XSIT Facts and Figures

Started in 2007
Over 180 people employed
Release stretches over = 1 800km
9 months of release from September to May
Adapted crop or area specific programmes

Capacity:

| Produce | 60 000 000 moths per week |
| Service | 22 000 hectares per week (Rate per ha dependent) |

Current Output:

| Produce | 50 000 000 moths per week |
| Service | 16 500 hectares per week |
Background

XSIT Facility location ★ & Releases
Background

Moths are irradiated at 180 GY - both Males & Females Released
Why SIT - FCM AND MARKET ACCESS Phytosanitary Status


United States  South Korea  China  Thailand  EU  Philippines  Vietnam
SIT and contributions to food safety
Internal Elements of Sustainability

**Diet:**
- Has to be 100% consistent
- Two extruded recipes available

**Space and Collection Methods:**
- Air flow and air quality critical to success
- Additional Building rented in 2017
- Cyclone collection being trialed on commercial scale

**Release Mechanism:**
- Gyro Copters proved to be unsafe
- R22 Helicopter & Quad bikes used currently
- Point release being tested on wide scale

**Sterilization Methodology:**
- Cobalt 60 used since beginning but has drawbacks
- X-Ray being researched and Trialed
FCM SIT Radiation Needs

- Irradiate to 180 GY
- Irradiate up to 10 million moths a day
- Keep moths cool and healthy
- Daily guaranteed service availability for 9 months
Cobalt 60 Source Challenges

• Acquisition Process
• On Site Risk
• Lack of Flexibility
• Disposal

**Cost**

- **Acquisition:**
  - Source and Transport: $350,000
  - Project Management, Security & Install: $125,000
- **Buildings & Bunker:** $150,000
- **Security System:** $60,000
- **Total Installation:** $685,000

**Running Cost per annum:**
- Support Service (safety & security): $19,500
- Staff: $18,000
- Ragtags: $2,700

- **Total Running Cost:** $40,200
X-Ray Challenges

• High Cost – SIT pricing
• Low reliability with extended downtime on failure
• Availability of Spares and Support
• Volume and through-put for scalability
• Stable and Reliable Electricity Supply
Sustainability Workstreams

- Technology Support
- Research on X-Ray
- Funding Options
- Government Involvement
- IP Sharing and Training
Thank you