

Presentation to 16th Meeting of COMSATS Coordinating Council

Industrial Technology Institute Progress, Development and Issues



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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

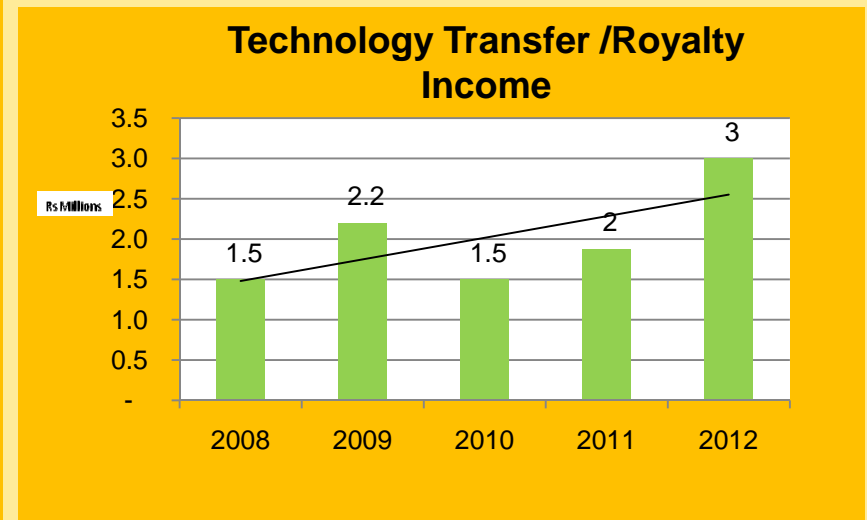
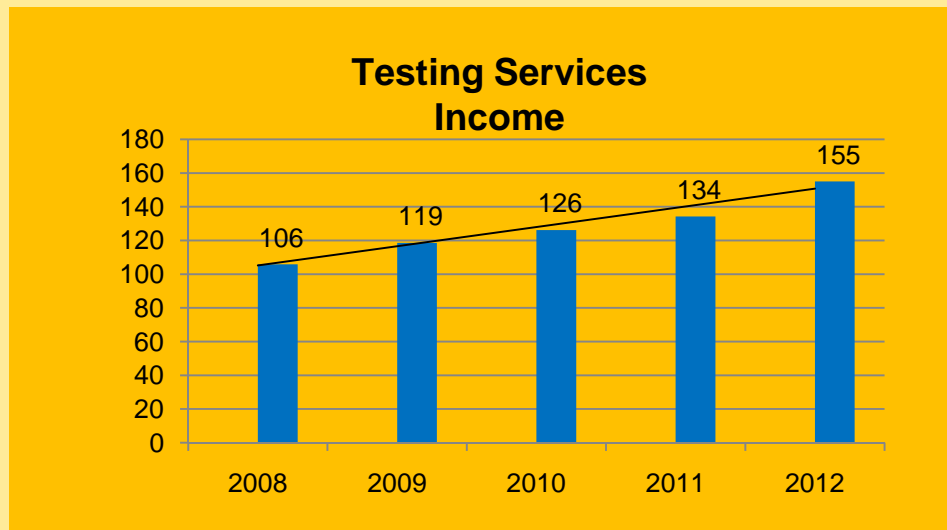
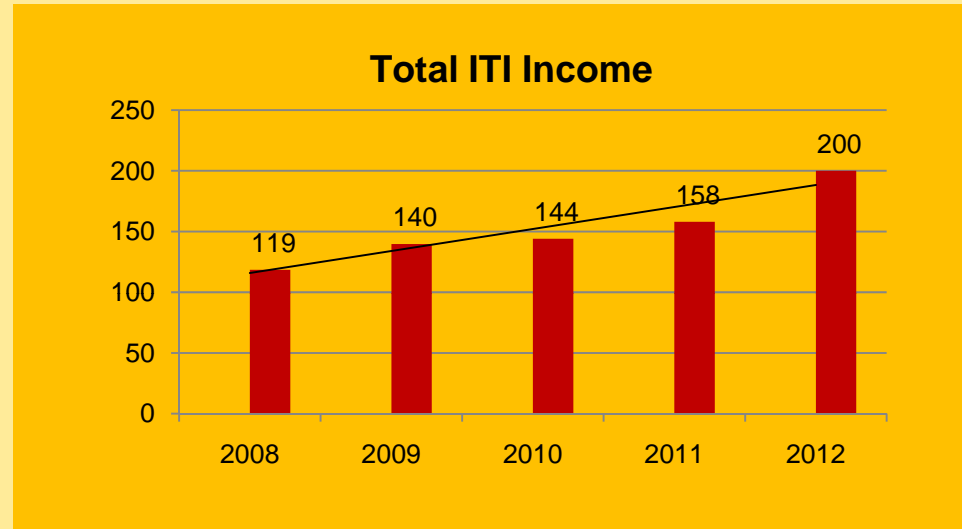
Testing Services

- 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)



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