Food Safety Programs that Exist in Mango Producing Countries
Brazil

- Producers
  - Number of producers or farms: ~3,000
  - Number of hectares: ~76,000 (Exp: 6,300 USA: 1,200)
  - Number of farms for exportation to USA: ~18 (VSF)
  - Types of certifications:
    - USA: USAGap, Global Gap with HWT
    - Europa: GlobalGap (All Europe), Fair Trade (Germany) Tesco and Markspenser (Inglaterra)
    - Local: PIF (Integrated Fruit Production)
    - Monitoring of Fruit Fly– Biofabrica Moscamel Brasil (BMB)
Brazil

- Packinghouses
  - Number of packinghouses: 38
  - Number of packinghouses certified for USA: 10
  - Type of certifications
    - HACCP (APPCC)
  - Traceability system:
    - IN-20 (Normative Instruction number 20 issued by Government (MAPA))
      Each packinghouse has their own traceability system

- Certification Companies
  - IBAMETRO (Government entity)
  - SANTEC
  - WQS
  - TUV
  - SGS (with IBAMETRO license)
Brazil

- Food Safety Programs
  - Government: Integrated Food Production (PIF)
- Associations:
  - VALEXPORT
    - Extension seminars in conjunction with NMB
      - Topics: Global GAP, GMP, Postharvest practices
- Companies: Each packinghouse and farm is responsible for the execution of its own food safety program
Mango Food Safety Information

Ecuador

- Producers
  - Number of producers or farms: 81
  - Number de hectáreas: 9,000 (5,311.00 Exportation)
  - Number of farms for exportation to USA: 81 (41 producers)
  - Type of certification:
    - GlobalGap (40% of exportation area)
Ecuador

• Packinghouses
  • Number of packinghouses: 4
  • Number of packinghouses certified for USA: 3
  • Type of certifications:
    • PrimusGFS
    • GlobalGap
  • Traceability System: Each packinghouse has its own traceability system

• Certification Companies
  • PrimusLab
  • Control Union
  • BSC Oko
Ecuador

• Food Safety Programs
  • Government: No

• Association:
  • Fundacion Mango del Ecuador
    • Extension seminars in conjunction with NMB
      • Topics: Cultural practices, postharvest practices, GAP and GMP

• Company: Each packinghouse and farm is responsible for the execution of its own food safety program
Mango Food Safety Information

Mexico

• Producers
  • Number of farms or producers: ~44,198 Producers
  • Number of hectares: ~173,060
  • Number of farms or producers for exportation to USA: ~16,800
    • With Hot Water Treatment: 86,754 Ha
    • Without Hot Water Treatment: 4,500 Ha
    • With Irradiation Treatment: 538 Ha
  • Types of certifications:
    • BUMA (Good use and agrochemical management)
    • SENASICA - SRRC
    • GlobalGap
Mexico

- Packinghouses
  - Number of packinghouses: ~ 72 (62 HWT)
  - Number of packinghouses certified to USA: ~ 62 HWT + 7 NHWT
  - Types of certifications:
    - SENASICA - SRRC: 46 HWT + 5 NHWT
    - México Calidad Suprema: 46
    - GlobalGap: 8
    - PrimusLab: 10
  - Traceability system:
    - EMEX - USDA (62)
    - Each packinghouse has its own traceability system
- Certification companies
  - Normex (SENASICA – SRRC, México Calidad Suprema)
  - PrimusLab, SGS, CVQ, SQF(AVQ), BUMA, Others
Mexico

- Food Safety Programs
  - Government: SENASICA - (SRRC)
- Associations:
  - EMEX
    - 2002 – Packers registration
    - Mexico Calidad Suprema & SRRC
    - Courses: HACCP, BPA, BPM, BUMA, SRRC, Sist. GlobalGap
  - CONASPROMANGO
    - BUMA (1,200 producers)
  - CESAVESIM
    - CESAVESING - SENASICA- Producer Organization
- Extension meeting in conjunction with NMB, CONASPROMANGO and EMEX
- Company: Each packinghouse and farm is responsible for the execution of its own food safety program
Peru

- Producers
  - Number of farms and producers: ~14,500
  - Number of hectares: ~21,000
  - Number of farms for exportation to USA: NA
  - Types of certification:
    - Code imposed by *Servicio Nacional de Sanidad Agraria de Perú* (~2.200 producers- Fruit fly SENASA)
    - GlobalGap (Big producers)
Peru

- **Packinghouses**
  - Number of packinghouses: 36
  - Number of packinghouses certified to USA: 6
  - Types of certification:
    - HACCP
  - Traceability system:
    - Each packinghouse has its own traceability system

- **Certification companies**
  - SGS
  - Control Unión
  - NSF
  - Bureau Veritas
Mango Food Safety Information

Peru

- **Food Safety Programs**
  - **Government:** SENASA
    - Ley de Inocuidad de Alimentos (DL 1062) y el Reglamento a la misma (DS 034-2008-AG)
    - Reglamento de inocuidad agroalimentaria específico para el SENASA (DS 004-2011-AG)

- **Associations:**
  - APEM - PROMANGO
    - Program on interpretation and implementation of HACCP norms for packinghouses
    - Extension seminars in conjunction with NMB
      - Topics: Cultural practices, postharvest practices, DAP and GMP

- **Company:** Each packinghouse and farm is responsible for the execution of its own food safety program
Mango Food Safety Information

Guatemala

• Producers
  • Number of farms or producers: 155
  • Number of hectares: ~5,500 (4,500ha to USA)
  • Number of farms certified for USA: 150
  • Type of certification:
    • GlobalGap
Guatemala

- **Packinghouses**
  - Number of packinghouses: 5
  - Number of packinghouses certified for USA: 5
  - Type of certifications: GlobalGap & HACCP
  - Traceability system: Each packinghouse has its own traceability system

- **Certification companies**
  - PrimusLab
  - Ecológica
  - LSQ
  - Mayacert
Mango Food Safety Information

Guatemala

• Food Safety Program
  • Government: Environmental and Agricultural Protection Program (PIPAA)
• Associations:
  • AGEXPORT - Mango Committee *(Comité de Mango)* - PIPAA
    • A food safety system is currently under implementation to try to uniform the traceability systems and packinghouses and farm certifications
    • Extension seminars in conjunction with NMB
      • Topics: Cultural practices, postharvest practices, BPA, BPM
• Company: Each packinghouse and farm is responsible for the execution of its own food safety program