

## ITDI Services

In support of the ITDI mission, the Institute provides various services or interventions to industry to help modernize the production sector and improve their productivity :

### Research and Development (R & D)

Multidisciplinary applied research in the fields of industrial manufacturing, mineral processing, energy and environment, using local raw materials.

### Technology Transfer and Contract Projects

Transfer of mature technologies with techno-economic viability, from product/process development to techno-assessment to commercialization.

### Tests and Analyses

Recognized as the national agency for tests and analyses, ITDI plays a critical role in product standardization and testing by providing analytical and testing services to industry and government agencies for various products and materials.

### Food Engineering Services

A package of services offered to the local food industry and other institutions that provide them with technical assistance to improve product quality and productivity in their operations, and enable them to comply with the stringent Sanitary and Phytosanitary System requirements of international trading under the World Trade Organization (WTO). Such services include engineering consultancy and technical advisory, process development and scale up, design and fabrication of food processing equipment, and design, layout and set up of processing plant.

### Metrology

As national custodian for weights and measures, ITDI's program on metrology responds to the call for accuracy and traceability in the units of measurement (e.g. mass, length, volume) for product standardization, higher quality and competitiveness of local products, and protection of the consumers.

### Process Engineering

This program is a tool to solve production bottlenecks or shop floor problems and to translate ITDI developed processes

into production systems. Through this program, ITDI integrates waste treatment systems, safety measures and process control systems in the enterprise modules. It also touches on the development of complex design systems that can be used for a wide range of products or a wide variety of processes in a plant. (link to foods)

#### Post Harvest Handling/Near Farm Processing/Packaging

This provides encompassing solutions to problems on maintaining the quality and extending the shelf life of fresh produce from the time and place of harvest to the time and place of consumption, with minimum loss, maximum efficiency and maximum returns to all involved. Processing and marketing problems of seasonal crops are addressed by providing alternative solutions such as developing value-adding qualities to the product to ensure continuous supply beyond the harvest season.

#### Packaging Research and Development

Improvement of packaging system, implementation of tools of modern and innovative packaging technologies and label design to upgrade the global competitiveness of local products and institutionalizing linkages locally and abroad.

#### Cleaner Production (CP)

Promotion of sustainable development and strengthening of competitiveness of local industries by providing technical information and assistance in adopting CP technologies.

#### Enterprise Module ( EM)

Designed for technology to spin off from the laboratories to industry. Offers tenancy to prospective investors to set up their own business, with close supervision and mentoring. Available Ems: fruit juice processing, basi and sugarcane juice, vinegar acetator, soap, glass blowing, bioreactor, ceramics, smoked fish, and virgin coconut oil.

#### Energy Audit

A critical examination of an energy consuming facility to help improve energy efficiency and productivity by identifying areas where energy waste can occur and recommend energy saving opportunities. Services offered include audit of complete facility, energy equipment like boilers, dryers, motors and building, technical evaluation of energy conservation projects, and in-house training.

#### Industry Training and Skills Development

Hands on experience in manufacturing and various industrial processes, and demonstration/training on various technologies for income generation.

#### Scale Up Production Facilities

Production facilities on a scaled up level for various technologies or processes are also available to industry such as those on: coconut oil milling and refining, food processing line (canning & dehydration), and materials processing (ceramics, plastics).

#### Technical Information and Promotion

Documentation and dissemination of information on S&T services, technologies and other technical inquiry data and promotion assistance to clients in various media channels.

#### Library Services

Open to the public especially for college students, researchers and entrepreneurs. A worthy source of in-depth information on the Institute's major areas of concern and allied subjects; a special collection of theses and technical reports of in-house researches/studies.

#### OTHER SERVICES