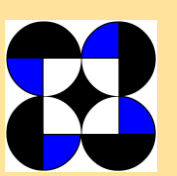
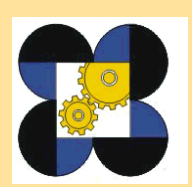


Standardization, Productivity, Innovation & Certification for Enterprises in Food Processing in Western Visayas

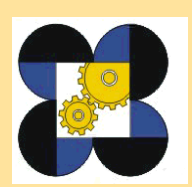
Maria Dolor Villaseñor
Food Processing Division
Industrial Technology Development Institute, DOST

Presented during the Forum on Standardization, Productivity, Innovation, and Certification for
Enterprises in Food Processing in Western Visayas;
April 29-30, 2015; University of the Philippines-Visayas, Iloilo City Campus

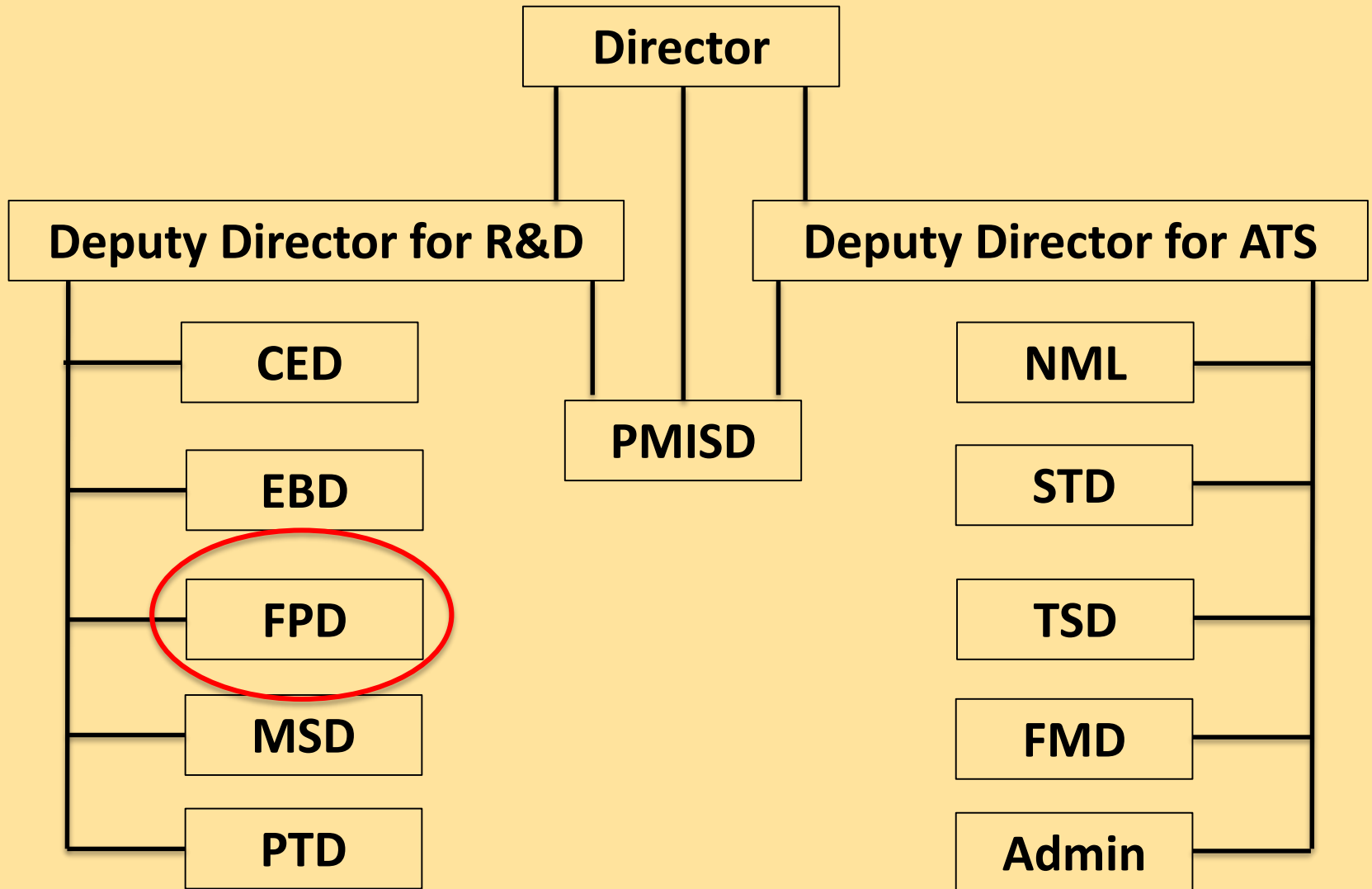
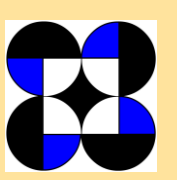


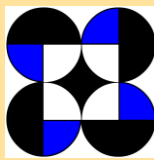
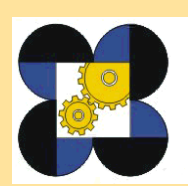
Industrial Technology Development Institute

DOST Science Complex
Gen. Santos Ave., Bicutan, Taguig City



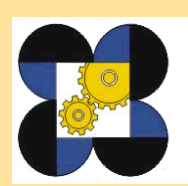
ITDI Organizational Structure



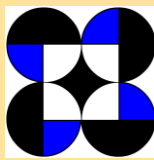


Philippine Ethnic Food Products

- **Product development & improvement**
 - ✧ **Drying**
 - ✧ **Thermal processing**
 - ✧ **Food fermentation**
- **Sanitary equipment design & proto-typing**
- **Establishment of food safety system for selected foods (peanut butter, *taho*, *sorbetes*)**

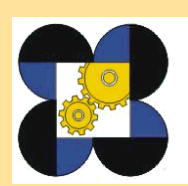


Food Processing Division: Services

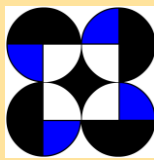


1. Product &/or Process development:

- Acetator for vinegar production
- Wine kit for wine fermentation
- Virgin coconut oil (centrifuge process)
- Muscovado process (improved)
- Alternative sugars (coco sugar, nipa sap, pineapple)
- Improved starter for rice wine (tapuy)
- Emergency Food Ration (EFR)
- Vacuum frying technologies
- Drum drying of fruit flakes
- *Tablea* processing

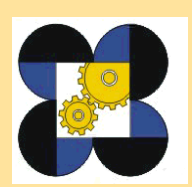


Food Processing Division: Services

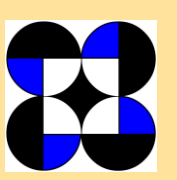


2. Certification readiness

- **Shelf-life tests**
- **Product specifications**
- **GMP audits & training**
- **HACCP audits & training**
- **Standard compliance assistance & support**
- **Thermal process evaluation**
 - ✧ **Heat penetration tests**
 - ✧ **Heat distribution tests**



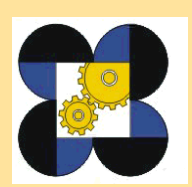
Food Processing Division: Services



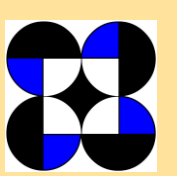
3. Sensory profiling

- Human panel
- Texture meter
- Color meter
- Electronic sensors





Food Processing Division: Services

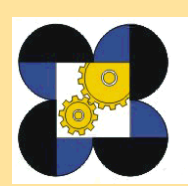


4. Equipment & process set-up

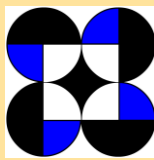
- Design of sanitary equipment
- Sanitary equipment fabrication supervision
- Plant lay-out



Raw Brown Sugar (Dumaguete)



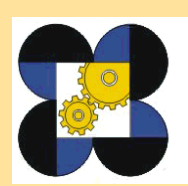
Food Processing Division: Services



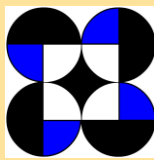
5. Facility usage

- Thermal processing line
- VCO processing line
- Beverage processing line
- Vacuum frying line
- Drying & dehydration line

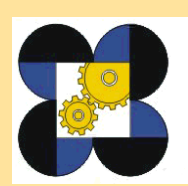
6. Trainings, consultancy thru the regional offices



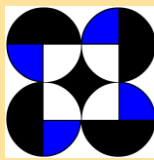
Food Processing Division: Outreach



1. **Development of Philippine National Standards (in cooperation with FDA, BAFPS, BPS, UP)**
 - **Flour-based confectioneries (*polvoron, piaya, barquillos*)**
 - **Milk-based confectioneries (*pastillas, yema*)**
 - **Fried corn snacks**
 - **Basi**
 - **Dried tropical fruits**

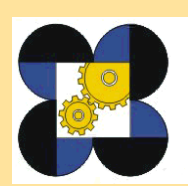


Food Processing Division: Outreach

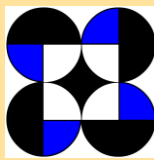


2. DOST Regional Food Innovation Centers

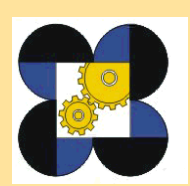
- Assistance in lay-out**
- Performance testing of food processing equipment**
- Training of FIC personnel (operations of equipment & product development)**
 - ✓ Davao – Philippine Women’s Center**
 - ✓ Cagayan – Cagayan State University**
 - ✓ Tacloban – Eastern Visayas State University**



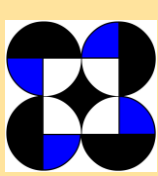
Food Processing Division: Outreach

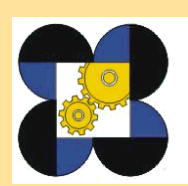


- **Training of FIC personnel:**
Focus: Operations of equipment (May 4-15, ITDI)
 - **Region 4A: Los Baños**
 - **Region 4B: Mindoro**
 - **Region 5: Bicol**
 - **Region 6: Guimaras**
 - **Region 9: Zamboanga**
 - **Region 10: Cagayan de Oro**
 - **NCR: Diliman**

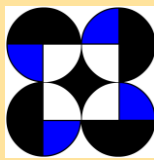


DOST Fabricated Equipment for FICs

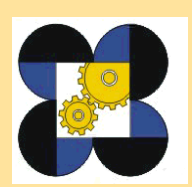




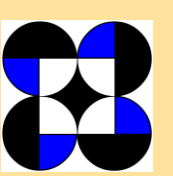
Food Processing Division: Outreach



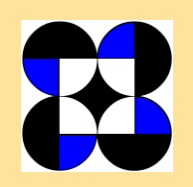
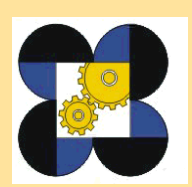
- **Training of FIC personnel:**
 - Focus: Product development (July 2015, ITDI)**
 - **All regional Food Product Development Teams (FPDTs)**
 - Focus: Recognition of Most Innovative Products (December 2015, PCIEERD)**
 - **Products produce using 3 FIC equipment (vacuum fryer, spray dryer, water retort)**



Additional Information



- **SIAL ASEAN**
World Trade Center, June 17-19
- **ASEAN Food Conference**
SMX Convention Center, June 24-26



THANK YOU!