Quality Management System: GAP in Thailand

Surmsuk Salakpetch   Ph.D.

Chanthaburi Horticultural Research Center, Department of Agriculture, Thailand

---

Concept and application

✻ Developed based upon the concept of GMP, GAP, HACCP, ISO, SPS and QA.

✻ Guidance applicable for any Certification Body (CB) to certify on farm production process of individual growers or produce marketing firms.

Definition :

Guidelines associated with practices to minimize physical, chemical and microbial hazards, produce free from pests and marketable quality acceptance from field through distribution of fresh fruits and vegetables for fresh markets and processing.

Scope :

♣ Associated with management system of the whole process of production cycle to produce safety, free from pests and marketable quality of fresh fruits and vegetables.

♣ Applicable practices for growers to ensure safety and quality of fresh produces for consumers.

♣ Emphasized on IPM and ICM.

Levels of certification

* Level 1: Safety produces

* Level 2: Safety and free of pest produces

* Level 3: Safety, free of pest and quality produces

Components of system

❀ **Quality policy**

❀ **Quality objectives**

❀ **Quality plan**

❀ **Operation procedure**

❀ **Work instruction**

Quality policy :

"We strive to produce quality fresh fruits and vegetables for fresh markets and processing and offer the best customer satisfaction"

Quality objectives :

❋ Marketable quality acceptance

❋ Physical, chemical and microbial safety

❋ Free from pests

❋ Guidelines to establish a quality plan

❋ customer satisfaction

Quality objectives : Durian

1. To produce mature durian without the symptom of hard flesh, wet core and mummy flesh

2. To produce chemical safety durian

3. To produce durian free from pests

Quality plan :

❋ Developed based upon the concept of HACCP and ISO

❋ Practice framework to get through quality objectives

Quality plan

Process step	Hazards	Control measures	CP/CCP	Operating limits	Monitoring	Corrective actions	Records

ขั้นตอนการผลิต	อันตราย	มาตรการควบคุม	CP/CCP
Process step	Hazards	Control measures	CP/CCP
Stage of plant growth & development	Problems or hazards		Control point / Critical control point

ค่าควบคุม	การเฝ้าระวัง	การแก้ไขปัญหา	สิ่งที่ต้องบันทึก
Operating limits	Monitoring	Corrective actions	Records
Indicators to control or monitor hazards or CCP	✿ What ✿ How ✿ Frequency	When problems or hazards > operating limits	All corrective actions

Safety & Quality guidelides	Quality objectives
1. Water 2. Field & land history 3. Pesticide issues 4. On farm stocking & transporting of produce	Physical, chemical and microbial safety

Safety & Quality guidelides	Quality objectives
5. Crop Protection	Free from pests
6. Production process	Marketable quality acceptance
7. Postharvest handling	
8. Records	Trace-back

Organization involved in Quality Management System; On Farm Production : GAP

⭐ **Growers**

⭐ **Advisory body** (Dept. of Agric. Extension)

⭐ **Certification body** (Dept. of Agric.)

⭐ **Accreditaion body** (National Bureau of Agricl. Commodity and Food Standard)

Keys of success of QMS in Thailand

❋ **Country policy**

❋ **Rules and regulations in trade**

❋ **System is acceptable, unstandable, practiceable and achieveable for growers and traders**

Obstacles to overcome in implementation

❋ Education and extension to create awareness for growers and other stakeholders

❋ Encouraged consumers to stimulate demand for safe and quality food

❋ Encouraged official governments and others in QMS to be educated and well understood at each level in the system

❋ Private sectors and others interested in the system are welcome

Challenges of GAP for growers

✿ **Too many codes and standards**

✿ Not easy for small holders (investments, paperwork, certification fees)

✿ Not always a better price for GAP produces

✿ Lack of local certification body and suited testing lab.

✿ Not always guarantee from buyers

✿ Market advantage may disappear overtime

FAO, 2005

2005 Program :

✳ Business cluster of growers and between growers and traders

❋ Group certification

❋ Strengthen fruit trade of the country

✳ Information technology for food safety and traceability

❋ GIS-MIS technology to visualize and control the outbreak of Avian influenza

2005 Program :

✳ **FAO-Thailand Workshop on GAP for fresh fruits and vegetables in Thailand**

❇ Review progress in the development of GAP program in Thailand

❇ Determine priorities for further development and implementation

❇ Review on-going assistance from FAO and other agencies and draw up preliminary lessons learnt for other countries.

2005-2006 Program :

✳ **Information management of fruit supply chain : A case study in durian and mangosteen**

❇ Help managing logistics system
❇ Support development of trace back system

✳ **Trace back system development**

❇ Build consumer confidence and risk management

✳ **Revision of the existing system and implementation**

Chanthaburi Horticultural Research Center
Khlung, Chanthaburi, 22110
THAILAND

E-mail : chrc@ksc.th.com

: chrc_chanburi@yahoo.com

Ph. +66-3939-7030   Fax. +66-3939-7236