveillance & extension
- Non-compliances, corrective actions (CA) & sanctions
- Application of certification mark



Group Certification – Certification Requirements for Producer Group: Management and Internal Control System



Producer Group

- · The formation of two or more producers of agricultural produces with legal status or natural group
- The production shall be under the same management and internal control system (ICS) under the same policy



Structure and Management

Status

- ➤ Demonstrate legal status or is a natural group with no legal status
- > Responsible for production, management, and the ownership of produce

Administration/ Management Structure

>documented and clearly indicate the relationship among members & producer group



Member's Contract

Written and signed contract between each member of the producer group to cover:

- ➤Individual details
- ▶Farm details
- ➤ obligations
- ➤ sanctions



Producer Registration

Register of the producer group shall define status of each member under GAP Certification and ensure all area of production comply with GAP requirements

Each member shall provide details



(Management and Organization

Producer group to have management structure and appropriate resources

Management structure documented with following details:

- ✓ coordinator for internal control system (ICS)
- ✓ Internal auditors
- ✓ group committee on certification
- Functions and responsibilities



Training

Producer group shall

- rensure all staff are well trained & capable of functioning as per requirement
- > determine knowledge & competency,
- >keep record on qualification & training of designated staff
- > Ensure trained internal auditor & evaluated
- ➤ Ensure system of updating information



💖 Quality Manual

- · Quality Manual to include
 - ➤ Scope of certification
 - Management & internal control
 - > Policy & working procedures
 - ➤ Policy for member's registration
- quality manual regularly verified & updated



Document Control1

All documents to be controlled, these include

- Quality manual (QM)
- Working procedures
- > Recommendation/quidelines on operation
- > Record formats
- External origin documents



Document Control2

Requirements for document control

- >control procedures for all document shall available
- > reviewed and approved
- ➤ Identification system
- ➤ Change control procedure and current status
- Obsolete document control



Record Keeping

- · Records demonstrate the effective control
- Records are retained for at least 2 years, longer if required – based on contractual/ legal requirements
- · Records to be legible, stored and easy to retrieve
- Electronic records



(Complaint Management

- System to effectively manage customer complaints
- Procedure to be documented cover complaint receiving, complaint registering, problem identification, causative analysis, solution and follow up
- Records relating to complaints to be maintained



Internal audits1

- Internal Audit is self assessment of adequacy of compliance to GAP requirements, management and internal control system of each member
- Internal Audit

- > conducted at least annually
- > internal auditor competent & independent - assessed during external audit
- > Records of plan, findings (checklist) & corrective actions



Internal audits2

- Internal auditor designated each farm/plot
- Review Process and producer status included in internal audit report
- New member given first priority
- Internal audit report maintained

 Internal audit report to cover certain information (next slide)



Internal audits3

- > Information to be covered in internal audit report :
 - √ name of registered producers and production area
 - √ signature of registered producers audited
 - ✓ Date of audit
 - √ name of internal auditor
 - √ registered produce
 - √ result of internal audit
 - ✓ each audited checklist to give remarks/ recommendations
 - ✓ detail of non-compliance with requirements & time for corrective action
 - ✓ On the basis of the internal audit report, decision on whether producer is in compliance



Competency of Internal Auditor

- Internal Auditor shall have capability to assess internal control system of producer group as well as each member's farm/plot
- Auditor competency
 - ➤ Education,
 - ➤Technical Qualification and Training
 - ➤ Working experience at least 2 years
 - **≻**Skills



Non-Compliance & Corrective Action **System**

CA defined for NC identified

- > NCs evaluated for root cause
- CA and timeframe for action defined
- > Responsibility for corrective action defined

Sanctions and Infringement

- Sanctions for not taking timely CAs
- Sanction procedures for warning, suspension and withdrawal defined
- Suspension/withdrawal of registered member
- Non-compliance, corrective action and decision process to be recorded



Identification & Traceability of **Produce**

- Produce traceable to producer and their farms
- · Procedures for identification and traceability
- Traceability to be from production/ purchase of planting material to sale of produce
- Effective systems & procedures to reduce risk of wrong labeling or mixing up of GAP and non-GAP produce.



W Withdrawal of Certified Produce

Producer group shall have written procedures of withdrawal of certified produce - cover form of violation which will induce withdrawal, responsible person for withdrawal process, notification to customer and CB and arrangements for renewing certification



Sub-contractor

- Sub-contracting procedures
- Sub-contractor competency
- Sub-contractor operation



Recap for Group Certification

- Producer group
- Organization structure & management
- Training
- Quality Manual
- Document control
- · Record keeping
- Complaint management

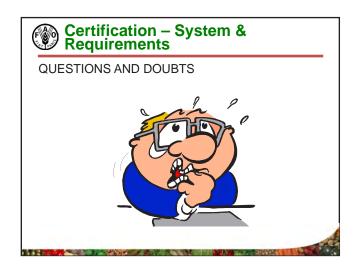
- Internal audit
- Competency of internal auditor
- Identification & traceability of product
- Sanctions
- Withdrawal on certified produce
- Sub contractor



Activity – Certification System

- Continue with the same groups
- Your GAP certification body would now like to expand their scope to certify producer groups. Write what additional requirements would be applicable to producer group for you to grant them certification.
- Present it to the other groups and open for discussion







Session 13

Implementation by Individual **Producer and Producer Group**



Purpose of the Module

- To create awareness and understanding on the requirements for GAP implementation
- To increase capacity of national governments/ focal points in countries regarding requirements for GAP certification
- To assist producers to implement GAP with the focus on certification requirements



Overview of the Module

- Requirements for implementation of GAP
- Documents required for GAP implementation and certification
- Types and structure of documentation
- Document and record control procedures
- Activity of developing samples of documents and records
- Guidance on Development of Internal Control Systems (ICS) for Producer Groups



Implementation of GAP

Producer needs to implement four sets of requirements

- ASEANGAP/ National GAP requirements
- Certification body procedures for certification
- Applicable regulatory requirements of country and where produce would be sold/traded
- · Customer requirement

Producers own set of requirements to ensure system would stay together and improve (system binding documents)



Implementation of GAP

Implementation of requirements need to be

- consistent practice same way and every day
- effective achieve its purpose
- demonstrable able to show that producer follows them

How can this be done??



By consistently.....

Understanding the requirements of GAP scheme and GAP certification

- Encouraging implementation of requirements
- By developing documentation in line with implementation practices
- Training all people concerned in the production chain on the understanding of requirements and new aspects to be implemented
- Reviewing the practices & starting all over





Documentation

Documentation includes

- Documents will guide producer or producer group into what needs to be done & how to do it
- Records tell what has been done on daily basis which are
 - useful information for farmer for own recollection
 - demonstrate implementation of requirements

Review of these would also help improve system



What documents needed

All documents to demonstrate how the requirements are being followed would be needed. Remember

- documents number too many or too less can both be harmful
- · document detail too elaborate or too scanty can both be harmful

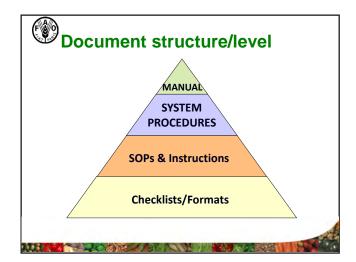
Documents need to be appropriate & efficient



Types of documents

- Manual outlines the entire operation to be followed by producer or producer group
- **Procedures** give a general guideline of how to perform a task, can refer to a SOP for specific task e.g. Procedure to conduct review
- · Standard operating procedures (SOP) or instruction – give specific instructions on how to do a specific task e.g. cleaning of spraying equipment
- Checklists "aide memoire"

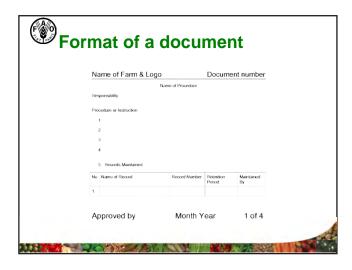
• Formats – prompts record keeper what details are to be kept





Documents need to be controlled

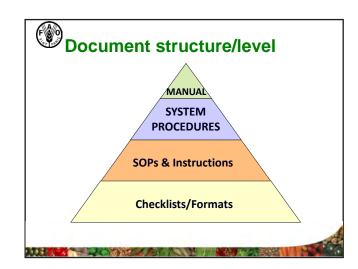
- · All documents to be approved
- · Current version to be identifiable
- Documents need to be numbered approval number, volume number, page number
- Documents need to be distributed to the people who should be having them
- Changes to be reapproved by same authority which initially approved them
- Obsolete documents to be removed from circulation





Types of documents

- Manual outlines the entire operation to be followed by producer or producer group
- Procedures give a general guideline of how to perform a task, can refer to a SOP for specific task e.g. Procedure to conduct review
- · Standard operating procedures (SOP) or instruction – give specific instructions on how to do a specific task e.g. cleaning of spraying equipment
- · Checklists "aide memoire"
- Formats prompts record keeper what details are to be kept





Documents need to be controlled

· All documents to be approved

- · Current version to be identifiable
- Documents need to be numbered approval number, volume number, page number
- Documents need to be distributed to the people who should be having them
- Changes to be reapproved by same authority which initially approved them
- Obsolete documents to be removed from circulation





Documents for GAP implementation include

- · Documents required by GAP scheme (National GAP, ASEANGAP or any other GAP) that the producer or producer group would like to be certified against
- Documents required by Certification Body individual or group producer (based on option)
- · Documents required for system management -Management System Documents



- Farm plan
- · Risk assessment record
- · Personal hygiene instructions
- · Waste management plan
- Job responsibility
- · Cleaning and pest control plan
- · Quality Plan





Quality Plan

A quality plan contains the following information:

- · Process steps What steps are involved in growing, harvesting and postharvest handling?
- · Quality hazards What quality loss can happen if something goes wrong during the process?
- Causes of quality loss What can go wrong during the process to cause the quality loss?
- Good agricultural practices What control measures, monitoring activities and record keeping are needed to prevent or minimize the risk of the quality hazard occurring?



By consistently.....

- Understanding the requirements of GAP scheme and GAP certification
- Encouraging implementation of requirements
- By developing documentation in line with implementation practices
- Training all people concerned in the production chain on the understanding of requirements and new aspects to be implemented
- Reviewing the practices & starting all over



System management documents (for individual producers)

- Optional
- Why maintain own systems
- Same as those required by Producer Group
 - ✓ Internal Audit procedure
 - ✓ Management Review procedure
 - ✓ Document control procedure
 - √ Record control procedure
 - √ Corrective action procedure
 - √ Subcontracting



(V) Activity 1 – Draft a Procedure

- · Form into four or five groups
- · Each group is assigned one procedure that is required to be maintained by producers
- The group to make a draft procedure following the document control procedure.
- Present to the other groups and open for discussion



Records for GAP implementation include

- Records required by GAP scheme
- Records required by Certification Body – individual or group producer
- Records required for system management - Management System records



Records required by GAP Scheme

- Farm plan
- Planting material
- Irrigation Records
- Chemical inventory
- · Spray record
- Pest and disease monitoring record
- · Postharvest chemical record

- · Chemical authorization form
- Fertilizer and soil additives record
- Harvesting and packing record
- Job responsibility and training record
- Cleaning and pest control plan
- · Corrective action report
- etc.....



Records required by CB

- · Individual producers
- Producer group
 - ✓Internal Audit Records
 - ✓ Management Review Records
 - ✓ Document Control Records
 - ✓ Record Control Records
 - √ Corrective Action Records
 - ✓ Identification and Traceability procedure
 - ✓ Revocation/withdrawal procedure
 - √ Subcontracting procedure



System Management Records

Same as required by the Producer Group records by CB

- ✓ Internal Audit procedure
- ✓ Management Review procedure
- ✓ Document control procedure
- √ Record control procedure
- √ Corrective action procedure



Records need to be controlled

- · All record formats preferably to be approved
- Current record format to be identifiable and in
- · Records need to be numbered
- Changes to record generally not permitted, changes if made need authorization and reason for change
- · Records need to be legible and retrievable
- · Records need to be retained for a predefined time period eg ASEAN GAP requires for 2 vears



Sample Record

Postharvest Chemical Record KIKI Farms Ltd

Record No. KFL/R/15

Business/Grower Name:

Chemical	Tank Size	Tank Mixing Rate		Application Method
		Fresh	Top-up	

September 2012



(Activity 2 – Developing a Record

- · Form into four or five groups
- Each group to be assigned couple of records required to be maintained by producers
- The group to make sample records following the record control procedure
- Present to the other groups and open for discussion.



Guidance on Development of Internal Control Systems for Producer Groups

Terminology

- ICS Internal Control System
- Producer group is a group of farmers of which members organized themselves as a group of producers for a crop/ crops
- NC Non-Compliance against specified requirements
- RA risk assessment
- · CCP Critical control point

Guidance for ICS Manual Development

- · ICS manual is a prerequisite for group certification
- Distribution of the ICS manual
 - ➤ available to members of GAP Approval Committee and internal auditor.
 - ➤ available upon request to farmers/ operators/ organizations that are parts of scheme
- · Improvement and updating of the ICS manual
 - >Reviewed on a regular basis and updated when necessary
 - > Changes communicated to all concerned

Development of Suitable ICS

- Identify qualified personnel for ICS and ensure training on both GAP and ICS development
- Identify farmers who want to participate in the GAP certification scheme & support awareness/ training on GAP
- Develop criteria & conditions for ICS & relevant documents/ forms to be included in the ICS Manual (initially simple)
- ICS staff to be fully aware of all minimum requirements prior to initial audit
- All documents (criteria and conditions, working procedures, forms, etc.) and operations of ICS staff to be gradually improved over time

Brief Description of Structure &

- ICS manual to contain an overview of GAP Scheme to cover
 - An overview of farms including the GAP sites and agricultural practices of participating farmers.
 - ➤ Overview of purchasing, handling and exports all the steps that take place from harvest until the final sale of the product to another entity

Risk Management

- · Basic Risk Assessment
 - > A detailed initial risk assessment (RA) must be done
 - > The RA to identify risks at farm level, during purchasing, processing or (export), transporting, as far as the product is under responsibility of the ICS operator
 - > The ICS covers all measures to minimize identified risks
- Critical Control Points & Continuous Risk Management
 - > The initial RA is the first step toward raising awareness of critical aspects to be covered in the ICS
 - > Recommended to repeat RA exercise regularly
 - > ICS operator to be aware of critical control points

Internal GAP Standard

- Internal GAP Standard is the reference standard for internal control
 - > includes the farm production requirements of the relevant external regulations/standards for certification
 - > Presented in adequate form for understanding by ICS staff
 - > requirements of internal standard (& practical implications for farmer) communicated clearly to all farmers in local language
- · The internal standard to address the following:
 - $\boldsymbol{\succ}$ production units/crops under farm management & certification
 - Farm practices (e.g., seeds, fertilization & sustainable soil management, plant-protection)
 - > Harvest/ post-harvest procedures
- Scope of certification All regulations/ standards pertaining to GAP certification to be listed in ICS manual.



Farm Control & Approval Procedures 1/3

- · Registration of new farmers
 - > All farmers under the system (to be certified) need to be formally registered as GAP farmers.
 - > Total area under each farmer management, crops with area & basic farming methods to be recorded in a "farm data sheet"
 - > A commitment declaration (contract) signed between each farmer and ICS operator in a language understood by farmer
 - > An overview map (village or community map) showing each farm location
 - > If farm data changes considerably, a new farm data sheet to be completed, or data in file updated
- Yield Estimates
 - > yield estimate for the crop of each farmer provided



Farm Control & Approval Procedures 2/3

Internal Audit

- > Each registered farmer is assessed by the internal control at least once a year by qualified internal auditors
- > Audit in presence of the farmer (or representative), include visit of whole farm, storage of inputs/ harvested products, brief check of post-harvest handling
- > Visit to be documented in "farm audit checklist", signed by internal auditor and farmer /representative
- Major NCs immediately reported to the ICS Manager and measures taken as per internal sanction procedures



Farm Control & Approval Procedures 3/3

Internal Approval Procedures

- Procedures to approve or sanction farmers defined
- Non-compliances and sanctions
 - ➤In case of non-compliances, appropriate corrective or mitigating measures by the ICS
- · Documentation of the ICS

The internal control is to be documented and all relevant documentation for each certified farmer to be available for audit



Organization and ICS Personnel

- Organization and ICS Personnel
 - ➤ A person to be made responsible for each procedure or task of the ICS and staff aware of their responsibilities and qualified for the job
- Organizational chart
 - An organizational chart (or similar) of the operator's organization to be available
- ICS Coordinator (ICS Manager)
 - >There has to be an assigned ICS coordinator



Organization and ICS Personnel

- Internal Auditor
 - > There should be sufficient qualified internal auditors
- GAP Approval Personnel
 - > There has to be a qualified person ("GAP Approval Manager") or certification committee
- Field officer (extension specialist, field advisor)
 - Field officer position is very important as training of farmers is crucial in GAP
- Conflicts of interest
 - > The ICS personnel must not have any conflicts of interest that might hinder activities



Training

Training of ICS personnel

- Each internal auditor needs to receive at least one training per year by a competent person
- Training of farmers
 - Most important aim of GAP certification is to improve the farmer's knowledge & understanding of GAP



Purchasing, Handling, Processing, Export

- The activities of purchasing, handling, processing and export are important for the operator who will buy the produce from certified smallholders, process and store these products and market them as GAP product
- The organization that will market the GAP products needs to define procedures in order to guarantee the integrity of the certified product in all steps of product flow and avoid mixing between different qualities (GAP/non-GAP)



Purchasing, Handling, Processing, Export

Purchasing Procedures

- The purchasing procedures need to ensure the integrity of the GAP produce at the critical interface of farmer purchaser
- · Storage and Handling Procedures
 - During all handling of GAP produce the GAP status of the produce and compliance with respective documentary requirements of the applicable GAP standard must be ensured



Purchasing, Handling, Processing, Export

GAP Processing

➤ During all processing of GAP produce, the GAP status of the product and compliance with respective documented requirements must be ensured. Central Processing Units are always subject to full external audit by the CB

GAP Exports

➤ Export of GAP produce is according to certain standards (e.g EU Regulation) - subject to inspection by certification body



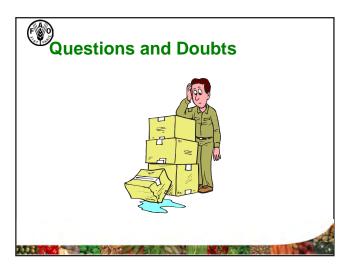
Purchasing, Handling, Processing, Export

- Purchasing, Handling & Processing Personnel
 - >purchasing officers are in charge of ensuring correct purchasing of GAP produce from farmers
 - it may be necessary to specifically assign a GAP warehouse manager who understands the GAP handling procedures
 - If there is a processing unit operated by the ICS operator it may be necessary to specifically assign a GAP processing manager



External Audit and Certification

- During the external audit by the CB, the effectiveness of the ICS will be evaluated
- The external auditor re-inspects a certain number of farmers
- The percentage of external control will be determined by CB on the basis of a risk assessment



Annex 15 Training slides on Field trip





Purpose of the Module

- To observe the implementation of GAP at some certified farms both individual and producer group during various stages production, harvesting and postharvest handling of fresh produce
- To observe the documentation (procedures and records) maintained by the GAP certified producer
- To compare the good agricultural practices implemented at the location(s) visited with the requirements of ASEANGAP
- To assess the benefits of GAP implementation and certification for producers



Overview of the Module

- Visit to certified farmers both individual and group
- Presentation and field trip.
- Sharing experience of GAP implementation & certification with special reference to bottlenecks /challenges, evaluation of benefits of Gap certification.
- Documents Seeing all the documents maintained for GAP certification (individual producer /producer groups) - to include risk assessment, working instructions and system procedures
- Records being maintained for GAP certification
- Practices and infrastructure infrastructure of chemical storage, washing and disposing extra chemical made and equipment washings, drainage system, handling of produce from harvest, post harvest techniques used at the pack houses like washing, grading, waxing or pruning, pre cooling etc



Instructions

The following points to be observed during the visit:

- Remember you are guests at their location with the intent to learn
- Stay out of the way of workers and do not disturb their activities
- Obey signs or instructions if present
- Do not touch produce

- Avoid asking inappropriate questions, or make unsuitable comments or gestures to the farmer or workers
- Observe only and do not comment or criticise
- Stay with your group and do not wander about alone, and
- Make sure you and your group members board the transport as planned



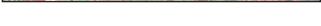
Preparations for field visit

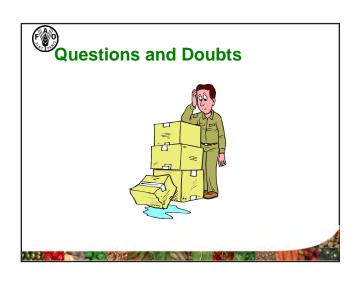
- · Read through checklists and add any additional points
- · Carry checklists



Discussion of field visit

 Presentation by participants, review & discussions





Annex 16 Training slides on Accreditation – Its Importance and requirements



Session 15

Accreditation - Its Importance and Requirements



Purpose of the Module

- · To create awareness and understanding of the importance of accreditation
- To build an understanding of governments/ certification bodies of the requirements of accreditation



Overview of the Module

- · Understanding accreditation
- · Accreditation standards of ISO for various types of certification activities
- Steps of accreditation with accreditation requirements as given in ISO/IEC 17065



Accreditation and Certification

International Accreditation Forum

Accreditation Board (Body)

A certificate issued in one country Certification Body

to be acceptable every where in the world **Organization**



• Accreditation is "third party attestation related to a conformity assessment body conveying formal demonstration of its competence to carry out specific conformity assessment tasks"

*ISO/IEC17000 Conformity assessment -Vocabulary and general principles



Accreditation

- Accreditation is the preferred mechanism for ensuring public confidence in the reliability of activities that impact on health, welfare, security and the environment
- Accreditation gives consumers confidence through ensuring consistent standards in the quality and safety of products or services purchased.

Accreditation

- · Accreditation is an essential tool for decision making and risk management.
- Organizations save time and money by selecting accredited certification body.
- Accreditation is objective proof that organizations has competence to comply with best practice.
- · It is the internationally recognized system that is used to develop and sustain standards of performance



- The Accreditation Boards accredits organizations operating in
 - inspection
 - management systems certification,
 - product certification.
 - personnel certification,
 - Testing and calibration laboratories.

Depending on type of certification

- · A CB will implement requirements from these
 - > ISO 17020 General criteria for the operation of various types of bodies performing inspection
 - ➤ ISO 17021 Conformity Assessment Requirements for bodies providing audit and certification of management systems
 - > ISO 17024 Conformity Assessment. General requirements for bodies operating certification of
 - > ISO 17025 General Requirements for the competence of Testing and calibration laboratories
- > ISO 17065 General requirements for bodies operating product certification systems



GAP Certification Body

GAP certification body need to align their systems including certification process to the requirements of ISO/IEC 17065

In the area of product certification, Accreditation Boards accredit certification bodies who certify the quality of a product. The word "product" is used in its widest sense, and includes processes and services



To become Accredited Product Certification Body

- · A product certification body must be able to demonstrate its competence to assess and certify the products presented to it.
- The certification body must comply with ISO/IEC 17065
- · Certification body can apply to any accreditation board



Certification system may include

- Type testing or examination
- Testing or inspection of samples taken from market or producers stock or combination of
- Testing and inspection of every product or of particular product whether new or already in
- Batch testing or inspection
- Design appraisal

ACCREDITATION REQUIREMENTS AS PER ISO/IEC 17065



General Requirements of CB

- Be a legal entity held legally responsible for its activities
- Have legally enforceable certification agreement with responsibilities of CB and clients
- Control the use of licences, certificates & marks of conformity
- Certification activities shall be undertaken impartially
- Have adequate arrangements to cover liabilities from its operations - have adequate finances for operations
- Maintain confidentiality of all client information
- Information to be publically available details of certification scheme, fees, rights and duties of clients, handling complaints & appeals



Structural Requirements

- Structure to safeguard impartiality
- CB shall document its organizational structure with duties, responsibilities & authorities of management, certification personnel & committees
- Responsibilities & authority for all activities to be identified
- · Have formal rules of appointment, TORs for any certification committees
- Mechanisms to safeguard impartiality to be documented



Resource Requirements

- · CB to employ or have access to sufficient personnel with necessary competence
- Procedure for management of competencies to be in place
- Records to be maintained on personnel involved in certification process
- Personnel to sign contract to commit to independence, impartiality & confidentiality
- · Outsourcing & use of external resources provided for subject to conditions



Process Requirements1

- Application
- Application review
- Evaluation
- Review
- Certification decision
- Certification documentation
- Directory of certified products
- Surveillance
- Changes affecting certification
- Termination, reduction, suspension or withdrawal of certification
- Complaints and Appeals



(Process Requirements2

Application & Application review

- Information collected through application form/ other means
- · Application information to cover
 - products to be certified.
 - > standards against which certified.
 - > details of client (activities, resources, labs/ inspection facilities, etc)
 - Any outsourced process
 - > Other information such as location, contact personnel for evaluation & surveillance
- CB to review for sufficiency of information, resolve any differences in understanding, scope of certification defined, CB has competence/ capability/ means to do certification





Process Requirements3

Evaluation & Review

- · Evaluation against scope of certification and certification scheme requirements
- · CB to have plan for evaluation, assign personnel, ensure availability of information/documentation.
- · Client informed of NCs & once corrected evaluation completed
- · All activities documented before review
- Review by an independent person not involved in evaluation – decision to be recorded



Process Requirements4

Certification decision

- · Authority with CB,
- Either 1 person or committee assigned independent ie not be involved in evaluation
- If decision not to grant certification client to be notified with reason

Certification documentation

Formal certification document to be given to client - with details of CB, client, certification scope, date of grant & expiry of certification, signature of authority

Directory of certified products

To contain identification of product, client, standards to which conformity



Process Requirements5

Surveillance

- To be laid down in certification scheme
- To include periodic surveillance of marked products

Changes affecting certification

 In case of new or revised requirements that affect client - need to communicate to client & verify clients actions



Process Requirements6

Termination, reduction, suspension or withdrawal of certification

- CB to specify conditions for all above
- Shall have procedure to
 - >Grant, maintain, withdraw & suspend certification
 - >Extend or reduce scope of certification
 - Re evaluate in event of significant changes



Process Requirements7

Records (Process & Systems requirements)

- Records demonstrate that certification procedures effectively fulfilled
- · Procedures for identification, storage, protection, retrieval, retention time & disposal to ensure integrity of process & maintain confidentiality
- · Retention period of records should minimum be a current & previous cycle; or as required by CB or law
- · Procedure for access to be consistent with confidentiality



Process Requirements8

Complaints and Appeals

- A documented procedure for receiving. evaluating and deciding on complaints and appeals
- Complaints & appeals to be recorded & tracked including actions taken
- · Acknowledged on receipt and formal notice of outcome at the end to be given



Management Systems Requirements...1

- · 2 options
- Option A address requirements
 - General management systems documentation
 - > Control of documents
 - > Control of records
 - ➤ Management review
 - ➤ Internal audit
 - > Corrective actions
- > Preventive actions

Option B –
establishes &
maintains a
management
system as per ISO
9001



Management Systems Requirements...2

Documentation

- Establish, document & maintain policies & objectives for implementing requirements of the standard and certification scheme
- Evidence for top management commitment to management system & its effectiveness
- Responsible person for establishing, implementing & maintaining Management system & reporting to top management
- All documents, processes, systems, records referenced in management system
- All personnel to have access to documents necessary to their functions



Management Systems Requirements...3

Control of Documentation

- CB shall establish procedures to control all documents (internal/external) that relate to its certification functions
- The procedures to define controls for
 - > approving documents for adequacy,
 - > reviewing & updating,
 - > current revision status identified,
 - > available at point of use,
 - > remain legible & identifiable,

- > documents of external origin identified & distribution controlled
- > Prevent unintended use of obsolete documents



Management Systems Requirements...4

Control of Records

- Records demonstrate that certification procedures effectively fulfilled
- CB shall establish procedures to control identification, storage, protection, retreival, retention time and disposition of records
- Establish procedures for retaining records for a time period based on contractual and legal requirements



Management Systems Requirements...5

Management Review

- CB to review management system at defined intervals; atleast yearly, records of review maintained
- Inputs for review to include internal/external audit results, feedback from different sources, preventive/ corrective actions, follow up of previous reviews, appeals/complaints, etc
- Review outputs decisions/ actions on improvement of Management systems, improvement of CB towards requirements of standard, resource needs



Management Systems Requirements...6

Internal Audits

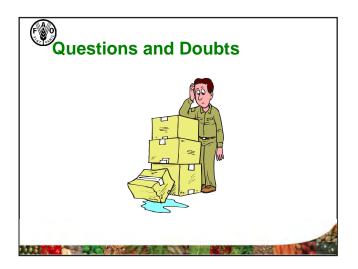
- CB to establish procedures for internal audits to verify effective implementation of management system
- · Atleast yearly all covering all procedures.
- Ensure outcome of audit communicated; corrective actions taken in timely & appropriate manner, opportunities for improvement identified & results documented/recorded



Management Systems Requirements...7

Corrective and Preventive Actions

- CB to establish procedure for identification & management of non conformities and taking corrective & preventive actions
- Take actions to elimimate causes of NCs or potential
- Procedure for CA cover identifying, determining cause, correcting, evaluating & implementing actions,& reviewing effectiveness of corrective & preventive actions (CA & PA) taken



Annex 17 Training slides on Preparing a certification body for setting up GAP certification and the accreditation process



Session 16

Preparing a certification body for setting up **GAP Certification and the accreditation** process



Purpose of the Module

To assist government/certification bodies to set up a system for GAP certification in line with accreditation norms and requirements



Overview of the Module

- · Identification and deciding on the certification body
- Preparing the certification body for GAP certification
 - ➤ Management systems requirements
 - ➤ Certification process systems
- The process of getting accredited



Identify and define CB

- Decide/ choose the entity that will function as a GAP certification body
 - Can be governmental
 - Can be private
- The entity needs to be a legal entity and needs to define its structure and organization to ensure it meets with the requirements of independence, impartiality and non-conflict of interests
- Ensure its financial stability and arrange for liability cover



Preparing CB for GAP Certification

- Define & document the organization structure with competency required & roles, responsibilities and authorities of various personnel
- · Develop the recruitment process and recruit as per organization chart
- · Develop organization policy for quality, its objectives and management system
- · Management system to be documented in terms of Quality policy, objectives and procedures and meet requirements of ISO 17065



Certification Body to develop....

- · Management Systems required to consistently maintain an impartial efficient and effective certification system
- Certification Process Systems required to verify the effective implementation of GAP requirements by the producer or producer group leading to certification





Develop Management systems

Components of a management systems to be developed include

- · General management systems documentation (manual, policies, definition of responsibilities, etc)
- Document and record control procedure
- Procedure for handling non conformity and corrective and preventive actions
- · Procedure for handling customer complaints, appeals and disputes
- Internal audit procedure in line with ISO 19011
- Management review procedure



Basic procedures/ materials to be developed...1

- Marketing material giving up-to-date description of the GAP evaluation and certification process
- Methods/ process of receiving enquiry from individual producer or producer group and defining both these and their requirements
- Application method/ process along with application format with all information regarding applicant as required by ISO/IEC 17065 (products, standards against which certified, details of client such as manpower/ labs/ outsourced process /location, etc)
- Method / process of evaluating the enquiry to ensure CB capability and scope



Basic procedures/ materials to be developed...2

- Method of calculating the assessment/ evaluation man-days
- Method / process and format for proposal or contract with producer or producer group including fees, terms and conditions
- Method / process of selecting auditors for the assessment/evaluation, their roles & responsibilities, their competency required, evaluation and monitoring methods
- Procedure for announcing and assessment/ evaluation date and time table giving details of auditors allocated for the assessment.



Basic procedures/ materials to be developed...3

- · Procedure for actual assessment including
 - Opening meeting
 - Assessment including checklists
 - Non conformity reporting and report writing
 - Closing meeting
- Procedure for evaluating/ reviewing the report & recommendation by persons not involved with actual assessment - Decision on certification
- · Procedure & conditions for granting maintaining, extending, terminating, suspending and withdrawing certification



Basic procedures/ materials to be developed...4

- Procedure for enabling surveillance to be carried out in accordance with the applicable criteria to certification system
- Procedure for changes in certification requirements
- Procedure for use of Licences, certification and mark of conformity - to include terms & conditions
- If need for subcontracting, procedure for the same



Basic procedures/ materials to be developed...5

- Procedure for determining, maintaining and upgrading competency of persons involved in certification process – scrutiny of application, planning audit, auditors, decision maker
- Procedure for maintaining confidentiality
- Procedure for complaints and appeals

Once the procedures are documented and implemented for a couple of certifications, apply for accreditation



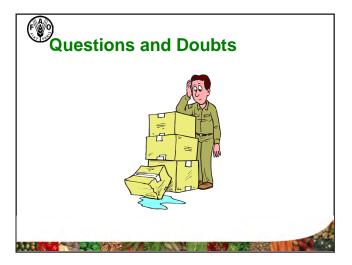
- · Keep the same four or five groups
- You are a GAP certification body, you have decided on the steps for certification of individual farmer certification (option1) and producer group (option2). Give briefly the procedure for following
 - ✓ Application method and format
 - ✓ Selecting auditors
 - ✓ Handling complaints, appeals and disputes
 - ✓ Confidentiality requirement
 - ✓ Terms and conditions for use of Licences, certificates & mark of conformity
- Present to the other groups and open for discussion



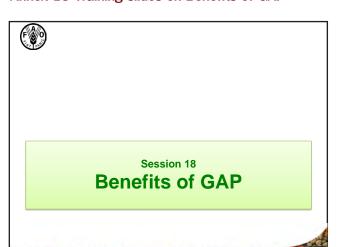
- Enquiry
- Application
- Pre-Assessment
- Assessment document review, office assessment and witness assessment
- · Office assessment includes:
 - > opening meeting
 - assessment
 - > evaluating results
 - > closing meeting



- · Clearance of non conformity
- · Recommendations to accreditation board
- Evaluation of recommendation and award of accreditation
- · Maintenance of accreditation status
- Extending scope if accreditation
- ISO/IEC 17065 Requirements related each of the steps needs to be followed



Annex 18 Training slides on Benefits of GAP





Purpose of the Module

 To illustrate the benefits of implementing GAP and being GAP certified



Overview of the Module

 Benefits of implementing and certifying to GAP



Benefits

- GAP implementation and certification offers three primary benefits
 - > economic risk reduction,

- > improved market access opportunities, and
- improved fresh fruits and vegetables safety and quality



Benefits

- Economic risk reduction
 - The risk of large economic losses—such as a significant drop in sales (especially if contaminated produce is traced to the farm operation), damage to the farm's reputation, and potential lawsuits—is also reduced with GAP implementation and certification.
 - Another important, but subtle, benefit of GAP adoption and certification is what economists call the "positive externality" effect to the entire fresh-produce industry.



Benefits

- Improved market access opportunities
 - GAP certification opens markets for producers to expand sales to major supermarket chains, school systems, restaurants, and other market outlets.
 - Many retailers and foodservice buyers now require third-party GAP certification as a condition of purchase.
 - Many importing countries under their SPS measures require food safety esp. related to chemicals (pesticide residues) and heavy metal (cadmium, lead, mercury etc.)



Benefits

- · Improved safety and quality
 - Understanding and implementation of good agricultural practices to improve the safety and quality of the produce
 - > Use of efficient and effective systems for pest control, irrigation systems etc.
 - > Traceability of produce from the farms
 - Availability of information in form of documents and records to review/analyze and improve. These would also help produce to demonstrate "due diligence"



Benefits vs Costs

- Weighing against the potential benefits of GAP adoption and certification are the following costs:
- > cost of adopting GAPs can include
 - large capital investments, such as water purification equipment,
 - ✓ or more moderate expenditures, such as training workers to improve hygiene, upgrading recordkeeping technologies, testing produce for specific hazards like pesticide residues, heavy metals etc.
- cost of third-party GAP certification is hiring the certifier.



Understanding Benefits

- GAPs actually won't increase consumer demand for fresh produce unless growers let buyers know that they have taken steps to improve food safety on their farms.
- Third-party GAP certification offers a way for growers to let buyers know that they follow appropriate food safety practices on their farms.
- Growers must measure the economic cost against the benefits before deciding whether to pursue certification.



Marketing aspects



International Fruits & Vegetables Market -

- The EU is the leading destination (60% of fruits imports) as well as source of supply in the global fruit and vegetable trade
- Spain, Italy, the Netherland, France, Ecuador and the United States, together account for 54% of sales by value
- · Major fruits in international market are oranges, apples, grapes, bananas, peaches, pears and pineapples



Fruits & Vegetables Market -International

- · The largest single vegetable in international trade is tomatoes, which account for 17 percent of the total.
- The category of beans, peas, and lentils accounts for another 14 percent.
- International trade in fruits and vegetables has expanded at a higher rate than trade in other agricultural commodities, particularly since the 1980s.



Fresh Fruits & Vegetables – Market

- According to FAO data, from 2005 to 2009 the world trade of fruits and vegetables enjoyed a dynamic export growth rate of 42%, from US.\$ 112 371 million to 159 680 million
- world exports of fresh vegetables increased from US \$ 1 788 millions to 2 800 millions (+ 56%)
- world exports for processed vegetables (in vinegar) increased from US \$ 5 248 millions to 6 946 millions (+ 32%)



Fruits & Vegetables Market - Regional

- ASEAN is recognized as the center of origin for a number of cultivated tropical fruits, major fruits produced are Banana, Mango, Pineapple
- Over fifty different vegetables species are commercially grown and traded in the ASEAN region, major vegetables produced are chili pepper, tomato, yardlong bean, cabbage, shallot, cucumber, eggplant, kangkong, bulb onion, Chinese cabbage, bamboo shoots



Where to sell fruits & vegetables?

- **Domestic Market**
 - Traditional markets individual shops in market places (wet markets)
 - > Supermarket chains or organized retail
- International Market
 - > Organized Retail
 - Hotels, Foodservice
 - > Exports to Countries with High-Value Markets
- Choices
- > Exports to "less discriminating" markets
 - "Business as Usual" is acceptable for now, but this is a low-value market segment that will decline over the next decade
- Export to high value markets tremendous pressure to improve quality and safety standards in order to participate in this more lucrative and growing market segment



Strengthening Competitiveness ...1

By fulfilling requirements

For Domestic Market

- ✓ Consumer requirements on consistent quality parameters like variety, shape, size, colour, maturity, no damage/blemishes
- ✓ Customer (supermarket) requirements on safety and quality parameters



Strengthening Competitiveness ...1

By fulfilling requirements

- For International Market
 - ✓ SPS requirements of importing country Pesticide residue MRLs, heavy metals contents, permissible bacterial loads, fumigation, traceability requirements etc.
 - √ Customer (supermarket) requirements on safety and quality parameters in additional or more stringent to above regulatory requirements, may additionally require environmental & worker safety
 - ✓ Consumer requirements on quality parameters



SPS Requirements

 The SPS Agreement of the World Trade Organization (WTO), which entered into force on 1 January 1995, allows importing countries to adopt scientifically based measures in order to protect human, animal and plant life or health as well as the environment.



What GAP covers

- Food Safety Chemical and Biological hazards (pesticide residue, heavy metals contents, pathogenic bacterial loads), traceability etc.
- Environmental Management soil erosion, structure, salinity; water consumption, quality, green house gases etc.
- Worker health, safety and welfare hazards and injury to worker health
- Produce quality size, shape, firmness, texture, spoilage, ripeness etc.



Linking Production to Marketing

For Better Farm/Producer Incomes

- There are two fundamental routes by which farmers can increase their incomes from the marketing of fruit and vegetables.
 - ✓ With the demand route
 - > Directly linking with the end buyer
 - > Better use of better market information
 - Fixing incomes by contracting
 - ✓ With the supply route the basic option is to establish better economies along the supply



Demand Route

- The most efficient way for farmers to learn the requirements of the markets is to engage themselves in the value chain.
- A massive percentage of all fresh produce is now sold by the major supermarket chains.
- · Supermarkets have increasingly integrated their operations involving many aspects of the post farm gate operations



Demand Route

- Market surveys domestic & international markets to assess requirements (quality, safety, price, quantity)
- Link with buyers for quality and quantity needs
- Upgrade to meet requirements

 Ensure continuous supply of required quality



Supply Route

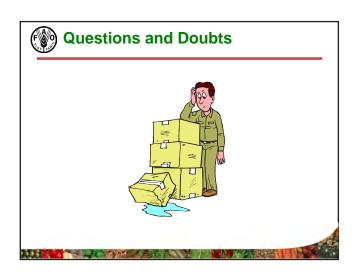
- Market surveys domestic & international markets to assess requirements (quality, safety, price, quantity)
- Produce quality as per market needs
- Brand image/ logo create brand of safe and quality produce
- Publicize through various means flyers, posters, media, free samples, participating in international trade fairs, etc



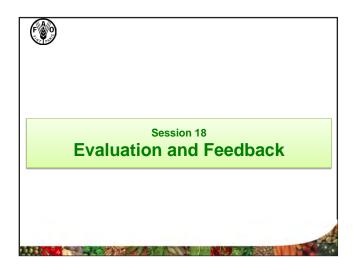
To Improve trade in Regional Market

It is important for ASEAN countries to harmonize National GAP by aligning it to ASEANGAP. This will assist in:

- give access to producers to regional markets
- give common basis for regional National
- give better standing to regional GAP status

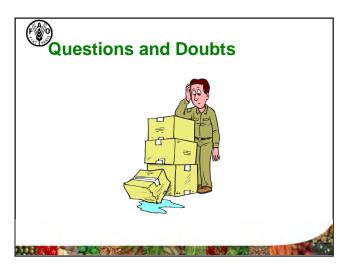


Annex 19 Evaluation and feedback











FAO Regional office for Asia and the Pacific 39 Phra Atit Road, Bangkok 10200, Thailand Tel: (66 2) 697 4000 Fax: (66 2) 697 4445 E-mail: FAO-RAP@fao.org, Website: http://www.fao.org/asiapacific

