Session 4
Examples of Public-Private Partnerships: Electron Beam Technology in Support of the SDGs

Prof. Suresh D. Pillai
National Center for Electron Beam Research
An IAEA Collaborating Centre for Electron Beam Technology
Texas A&M University, College Station, Texas, USA
National Center for Electron Beam Research

Bring together key strategic partners to take the idea of using e-beam technology into reality

Outreach & Education

Private Industry
Private Investors
International Financing Institutions
National Center for eBeam Research
Academic Researchers
International Agencies
Equipment Providers
Case Study – Mexico
Medical Device Sterilization E-beam Facility

Baja California has the highest concentration of Medical Device companies in Mexico.

Baja California is a Worldwide Hub of Medical Device Manufacturing and Sterilization.
Case Study – Mexico

Mexico exports Manila mangoes for the 1st time ever

Framework

Technical cooperation regional project RLA/5/066 “Increasing the Commercial Application of Electron Beam and X Ray Irradiation Processing of Food”
Mangoes – Pakistan
Creation of new companies and jobs both in Pakistan and USA

• Strong interest for mangoes from Pakistan
• Partnered with Mevex, Inc.,
  – Developed a certifiable process (linac operating parameters) to achieve the 400 Gy – 1000 Gy dose limits
• Worked closely with USDA-APHIS for documenting and demonstrating the process and SOP of the facility
• Mangoes air freighted from Karachi, Pakistan to Houston, Texas then to Texas A&M University eBeam Center
Lessons Learned

- Private industry has to have a strong stake in the project
- Education, Education, Education for everyone
  - High quality, technically very specific educational materials
- Teaming with local educational institutions
- Financial and technology sustainability has to be documented, verified and proven