

Banana production by Japan standard

**TOHTO CONSUMERS'
CO-OPERATIVE SOCIETY
OTENTO (THAILAND) Co. , LTD.**

PURPOSE

- Effective use of WEB traceability 100% subsidy (10 million baht = about 33 million yen) from Thai government to Thayang.
- Effective use of 50% subsidy (six million baht = about 19.8 million yen) that allows to processing facilities improvement for overseas export from Thayang, Petchburi prefecture.
- Stable supply, cultivation management and quality improvement of banana.
- Knowing of east capital standard (farmer and staff)

Thayang Agricultural Co-operative

- Establishment years : 1974
- Union membership:
About 2,000 people
(banana registration farmers=
about 230 people)
- Business scale=150 million baht
- Banana business=10 million baht
(Export is 60%.)
- Market business= 16 million baht
- Financial business= 6.7 million baht

*Results in fiscal year 2007

- South of THAILAND about
150 km from Bangkok.
- For about 2 hours (car).

Thayang Agricultural Cooperative
(main entrance)



Cutting



Method of cutting banana

- Cut banana by knife with no curl on the cut.
- After banana was cutting it becomes easier for the bacteria to grow.
- After cut, the knife was returned to the inventory location (sterilization) after use.

Washing



Overflow stream.

- Washing tank by the stream.
- It is enforced to refill clean water when dirt precipitates in water tank.

Method of washing

- ① Removal of hull and dirt of sap
 - ② Insect removal of banana axis and the lower side
 - ③ Sap washing after cutting section
- Every hands are doing this process more than 1 time.

Drying

- The use of dryer is discontinued.
- Only air spray is used.



- Small air dryer
- A lot of mold bacteria were detected because the upper part is an irresolvable structure, and was not able to be sterilized and to be washed.
- High-pressure air spray
 - ① Removal water from banana
 - ② Insect removal of banana axis
 - ③ Sap removal in cutting section
- Every hands are doing this process more than 1 time.

Storage

- Change Temp 12.5C

- The report card for the processor in Japan is put into the banana box.



| | | |
|--|---|---------------------------------------|
| 黄変/過熟 (Over-matured/ Yellow Color) အညို/အညို/အညို/အညို キトリ | Retail Pack NG Card | 黴カビ(Mold) အညို/အညို/အညို キトリ |
| 加工日(Production Date in Japan) 2008/ / တီထွင်/တီထွင်/တီထွင် | | |
| 不良発生率(NG %)(Occurance) = _____ % | | |
| Tayang Date(တီထွင်/တီထွင်/တီထွင်): /05/2008 | | |
| CASE No. (ကိစ္စနံပါတ်): _____ | | |
| ■小分け加工者の皆様へ■ バナナ不良内容に応じ、四隅を切り取って下さい。 | | |
| ぶく(Soft) အညို/အညို キトリ | ご協力ありがとうございました。 (Thank you for your cooperation.) အထူးကျေးဇူးတင်ပါသည်..... WAGO, Co. LTD | 傷・スレ(Damage) အညို/အညို/အညို キトリ |

Quality problem

- Yellowed banana, soft texture, grow moldy, rots is notice = as for my complaint (measures).



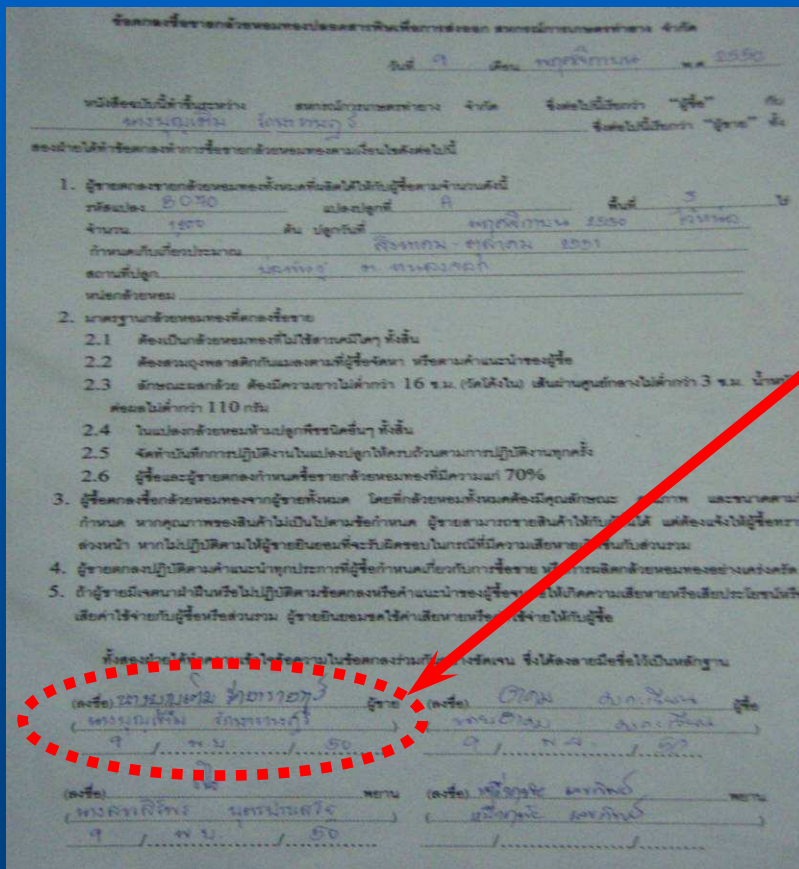
- Both of Japanese side and Thailand report on the results according to my complaints and export trial sample and information is shared.

Cultivation Plan

| Thai | Japanese | District | Farmers | Farm | ation | Planting | Harvest | ri | 冊 | average | ht/ | Weight(kg) | mix | detail | SafeBac | factory | volum |
|------------------------|---------------------|---------------------|---------|------|-------|----------|----------|-----|-------|---------|------|--------------|-----|------------|---------|---------|-------|
| タイ語 | 日本語 | 地域区分 | 生産者 | 圃場 | 世代 | 定植日 | 収穫期 | ไร่ | 本数 | 1ไร่平均 | tree | 製品重量 (kg) | 混植 | 明細 | SB有効面積率 | 加工歩留まり | みの |
| นางพินิจ ภัฏฐมนต์กร | สมาธิ-บินยาตนาฟุต | thamailuak/thayang | B071 | A | 1 | 2007/5 | 2008/1-3 | 1.3 | 560 | 431 | 7.0 | 3,920 | NO | | 100.0 | 85.0% | |
| นางบุญจักษ์ คำทอง | ブンサム-カムบอน | thayang/thayang | B073 | A | 1 | 2007/3 | 2008/1-3 | 2.4 | 950 | 396 | 7.0 | 6,650 | NO | | 100.0 | 85.0% | |
| นางบุญจง สันนิษะกิจ | *ปนฺลิอาณ-ซานบราเซอ | nongjok/thayang | B081 | A | 2 | 2007/5 | 2008/1-3 | 1.0 | 400 | 400 | 7.0 | 2,800 | NO | | 78.0 | 85.0% | |
| นางชื่น เข้มเกษม | *จ็อน-เยนทานัม | thayang/thayang | B014 | A | 2 | 2007/7 | 2008/3-5 | 4.0 | 1,200 | 300 | 7.0 | | YES | chemical | | 0.0 | |
| นางกนิษฐา สิริโสธการ | มานอท-ชิตติโชคุตัม | thamailuak/thayang | B043 | A | 2 | 2007/8 | 2008/3-5 | 1.9 | 850 | 447 | 7.0 | 5,950 | NO | | 52.2 | 85.0% | |
| นางวิเชียร พลใจ | วาชิยัน-โซมไชย | baannaidong/thayang | B085 | A | 1 | 2007/8 | 2008/3-5 | 3.0 | 1,300 | 433 | 7.0 | 9,100 | NO | | 65.0 | 85.0% | |
| นางทิพย์ สิริขจร | ตัสซานี-ซานสัค | nongjok/thayang | B003 | B | 2 | 2007/8 | 2008/3-5 | 1.0 | 400 | 400 | 7.0 | 2,800 | NO | | 100.0 | 85.0% | |
| นางฉวี รัชฎา | ไซน์-เทียจูน | nongjok/thayang | B056 | B | 2 | 2007/7 | 2008/3-5 | 1.5 | 450 | 300 | 7.0 | | YES | lemongrass | | 85.0% | |
| นางจิตติมา กัณโฑ | *จ็เลนสัค-คีเตีย | thamailuak/thayang | B075 | C | 1 | 2007/2 | 2008/3-5 | 1.0 | 400 | 400 | 7.0 | 2,800 | NO | | 100.0 | 85.0% | |
| นางพินิจ สันนิษะกิจ | บาร์นี-คิมเลน | thayang/thayang | B004 | D | 1 | 2007/6 | 2008/3-5 | 0.8 | 409 | 511 | 7.0 | 2,863 | NO | | 78.0 | 85.0% | |
| นางทิพย์ สิริขจร | ตัสซานี-ซานสัค | nongjok/thayang | B003 | D | 1 | 2007/7 | 2008/4-6 | 2.0 | 750 | 375 | 7.0 | 5,250 | NO | | 100.0 | 85.0% | |
| นางจิตติมา เข้มเกษม | ซานวอน-เคิร์ลแคม | nongjok/thayang | B057 | A | 1 | 2007/8 | 2008/4-6 | 0.7 | 308 | 440 | 7.0 | 2,156 | NO | | 95.0 | 85.0% | |
| นางพินิจ พวงทอง | *ควา-บ-พัว-ปาดู | thayang/thayang | B087 | A | 2 | 2007/9 | 2008/4-6 | 0.7 | 320 | 457 | 6.8 | 2,176 | NO | | 78.6 | 85.0% | |
| นางพินิจ สันนิษะกิจ | บาร์นี-คิมเลน | thayang/thayang | B004 | A | 3 | 2007/10 | 2008/5-7 | 1.4 | 759 | 542 | 6.8 | 5,161 | NO | | 60.8 | 85.0% | |
| นางบุญจักษ์ บัณฑิต | ฟอนอา-โพกัม | thayang/thayang | B015 | A | 2 | 0 | 2008/5-7 | 1.6 | 907 | 567 | 6.8 | 6,168 | NO | | 78.0 | 85.0% | |
| นางจิตติมา อินทวงษา | *เวราซัค-อินปอม | wangan/kangkrajarn | B038 | A | 1 | 2007/7 | 2008/5-7 | 2.0 | 800 | 400 | 6.8 | | NO | damaged | | 0.0 | |
| นางจิตติมา ขันบุญเรือง | บอน-คอนมอัน | baannaidong/thayang | B008 | B | 1 | 2007/8 | 2008/5-7 | 2.7 | 1,150 | 426 | 6.8 | 7,820 | NO | old tree | 71.6 | 85.0% | |
| นางจิตติมา เข้มเกษม | ซานวอน-เคิร์ลแคม | nongjok/thayang | B057 | B | 1 | 2007/9 | 2008/5-7 | 1.0 | 350 | 350 | 6.2 | 2,170 | NO | | 60.9 | 85.0% | |
| นางจิตติมา เข้มเกษม | เคิร์ล-เคิร์ลแคม | nongjok/thayang | B009 | B | 1 | 2007/7 | 2008/5-7 | 1.5 | 700 | 467 | 6.8 | | YES | lemongrass | | 0.0 | |
| นางจิตติมา อินทวงษา | *เวราซัค-อินปอม | wangan/kangkrajarn | B038 | B | 1 | 2007/8 | 2008/5-7 | 2.1 | 1,120 | 533 | 6.8 | | NO | | 0.0 | 85.0% | |
| นางจิรา ใจอานนท์ | *ลัน-ออร์-เชล-เทีย | thamailuak/thayang | B045 | B | 1 | 2007/8 | 2008/5-7 | 1.0 | 500 | 500 | 6.8 | | YES | chemical | | 0.0 | |
| นางพินิจ สันนิษะกิจ | บาร์นี-คิมเลน | thayang/thayang | B004 | C | 2 | 2007/10 | 2008/5-7 | 1.6 | 830 | 516 | 6.8 | 5,644 | NO | | 75.5 | 85.0% | |
| นางจิรา ใจอานนท์ | *ลัน-ออร์-เชล-เทีย | thamailuak/thayang | B045 | C | 1 | 2007/8 | 2008/5-7 | 3.0 | 1,200 | 400 | 6.8 | | YES | chemical | | 0.0 | |
| นางทิพย์ สิริขจร | ตัสซานี-ซานสัค | nongjok/thayang | B003 | E | 1 | 2007/7 | 2008/5-7 | 1.0 | 300 | 300 | 6.8 | | NO | damaged | | 0 | |
| นางจิตติมา กัณโฑ | *จ็เลนสัค-คีเตีย | thamailuak/thayang | B075 | D | 1 | 2007/6 | 2008/6-8 | 2.0 | 1,000 | 500 | 6.2 | 6,200 | NO | | 100.0 | 85.0% | |
| นางจิตติมา บัณฑิต | ควิอากรไค-เดียม | thakateam/thayang | B083 | A | 2 | 2007/10 | 2008/6-8 | 1.5 | 630 | 420 | 6.8 | 4,284 | NO | | 78.0 | 85.0% | |
| นางจิตติมา เข้มเกษม | เซ-น-ชาน-บอน-สิริ | thalang/thayang | B027 | A | 2 | 2007/10 | 2008/6-8 | 2.5 | 1,000 | 400 | 6.8 | 6,800 | NO | | 77.4 | 85.0% | |
| นางจิตติมา กัณโฑ | *จ็เลนสัค-คีเตีย | thamailuak/thayang | B075 | A | 2 | 2007/11 | 2008/6-8 | 2.3 | 1,070 | 465 | 6.2 | 6,634 | NO | | 100.0 | 85.0% | |

- The crop plan (import plan) in the next fiscal year is presented beforehand.
- Harvest banana (the 1st generation) = about 9-10 months (the 2nd generation) = about 7-8 months.
- area, number, harvest weight, set back, expectation weight and processing yield are input in export harvest schedule.

Farmer registration for export



ใบสมัครเพื่อจำหน่ายกล้วยหอมของประเทศไทยเพื่อการส่งออก

วันที่ ๑ เดือน พฤษภาคม พ.ศ. ๒๕๕๐

ขอแจ้งว่ามีผู้ที่จะเข้าร่วมโครงการสหกรณ์การเกษตรกล้วยหอม จำกัด จำนวน ๑๐ ราย

ชื่อกล้วยหอม "สุối" ปีที่ปลูก ๒๕๔๙

ชื่อสหกรณ์การเกษตร "สุối" ปีที่ปลูก ๒๕๔๙

ขอแจ้งว่ามีผู้ที่จะเข้าร่วมโครงการสหกรณ์การเกษตรกล้วยหอมของสหกรณ์การเกษตรกล้วยหอม จำกัด

- ผู้ขายกล้วยหอมของสหกรณ์การเกษตรกล้วยหอมของสหกรณ์การเกษตรกล้วยหอม จำกัด จำนวน ๑๐ ราย
- มาตรฐานกล้วยหอมของสหกรณ์การเกษตรกล้วยหอม
- ผู้ซื้อกล้วยหอมของสหกรณ์การเกษตรกล้วยหอมของสหกรณ์การเกษตรกล้วยหอม จำกัด
- ผู้ขายกล้วยหอมของสหกรณ์การเกษตรกล้วยหอมของสหกรณ์การเกษตรกล้วยหอม จำกัด
- ผู้ขายกล้วยหอมของสหกรณ์การเกษตรกล้วยหอมของสหกรณ์การเกษตรกล้วยหอม จำกัด

ชื่อสหกรณ์การเกษตรกล้วยหอมของสหกรณ์การเกษตรกล้วยหอม จำกัด

ชื่อสหกรณ์การเกษตรกล้วยหอมของสหกรณ์การเกษตรกล้วยหอม จำกัด

ชื่อสหกรณ์การเกษตรกล้วยหอมของสหกรณ์การเกษตรกล้วยหอม จำกัด

- The farmers who want to cultivate of the banana for Japan's export, have to sign the banana participation application form.
- 100% is being submitted by all farmers now.
- Tayang coop will sign after re-confirm this participation application is correct.

Cultivation record

- 100% from all producers are submitted now.

บันทึกการปฏิบัติงานด้วยหอมทองปลอดสารพิษเพื่อการส่งออก

ชื่อ - นามสกุล ช.ล. พณี กิมเท็ง

รหัสแปลง B 00A แปลง ๑C

จำนวน 400 ต้น วันที่ปลูก พฤศจิกายน 2549

พื้นที่ 1.5 ไร่

ในแปลงด้วยหอมทองมีการใช้สารเคมีหรือไม่?

ใช่ ไม่ใช่

| ว.ศ.ป. | ให้น้ำ | ใส่ปุ๋ย | ตัดหญ้า | ตัดปลี | พอง | เก็บเกี่ยว | หมายเหตุ |
|--------|--------|---------|---------|--------|-----|------------|----------|
| 9-50 | | | | | | | |
| 9-50 | | | | | | | |
| 9-50 | | | | | | | |
| 9-50 | ✓ | | | | | | |
| 9-50 | | ✓ | | | | | |
| 9-50 | | | | | | | |
| 9-50 | | | | | | | |
| 9-50 | | | | | | | |
| 9-50 | ✓ | | | | | | |
| 9-50 | | | | | | | |

- All registered farmers need to fill in the cultivation record of the banana.
- Farmer information (content) "Farmer name, code, cultivation area, crop number, transplant date" and "Use existence (YES/NO) of chemicals".
- Check item of cultivation record = "Watering, manure, weeding, floral bud cutting, bag or disregarding, harvest".

Farm signboard



- Identity farm signboard (English + Thai).
- Farm signboard = Harvest time, farmer name, farmer code, farm code, cultivation area, crop number and crop time" are described clearly.
- After I go to check in field, the mistake turns out and the data was rewrite.

Farm MAP

- Data for Web publishing

แผนที่แปลงกล้วยหอมทอง (Banana Field Map, Thayang : Hom Thong Banana Map) B008-B

DATE (確認日, วันที่จัดบันทึก) : 2008/05/14
 FARMER NAME (生産者名, ชื่อ-นามสกุล) : เซม-ควานมูอัน (Sem Kwanmuang)
 CODE-FARM (圃場コード, รหัสแปลง) : B008-B
 FARM SIZE (圃場面積, พื้นที่ปลูก (ไร่, Rai)) : 2.7
 AMOUNT OF BANANA TREES (定植本数, จำนวนต้นกล้วยทั้งหมด) : 1150 (1 Rai (ใน 1 ไร่)) : 426
 PLANTING TIME (定植月, เดือนที่ปลูก) : 2007/08
 PERIOD OF HARVESTING (收穫予定月, ช่วงเก็บเกี่ยว) : 2008/05-07

- Farm check mark

ホームトンバナナ圃場点検用マーク一覧
 Mark list for hom thong banana field check

| NO | Mark ○ | | Japanese | English | Thai | Picture |
|----|---------------|------|----------|-----------------|-------------|---------|
| | 自然 Natural | 化学物質 | | | | |
| 1 | A | B | ホームトンバナナ | HomThong banana | กล้วยหอม | |
| 2 | C | C | ハニーバナナ | Honey banana | กล้วยไข่ | |
| 3 | D | D | ナムワーバナナ | Nam wah banana | กล้วยน้ำว้า | |
| 4 | K | K | マナオ | manao | มะนาว | |
| 5 | M | M | マンゴー | mango | มะม่วง | |
| 6 | N | N | チョンブー | Jun Pooh | ขมิพู่ | |
| 7 | O | O | バジル | basil | กระเพรา | |
| 8 | P | P | 唐辛子 | red pepper | พริก | |

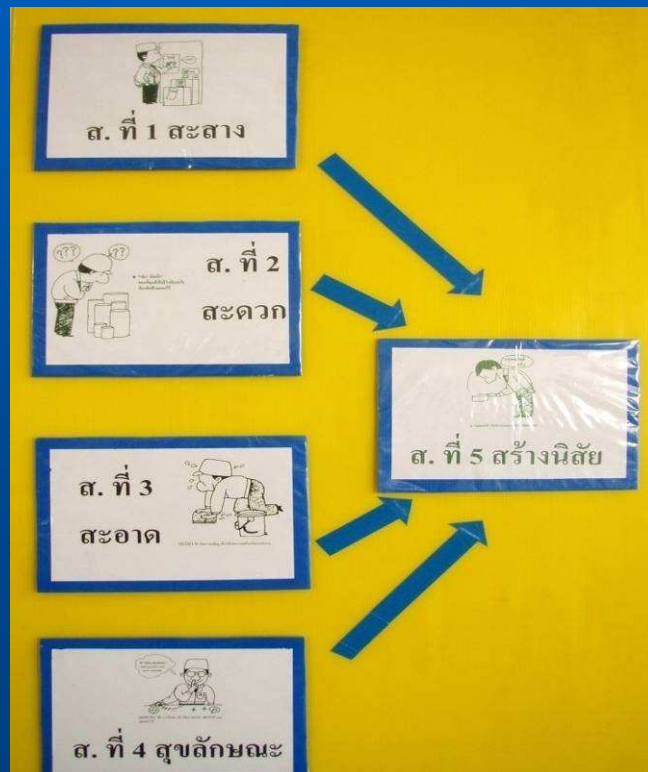
7S activity (arrangement, order, cleaning, cleanness, discipline + firmly persistent) promotion.

- 7S activity is promoted in cooperation with Mahidol university. The inventory location of the use materials is specified.



7S quality improvement = activity

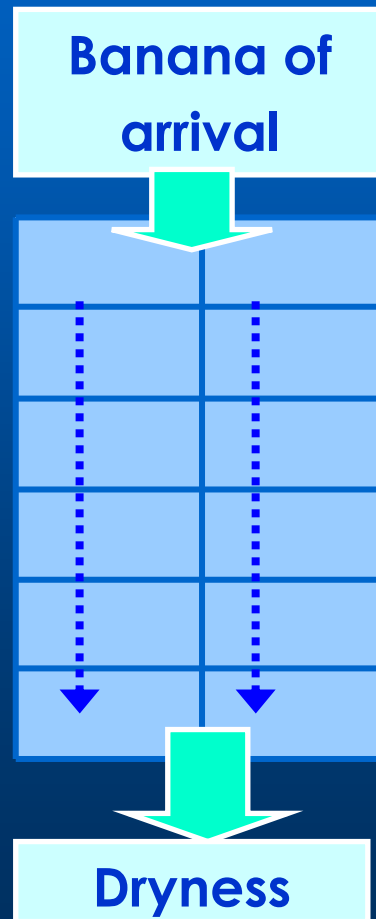
5S (arrangement, order, cleaning, cleanness and discipline)+2S activity seminar



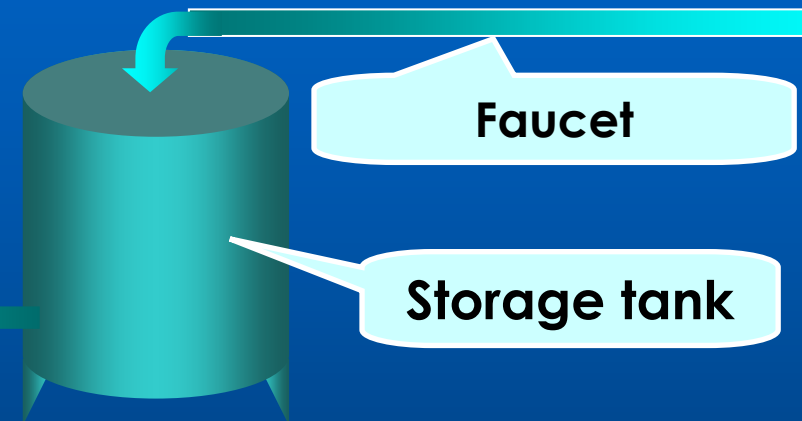
Water-quality test

Cleaning process

- first water tank
- second water tank
- third water tank
- fourth water tank
- fifth water tank
- sixth water tank



Water from regional waterworks bureau



- Water that gathers the sample is inspected from eight places (the faucet, water in the flush tank and water of six water tanks) by the cooperation of the Mahidol university.
- *E. coli*, bacteria and mold bacterium

Water-quality test

- Water-quality test = *E. coli* and bacteria by Mahidol university (MPN/100ml)

| サンプル | 大腸菌 (MPN/100ml) | | | | | | | | | |
|------|-----------------|-------|-------|--------|---------|---------|--------|--------|-------|--------|
| | 蛇口の水 | 貯水タンク | 使用前の水 | 使用1後の水 | 使用2*前の水 | 使用2*後の水 | 使用3後の水 | 使用4後の水 | 使用5の水 | 使用6後の水 |
| 1 | 6.9 | >23 | >23 | >23 | 0 | 12 | >23 | >23 | >23 | >23 |
| 2 | 6.9 | >23 | >23 | >23 | 0 | 12 | >23 | >23 | >23 | >23 |
| 3 | 12 | >3 | >23 | >23 | 0 | 1.1 | >23 | >23 | >23 | >23 |
| 4 | 12 | >23 | >23 | >23 | 0 | 2.2 | >23 | >23 | >23 | >23 |
| 5 | 6.9 | >23 | >23 | >23 | 0 | 1.1 | >23 | >23 | >23 | >23 |
| 6 | 12 | >23 | >23 | >23 | 0 | 2.2 | >23 | >23 | >23 | >23 |

備考: *石鹼水. 貯水タンク

このテーブルでの'0 MPN/100ml'数値は、MPNテーブルで10チューブMPN方法で分析し、<1.1 MPN/100 mlの場合、大腸菌は発見されなかったという意味である。

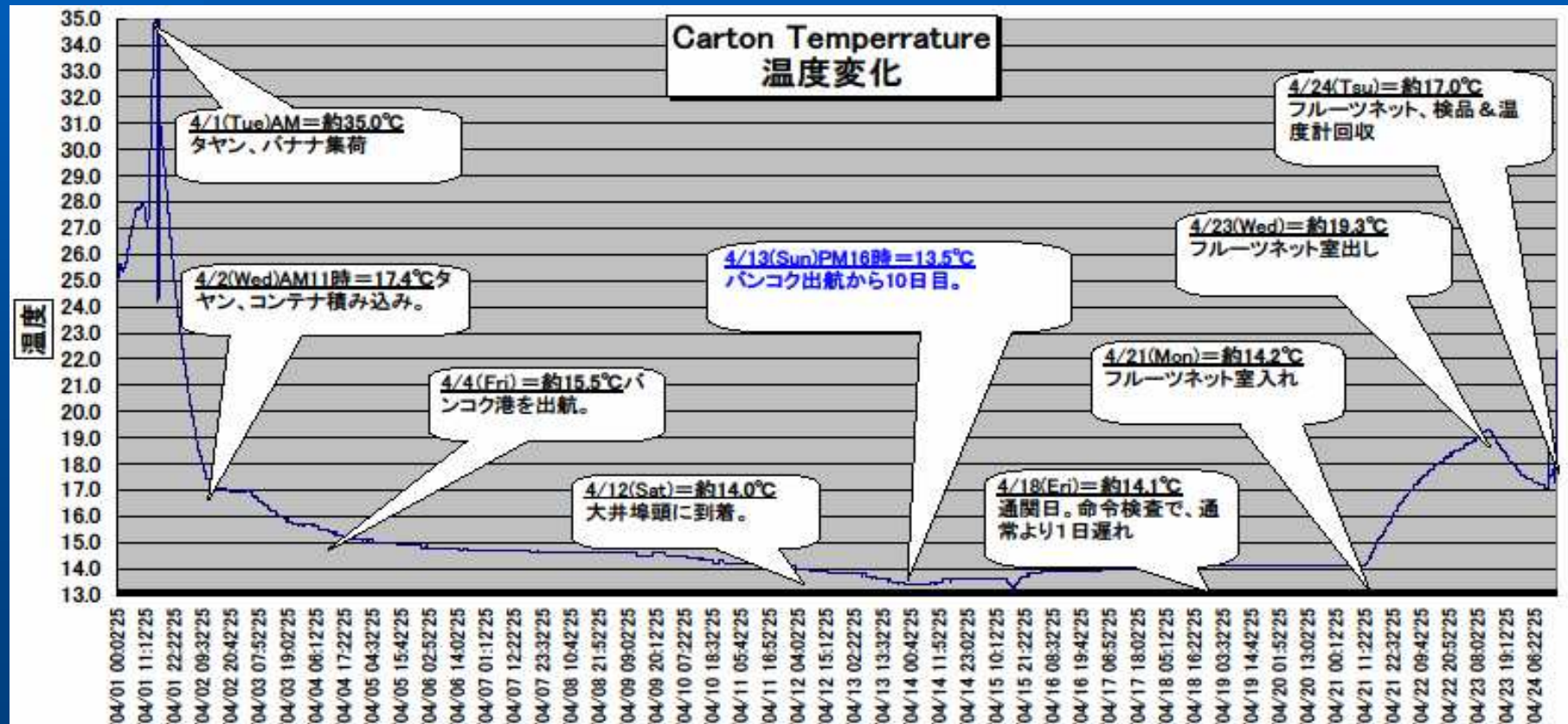
温度測定「おんどとり」



- Use of temperature measuring instrument material
- The circulation temperature until Japan arriving from Thayang Agricultural Cooperative is measured.
- The circulation optimum temperature of the banana is 12-13 ° C.
- The temperature that the ethylene gas discharge generated by breath of the plant is a little (aging control) is an optimum temperature.

Measurement of temperature

- The temperature in the banana carton until banana checking at cargo - Japan arriving is measured.





















Facilities improvement

- The increasing of flush tank and the pump is being examined.
- Pressure in water pipe is improve by adding pump
- When the amount of the shipment increase in the future, it will become a shortage of water.
- If shortage of water occur, underground water can be use after sterilization.
- The installation of belt conveyer is being examined.
- The installation of refrigerator room is being examined.
- Subdivision of cutting and packing
- A tear of ceiling (leak in the roof) and overall insulated seat





















Harvest (maturity degree)

- Banana maturity degree is a visual standard. It was for workers who did harvest judgment.

| Maturity | Outside | Inside | Shape | Maturity | Outside | Inside | Shape |
|----------|---|---|--|----------|---|---|---|
| 95% |  |  |  | 80% |  |  |  |
| 90% |  |  |  | 75% |  |  |  |
| 85% |  |  |  | 70% |  |  |  |

収穫(熟度)

- Again, the visual standard is made. Domestic-oriented is harvested by 85%、70% and for export.

| Maturity | Outside | Inside | Shape | Maturity | Outside | Inside | Shape |
|----------|---|---|--|----------|---|---|---|
| 95% |  |  |  | 80% |  |  |  |
| 90% |  |  |  | 75% |  |  |  |
| 85% |  |  |  | 70% |  |  |  |

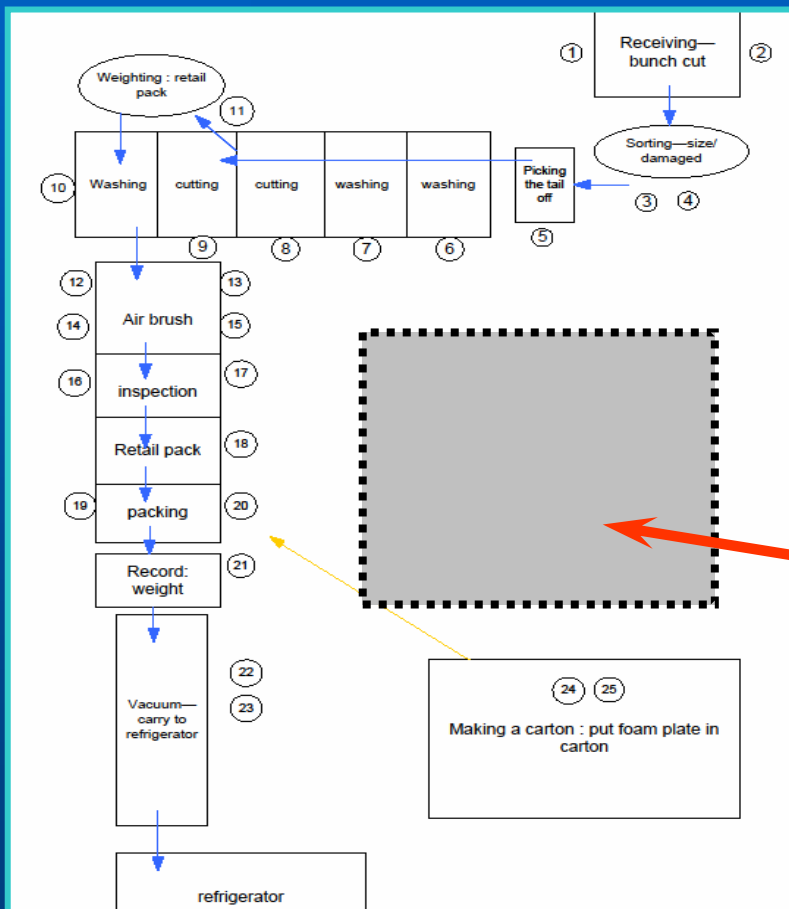
Fruit sorting (damage)

- Banana fruit sorting standard is arranged.



- The banana that has defect in immature banana and the flesh is removed.
- The banana that has defect of 2 cm or more on flesh is removed.
- It has to consults beforehand when the banana of less than 100 g is shipped.
- The banana for export is harvested and shipped by the harvest maturity degree 70%.
- The export of delicious ripe banana is coming ... the suitable maturity for export is the next tasks.

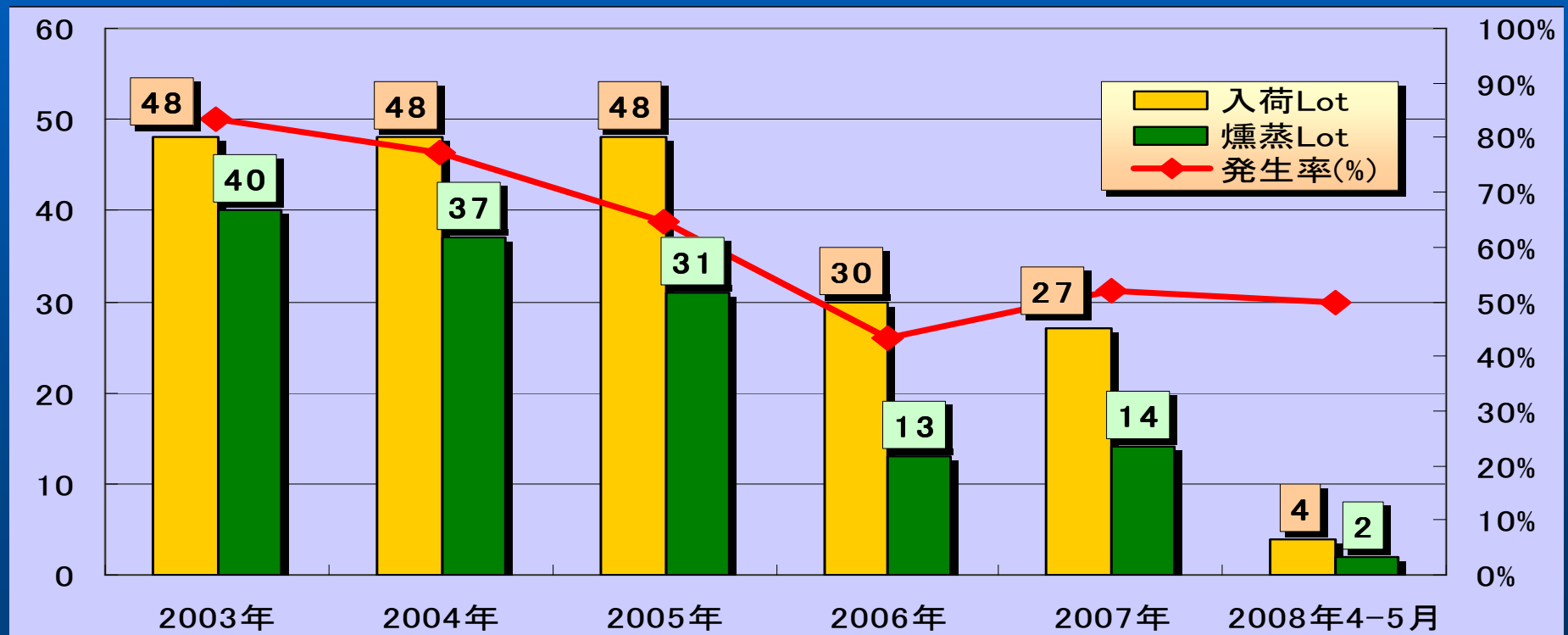
Layout



- Work layout change
- Each process was measured for efficiency time and numbers of workers was calculated and showed.
- Materials are test and review (corrugated cardboard, filter sheet and subdivision packing bag etc) for export.
- The free space in left chart is work a space for the domestic shipment banana (for supermarket-hotel).

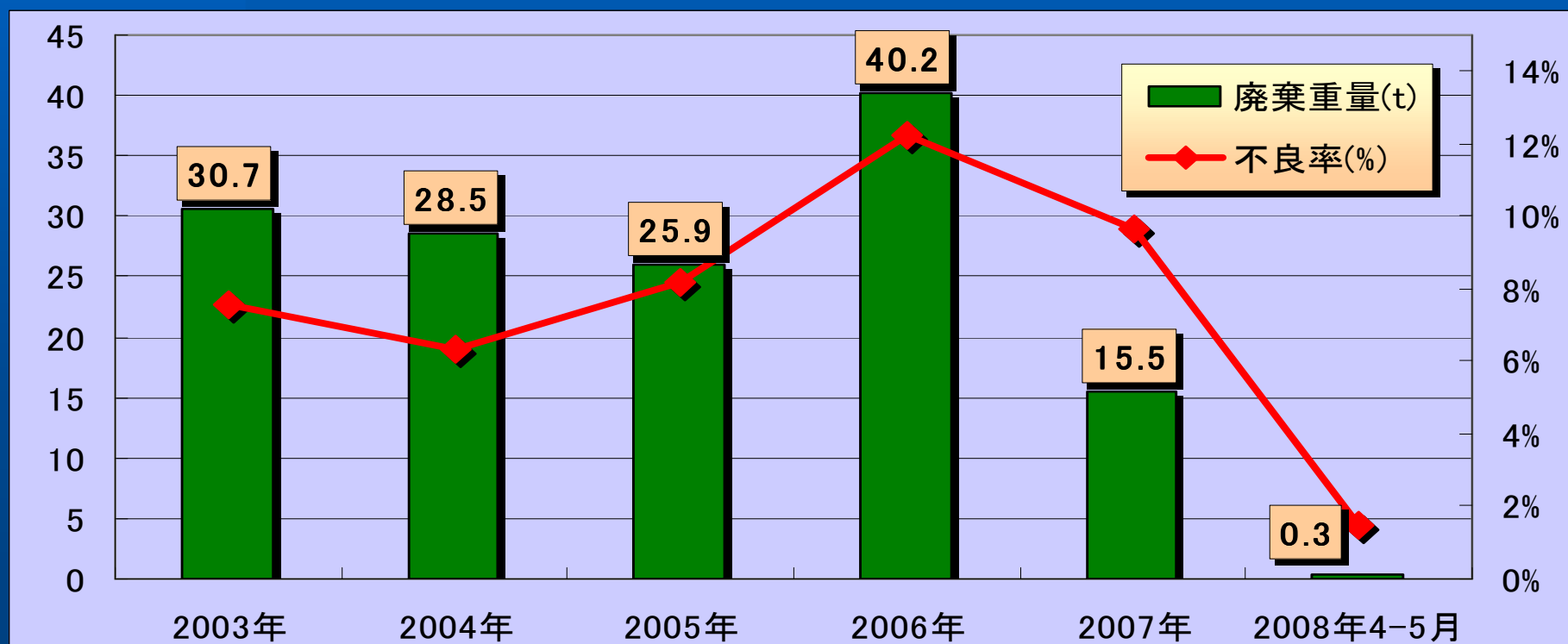
Fumigation rate (reference)

- Transition of fumigation rate when plant is quarantined after Japan arrives.



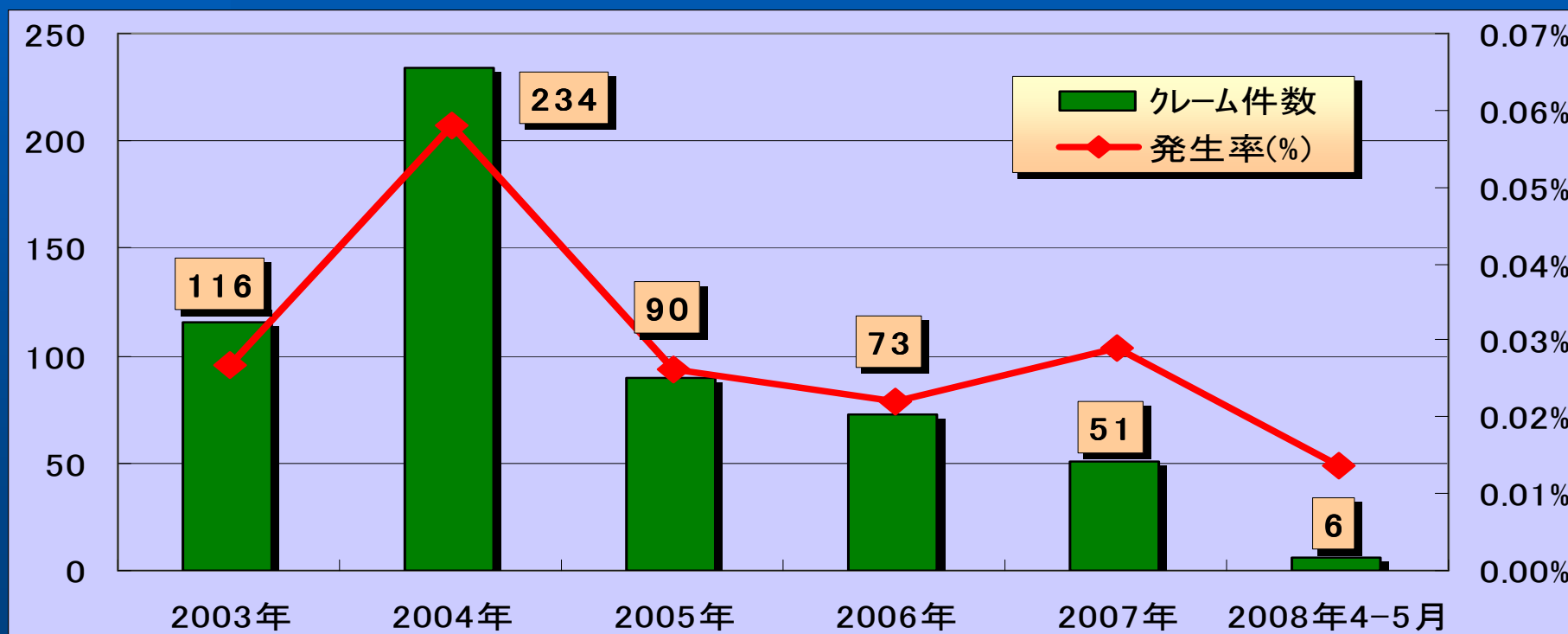
Defective abandonment rate (reference)

- Defective banana percentage after arrival at Japan.



Complaint number (reference)

- Complaint number rate.

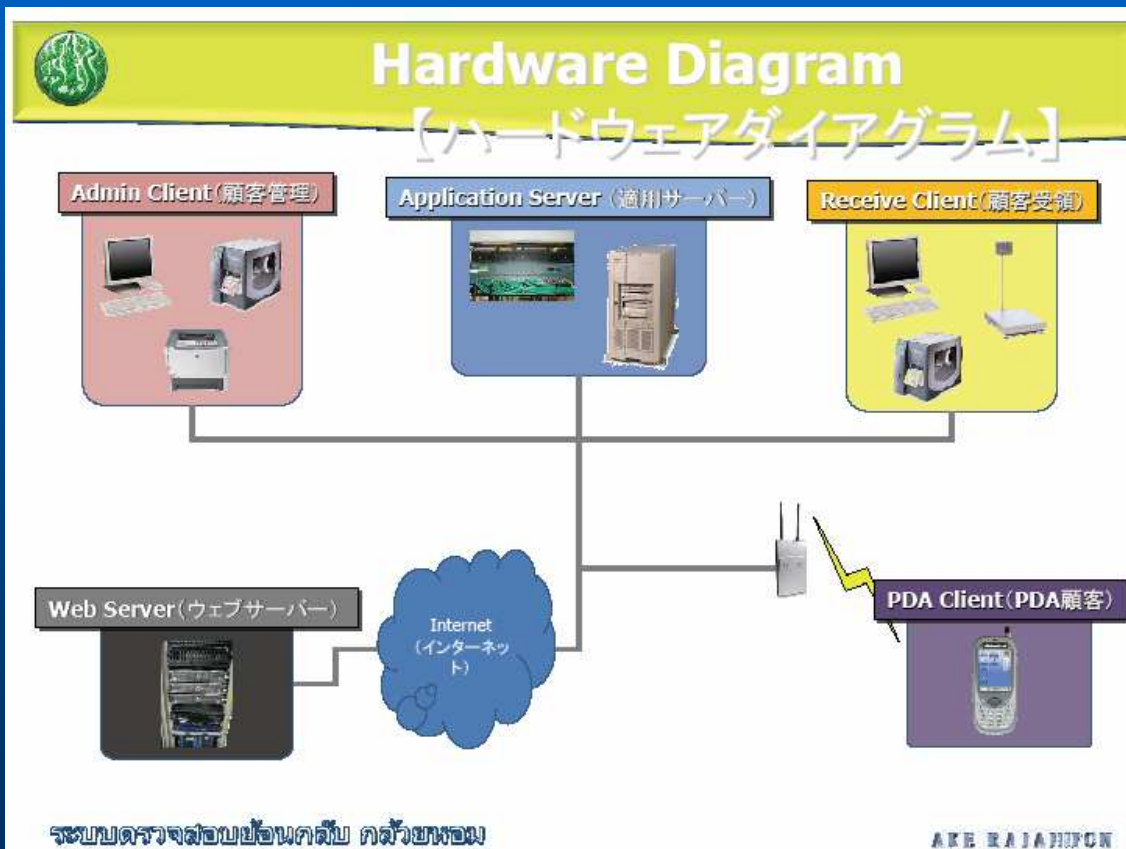


Traceability (outline)



- Thai TISTR (government). The WEB traceability system is constructed with private SISC Co. (system development) that receives the business consignment from Science and Technology Agency.

Traceability (Data)



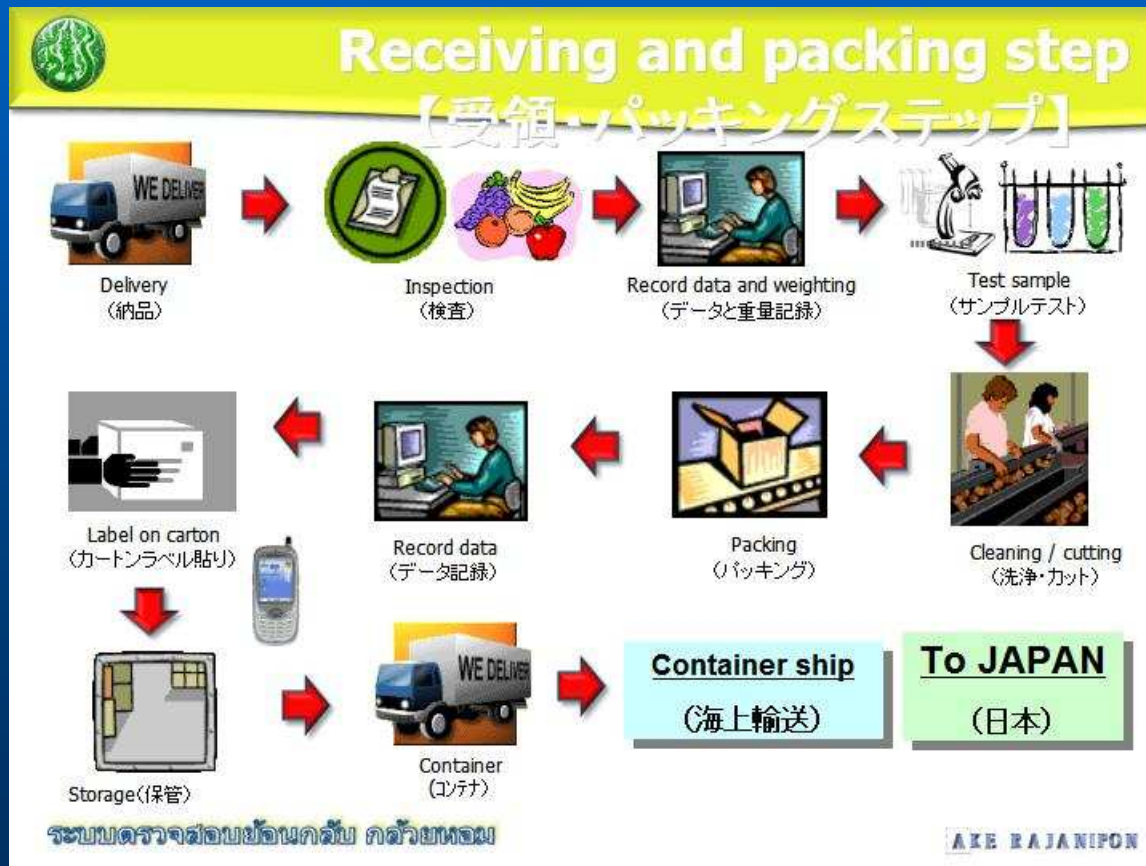
- The Web traceability data (producer and field etc) is kept in the server.
- The server is kept in Thayang Agricultural Cooperative.

Traceability (farm)



- Working session in banana packing house (Under preparation)
- An over part of products demand and supply is adjusted by the Thailand domestic sale (super-hotel).

Traceability (processing place)



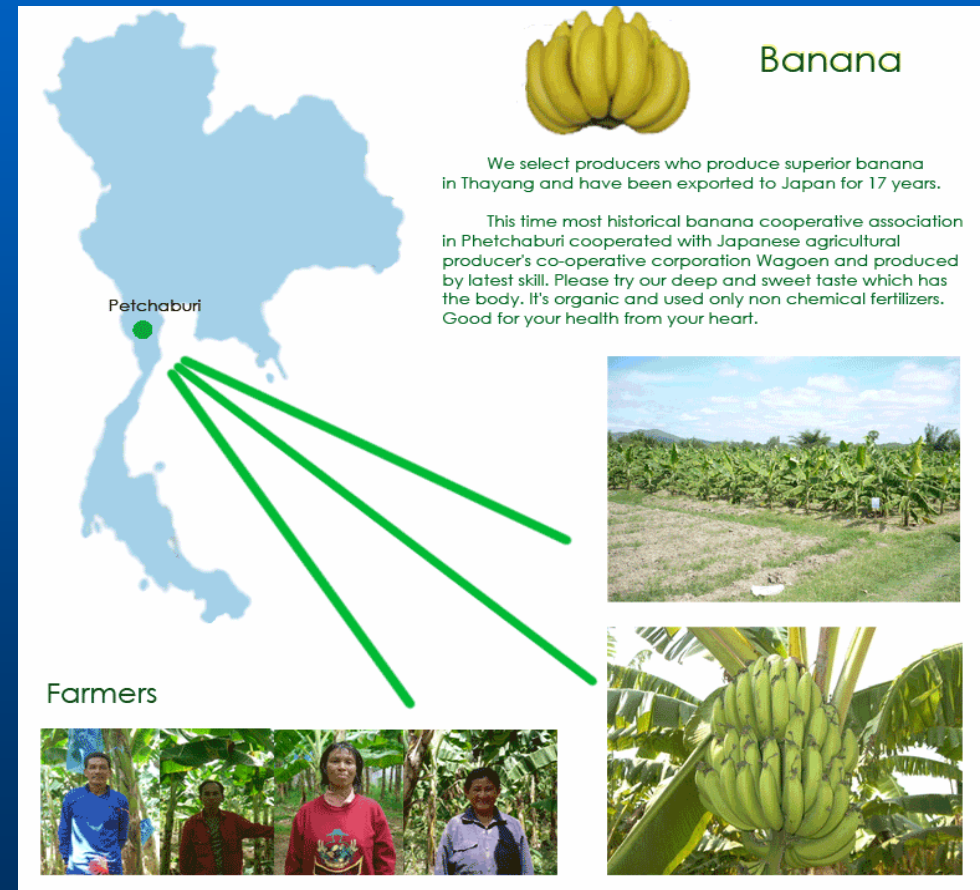
- An individual work manual (visual) in processing hall is being made now.
- A simple test of the pesticide residue (test kit) is being examined before exported.

Future tasks (Idea)

- Making banana cultivation indicator.
- Producers meeting and group meeting.
- Education of cultivation rule (east capital standard) to new producer.
- Traceability WEB site and the banana is loved. (banana cultivation struggle record) Update. Japanese mark making.
- Examination of banana exchange fund
- Facilities improvement (Examining)= flush tank, the pump, the refrigeration room and the belt conveyer.
- Shipment by subdivision packing Banana.
- Examination of delicious ripe banana.
- Examination of harvest maturity degree.
- Restart examination of Honey Banana (monkey banana). The maintenance of the circulation quality is a problem.

OTENTO Co. (WEB site)

- OTENTO (Thailand)
<http://www.otento.net/>
- (link)The banana is loved.
<http://otento.exblog.jp/>
- (link)TohtoCo-op
<http://www.tohto-coop.or.jp/>
- (link) : Wagoen
<http://www.wagoen.com/>
- (link): Traceability retrieval site page in Tayan Agricultural Cooperative (Thai and English)(Japanese mark)



Banana

We select producers who produce superior banana in Thailand and have been exported to Japan for 17 years.

This time most historical banana cooperative association in Phetchaburi cooperated with Japanese agricultural producer's co-operative corporation Wagoen and produced by latest skill. Please try our deep and sweet taste which has the body. It's organic and used only non chemical fertilizers. Good for your health from your heart.

Farmers

The image shows a layout for a banana product page. At the top left is a map of Thailand with a green dot and label for 'Phetchaburi'. Three green lines radiate from this dot to three photographs: a banana plantation, a close-up of a bunch of green bananas, and a group of four farmers standing in a field. To the right of the map is a bunch of yellow bananas and the word 'Banana'. Below the map is the word 'Farmers' above the group photo. Text blocks describe the product's quality and origin.

Wagoen (WEB site)

- The Web address which is described of banana sticker seal
= <http://www.wagoen.net/>
- Banana information in Wagoen homepage
 - ① Retrieval page of trace number
It links with Thayang co-op WEB site.
 - ② Flow to reaching of banana
Photograph flow chart or short Video
 - ③ The east capital banana standard
Explanation and cultivation rules of positive list
(set back standard)
 - ④ Banana Q&A
Complaint case Q&A, trivia (kind of the world) and dish
recipe

Wagoen (WEB site)

- Banana information in Wagoen homepage (cont.)
 - ⑤ Introduction photograph ⇒ continuous basis and update of Kingdom of Thailand and Thayang. Map of Thayang, Petchburi prefecture.
 - ⑥ History of Thayang co-op banana. (10year anniversary magazine of 19 years with Tohto Coop)
Exchange agreement book with Coop (PDF)
 - ⑦ The banana is loved. (blog)⇒ It links with an outside site. Daily life in Thailand and activity report of staff introduction in every day.
 - ⑧ External site (banner)
Tohto Coop, Thayang and Wagoen

Thayang (WEB site)



- Thayang Web site (under construction).
- Input of trace number that print on sticker of banana.
- The input screen page of the trace number is scheduled to assume only a Japanese mark.

Thayang (WEB site)

- Thayang site and content of retrieval page
- It is scheduled that only the trace number retrieval page is assumed to be a Japanese mark though the Thayang site is English or Thai mark but Japanese mark is under construction.
- The identification data that can be retrieved according to trace number (update = at any time)
cultivation record, farmer name, farmer number, farmer, family (photograph), farmer comment, farm number, farm (photograph), farm map (JPG), farm signboard (photograph), cultivation area, crop number, crop date, harvest schedule time, banana harvest date, date of shipment from Thayang (JPG) and banana business joining application form (JPG)
- Retrieval fixation information
sample, field MAP, list of check mark, Tohto Coop capital standard, and cultivation rule (set back standard)

* IQS. Tohto-Minori

- (tentative name) Examination of "IQS . Tohto-minori capital standard" attestation
- The change to the third party authentication system that reflects "East capital standard" in Mae-jo university "IQS authentication system" is scheduled to be conferred.
- The Thayang banana is No. "TH-GAP attestation" 1 of Kingdom of Thailand.
- TH-GAP is GAP that the Thai national administration is attesting (agricultural proper standard).
- The grinding match of advocated "IQS authentication system" and "East capital" standard is done as a third party attestation.
- It will confer on the IQS attestation as a new third party authentication system in the renewed direction in the future.

* Pesticide residue inspection (Idea)

The simple test execution is being examined about the banana from the field with the agricultural chemicals dispersion risk from the adjacent field.

- Set back easing (10→2m etc.) rule conference when meeting is not also detected.

Farmer meeting (Trial)

- Farmers meeting in each region began.



- The banana farmers meeting is made in regional for strengthening in communication between producer and co-op in the future.
- Meeting about farm management for exporting to Japan.
- Schedule for banana farm soil inspection by test kit

Farm management (Trial)

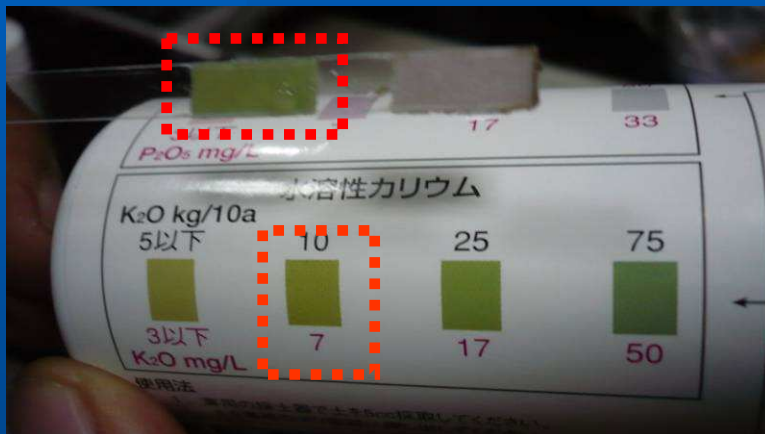
- When the floral bud is cut, blue ribbon should bind with the tree. Trial inside.



- For each farmer, Thayang arranges (stock division) and transplants the seedling.
- Because the land is large, the time between the harvest schedule time is different due to the seedling (growth period) when transplanted.
- The future tasks is making cultivation indicator.

* Soil analysis (idea)

- Soil analysis kit "Midori" is used and the banana cultivation indicator is making.



- Use of simple soil that Tokyo University of Agriculture and Technology developed analysis kit "Midori"
- PH, Nitrate-nitrogen, phosphoric acid and the amount of the water solubility potassium in the soil sample are measured.

* Regional agriculture (Idea)

- It leaves was used and vegetables and fruits is challenged to "Organic compost making".
- Cooperation with the biomass business (harmony village garden) can also come within the sweep and it confers.
- The conference for "Organic compost" making of vegetables and fruits leaves from the banana customer supermarket in Thailand is started.
- **The banana customer supermarket (abandonment of + ..leaving vegetables and fruits.. banana) in Thailand is used by ⇒ Tayan Nokyo (make to compost) ⇒ each farmer (banana field), and it makes the best use of for good quality banana production.**

* Circle of fair trade (Idea)

- Be not good when it is possible to do all. Circle of fair trade.
- BANANA to be able to contribute also to these kind of things only by eating for a moment
- BANANA that leads to the producer's life improvement
- BANANA that children in region comes to be able to enter school
- Therefore (tentative name), do you fund the banana?
- Examination of "Agreement" conclusion concerning promotion of environmental friendly agriculture including Thai government and region.
- The NPO group is a fund administration.

Hom Thong Banana (From Thailand)



Thank you !

- "Safety" banana.
- Impress by "Delicious" banana.
- Taste of real Thailand banana.
- It gathers ones' efforts together to finish reporting to union members and it makes an effort.

ERROR: syntaxerror
OFFENDING COMMAND: --nostringval--

STACK:

```
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( )  
/Subject  
(D:25510709132627+07'00' )  
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(Administrator)  
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-mark-
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