

2nd National R&D Conference

2017 – 2022 Industry Sector R&D Priorities

Presented by:

CARLOS PRIMO C. DAVID, Ph.D.

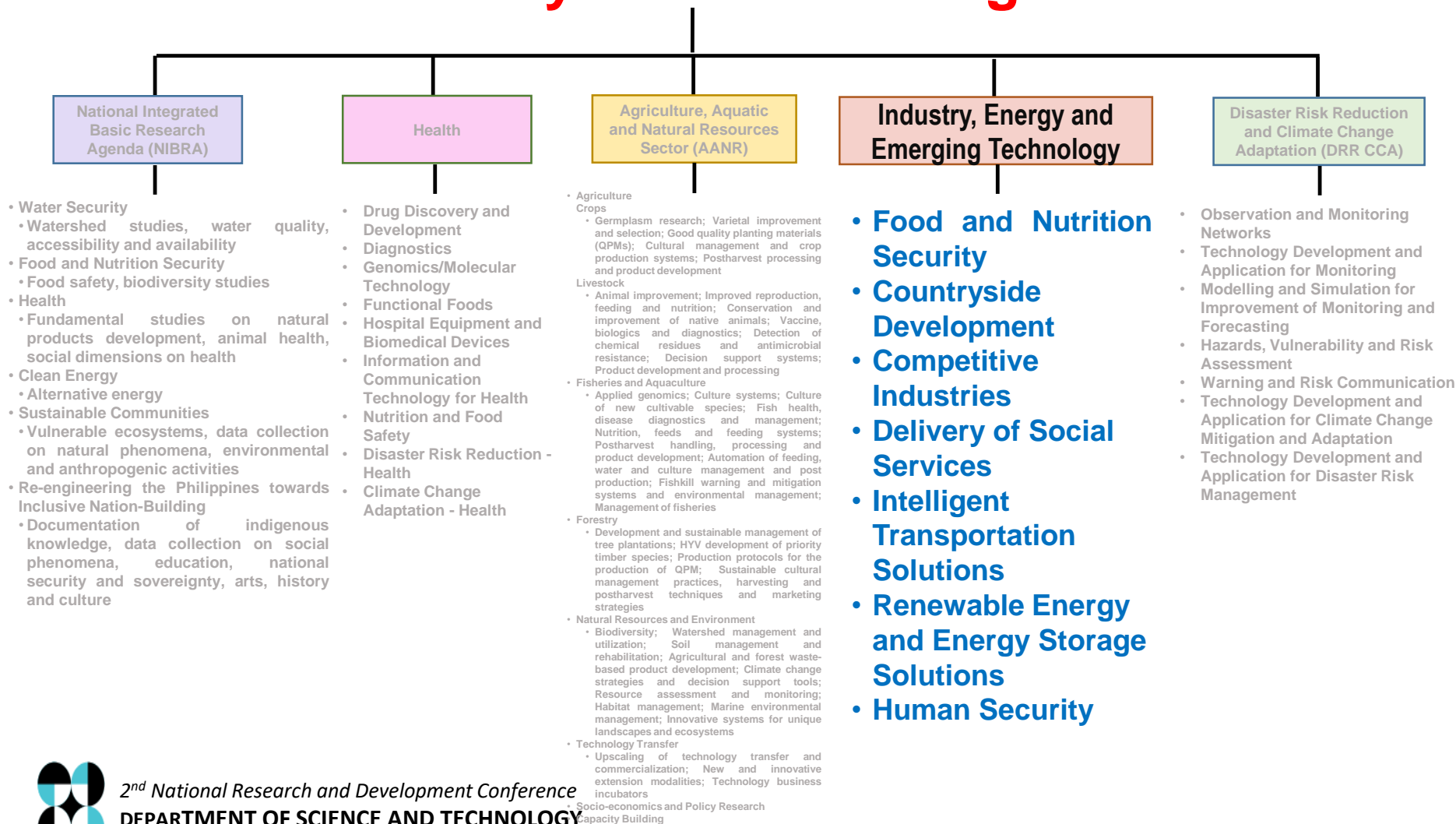
Executive Director
DOST-PCIEERD

15 February 2017



Harmonized National R&D Agenda (2017 – 2022)

R&D Priority Areas and Programs



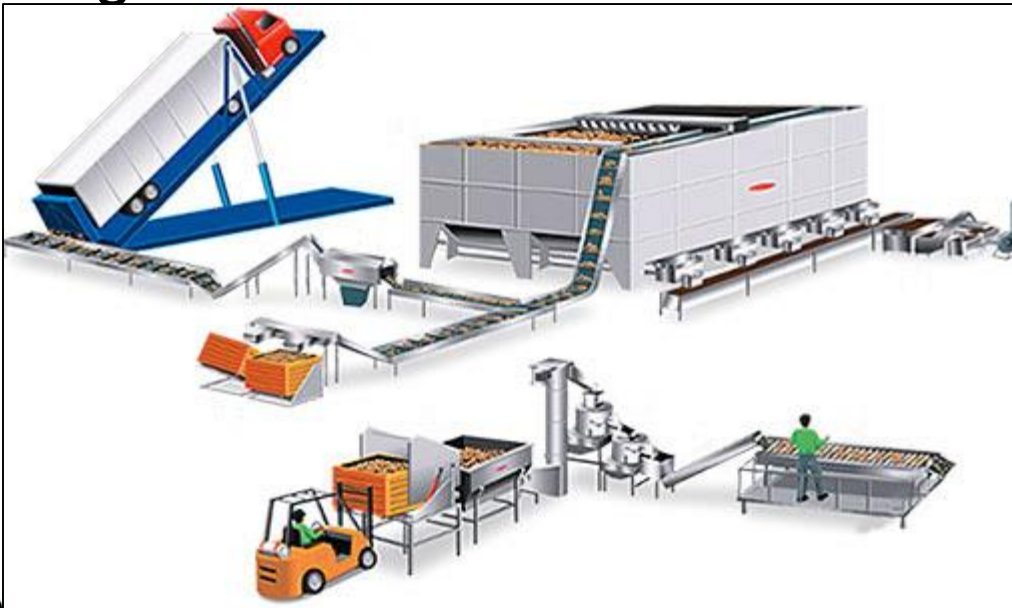
Food and Nutrition Security

- Affordable Tests for Food Contaminants
- Development of Food Safety Rating and Grading System for Food Service Establishments
- Safe and Regulatory-Compliant Food Products and Processes
- Improvement of Food Shelf-life
- Innovative Food Products



Countryside Development

- Agro-Processing, Utilization and Value-Adding
- Natural Products Development
- Improvement of Textile Processing
- Halal Processing Technologies for Food and Non - Food
- Metrology and Testing Methods for Laboratory Analysis
- Shop Floor R&D and Innovations
- Regional Consortia R&D



Competitive Industries: ICT, Electronics and Semiconductor

- Big Data Analytics
- Artificial Intelligence
- Internet of Things
- Advanced Electronics and Communications (e.g. photonics & opto-electronics devices, semiconductor materials, etc)



Competitive Industries: Mining and Minerals

- Green Mining Technology
- Clean Metallurgical Processes



Competitive Industries: Metals and Engineering

- Advanced Machine-Based or Machine Aided Metalworking and Testing Procedures
- Technologies for Disposal, Recycling, and Treatment of Metal Wastes



Competitive Industries: Construction

- New Construction Materials and Techniques



Competitive Industries: Packaging

- Smart and Green Packaging Technology
- Appropriate Packaging System for Various Products



Photo credit: twitter.com



Competitive Industries: Industrial Application of Nuclear Technology

- Food and Non-Food Processing
- Non-Destructive Testing
- Product Development
- Environment Monitoring



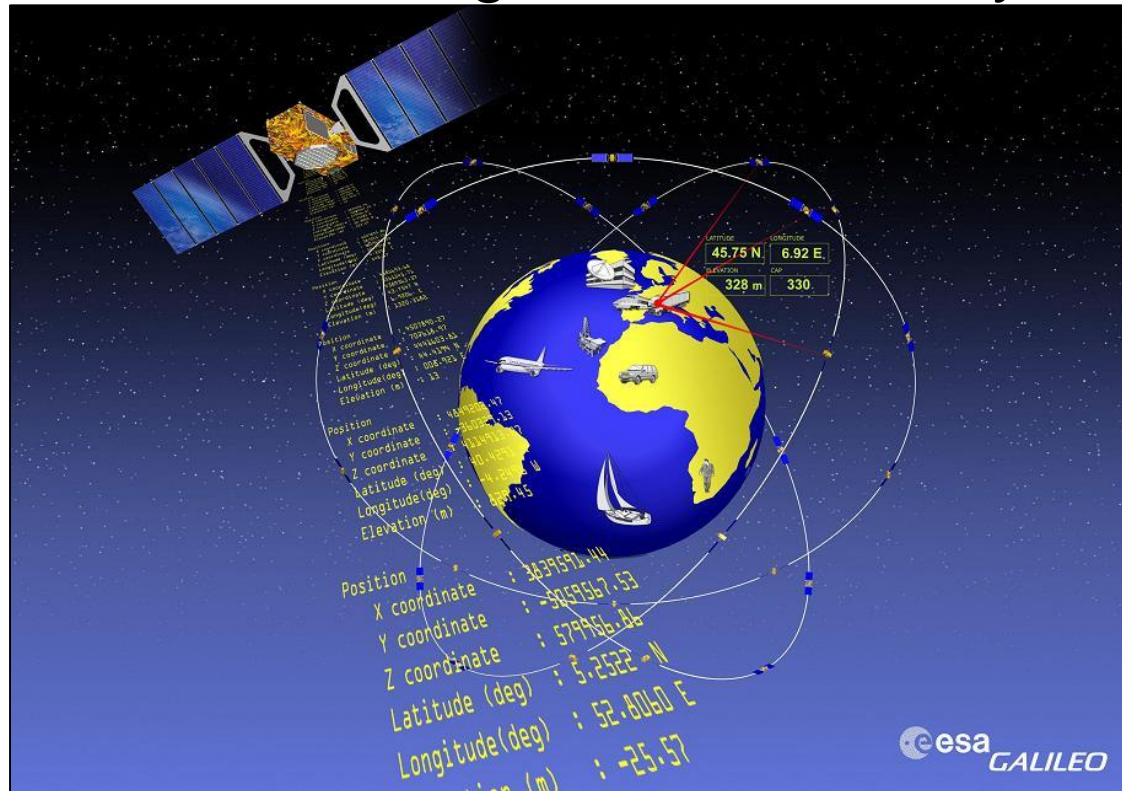
Delivery of Social Services: Environment and Pollution Control

- Wastewater Management
- Air Pollution Control and Management
- Solid Waste Management



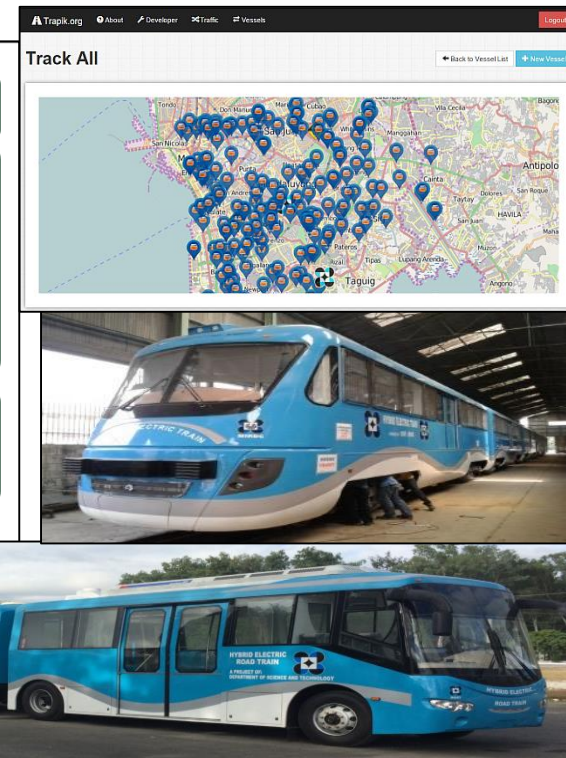
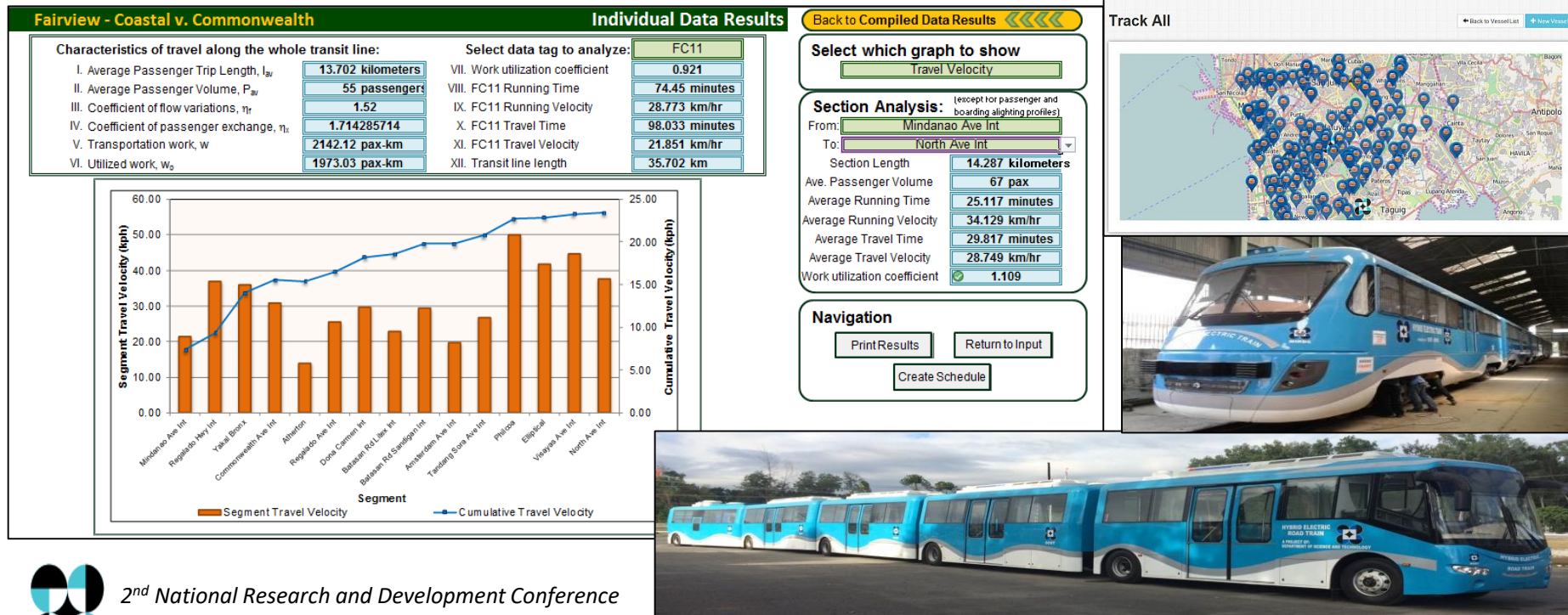
Delivery of Social Services: Space Technology Application (STA)

- Development of Micro-Satellites and Space Technologies
- Use of STA for Resource Mapping
- Application of Global Navigation Satellite System (GNSS)



Intelligent Transport Solutions

- Alternative Mass Transport Systems and Components
- Intelligent Vehicle-to-Vehicle Connectivity and Information Sharing
- Sea-worthy Hull Design
- Automatic Identification System (AIS)



Renewable Energy and Energy Storage Solutions

- Energy-efficient Technologies for Industry and Buildings
- Renewable Energy Systems & Bioenergy Technologies
- Functional Materials for Alternative Energy Sources and Energy Conversion and Storage



Photo credit: Waste to Energy & Wattsmart Projects



Human Security

- Food Defense
- Biosecurity
- Cybersecurity

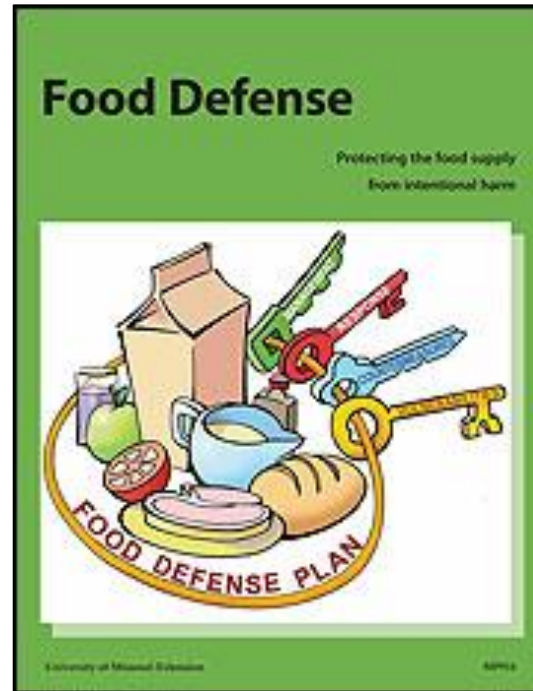


Photo credit: MU Extension – University of Missouri; NYU Tandon School of Engineering; Biodesaru



Funding Programs

Regular Funding Support

- Regular Grant-in-Aid
- Technicom (c/o TAPI)

Institutional and Human Resources

- Institutional Development Program (IDP)
- Technology Business Incubation
- Training and Conference Attendance Support
- Overseas Collaboration Programs

Special Funding Support

- Young Scientist Program (YSP)
- Equipment Use Grant (ADMATEL, EPDC, PNRI)
- Equipment and Facilities Management Program



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