Presentation to 16th Meeting of COMSATS Coordinating Council

Industrial Technology Institute
Progress, Development and Issues

Vijaya Kumar
Chairman, Industrial Technology Institute
Sri Lanka

vkumar@pdn.ac.lk
ITI Thrust Areas and Competencies

Thrust Areas
- R & D for technology commercialization
- Internationally competitive Technological Services
- Research for society - Health, Nutrition, Environment
- Human Capacity and Infrastructure Development

Competencies
- R & D in Food, Herbal, Materials, Environment
- Internationally recognized accredited testing/calibration
  - High quality analytical/measurement facility in core areas
  - Chemical metrology services traceable to SI Units
- Strategic S&T information required by industry
ITI Location

2.5 hectare plot in Colombo

- Main building area
- Research divisions
  - Food/Herbal/Environment/Materials Technology
- Administration and Support Services
  - General Administration/Finance/Supplies/Human Resources/Engineering Services/Pilot plant/Library
- New building area
  - Testing Services, Metrology services

New 4 hectare plot in Malambe, 20 km from Colombo

- Administration, AgriFood/Herbal complete
Malabe new building

Above: Agro-Food Laboratory Building
Top Right: Administration Block
Bottom Right: Pilot Plants
Achievements 2009-2012 – R & D

Technologies Transferred
- Goraka (Garcinia) based drink, Bottled coconut water
- Pectin from fruit waste
- Instant rice
- Kothalahimbutu (low Glycemic index) biscuits
- Massak NP natural pesticide and bacteria based larvicide, Bti and insecticide, Btk

Technologies awaiting transfer
- Red clay crockery,
- Absorbent sanitary wear from agricultural waste
- Graphene from graphite
- Automatic street lamp controlling system.
Achievements 2009-2012 – Services

Testing Services
- Over 40,000 test services during the 3 year period
  - Developed several new test methods
  - Moving into biotechnology testing services.

Services to the Community
- Low level technologies through Vidatha/Divi Neguma
  - Efarms – Cost-effective solution for real time information transfer from ITI to farmers/rural MSMEs.
- Health properties of traditional rice varieties
- Kithul (Caryota urens) sap technology
- Jeevaposha food supplement for North East (WB)
ITI Income (2008-2012)

Total ITI Income

Testing Services Income

Technology Transfer /Royalty Income
Constraints and Challenges

Human Resources

- Cannot attract/retain quality research staff, marketers, accountants, at emoluments offered. E.g. PhD recruit with 18 years service earn a third less than University beginning PhD recruit Rs 98,000
- No study leave schemes for staff to obtain PhDs unlike in Universities
- Retirement at 60 years (Universities 65) - Our best scientists/engineers lost at the peak of their abilities.
- Technology transfer arm - good lawyers, marketers, business development specialists – Salaries not competitive
Constraints and Challenges (Continued)

Financial matters

- Malambe Building Project – Progress Slow
- Admin. Building Phase 1 (Operational Area) complete
- Agro-Tech Building complete.
- Admin Building Phase 2 (Public Facility, Auditorium) funds allocated but not released.
- Advanced Materials complex – Seeking funds
- Research Funds - Less than 40% of capital allocations released usually and mostly in November- December.
- Government/bank support for entrepreneurs low
  - E.g. EITI’s Bti larvicide/Credit for rural entrepreneurs.
Training

Training services which could be offered

- Testing Methods
- Calibration Methods (Metrology)
- Pilot Plant operations in Food and Herbal Technology
- Environmental Technologies

Constraints.

- No system of guest houses, accommodation expensive

Training interested in

- Vaccine development
- Commercialization of Herbal products
- Research- Use of instruments which we lack
Thank you