



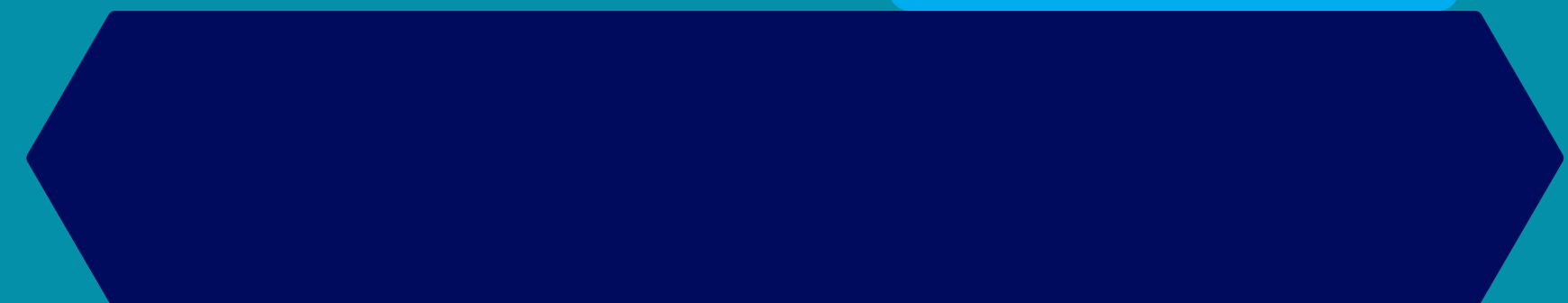
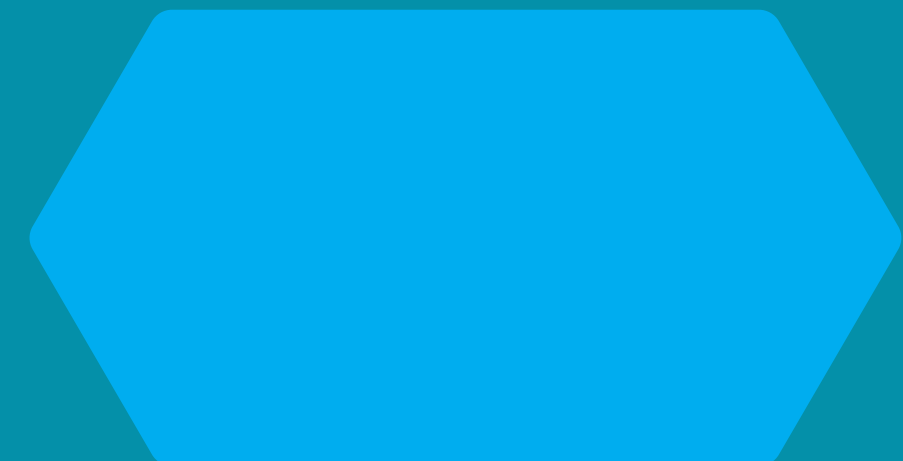
TANZANIA INDUSTRIAL RESEARCH AND DEVELOPMENT ORGANIZATION (TIRDO)



Programs/Activities of Centers
of Excellence during February 2023 to September
2024

Presented to the 25th Meeting of COMSATS
Coordinating Council on 10 – 12 Sept, 2024 in
Tianjin, China

- TIRDO in brief
- Capacity of TIRDO
- TIRDO Services
- Achievements of TIRDO
- Programs that supports South – South Cooperation
- Programs that supports SDGs
- Future plans for COMSATS Network
- Areas of collaboration



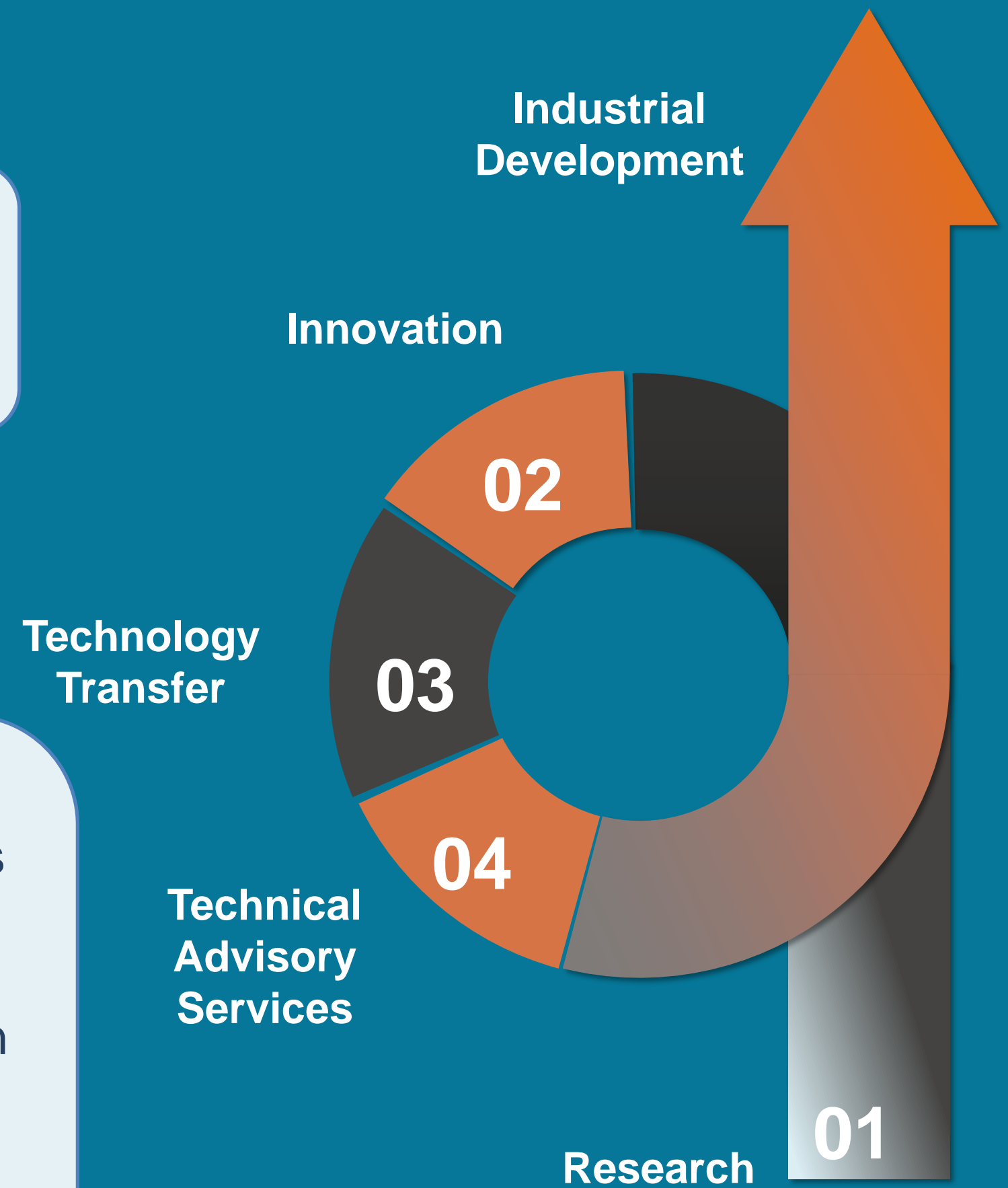
TIRDO IN BRIEF

Tanzania Industrial Research and Development Organization is a multi-disciplinary research and development organization

Established in 1979, Parliament Act No.5, partially amended on 12th May 2023

TIRDO FUNCTIONS

- ✓ To conduct research, development on industrial processes and products.
- ✓ To carry out research on industrial techniques and technologies and evaluate their suitability for adaptation in Tanzania
- ✓ Provide technical advisory services and guidance to industries
- ✓ Provide technical advisory services to avert or minimize the sources of industrial pollution



VISION

To be a centre of excellency in provision of innovative solutions for a competitive industrial sector.

MISSION

To support the development of competitive and sustainable industries through quality research and professional technical support services.



CAPACITY OF TIRDO

1 *Laboratories*

- *Environmental Laboratory*
- *Food Microbiology Laboratory*
- *Wet Chemistry Laboratory*
- *Analytical Laboratory*
- *Energy Efficiency Laboratory*
- *Coal Laboratory*
- *Material Science Technologies Laboratory*
- *Textile and Leather Laboratory*
- *Electronics and Instrumentation Laboratory*

2 *Incubation Hub*

3 *Personnel*

- *Artisans, Technicians, Laboratory Scientists*
- *Researchers*
- *All with Diplomas, B.Sc, M.Sc and PhDs*

TIRDO SERVICES

1

Industrial Technical Audits

2

Feasibility Studies

3

Laboratory Analytical Services

4

ICT services & System's Development

5

Non Destructive Testing (NDT)

6

ESIA, EIA, Environmental Audits

7

Energy Efficiency services /Energy Audits

8

Electronic Equipment maintance and repair

9

Product Development/Value addition

ACHIEVEMENTS OF TIRDO

Research on Tanzanian coal quality

Production increase
From Ton 255,884
To Ton 913,000

357%

Industrial technical audit

38- Audited
22- Industries handled back to the Government

38/22

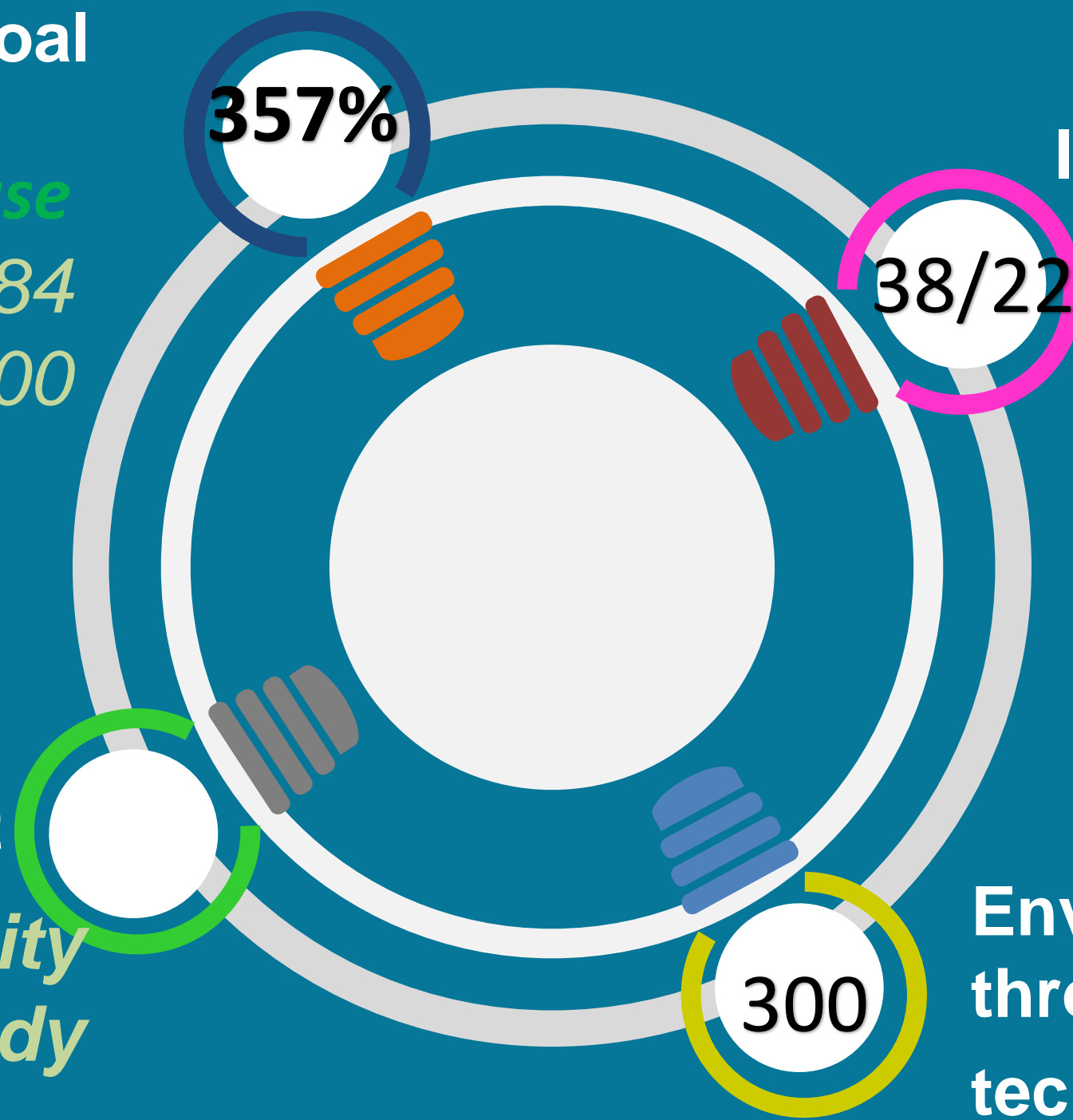
Engaruka Soda Ash project

Technical feasibility study

300

Environmental Mitigation through Plastic Recycling technology

Trained - 300 SMEs



ACHIEVEMENT OF TIRDO...

CPB Rice paddy mill,
Mkuyuni Mwanza

*Last stages of
commissioning*

Kilimanjaro International
Leather products, Moshi

*First phase completed and
second phase at 97% complete*

Energy Audits to Industrial
establishments & Buildings
(commercial and
Residential)

Establishment of GS1 Tanzania
BAR CODES and traceability handling



THE PROGRAMS THAT SUPPORTS SOUTH – SOUTH COOPERATION

- Collaborative Research Proposal/Project implementation
 - TIRDO participated in the implementation of Project title: ***Energy and Raw Material Recovery from Treatment Sludge as a Conceptual of Zero Waste***
- Establishment of MoUs among COMSATS members
 - TIRDO used to have a MoU with TUBTAK Marmara

THE PROGRAMS THAT SUPPORTS SGDS

- SDG 7: AFFORDABLE AND CLEAN ENERGY; SDG 13: CLIMATE ACTION
 - ✓ Use of coal dust to produce value added coal dust briquettes
 - Production of smokeless coal briquettes for industrial and domestic purposes
- ✓ The Use of Biomass Briquettes for Combating Climate Change.
 - Four (4) formulated mixing ratios passed TBS standard of biomass briquettes
 - Hand book guiding step by step production of charcoal biomass briquettes developed

THE PROGRAMS THAT SUPPORTS SGDS

- Implementation of Energy Efficiency Action Plan 1.
 - Project contribute to achieving Energy Efficiency in households, industries, public utilities, and buildings through the implementation of the eight (8) key Energy Efficiency actions

THE PROGRAMS THAT SUPPORTS SGDS

- SDG 8: DECENT WORK AND ECONOMIC GROWTH
- Value addition projects supports

SURVEY FISH MARKET
Kwa kushirikiana na

TANZANIA INDUSTRIAL RESEARCH AND DEVELOPMENT ORGANIZATION (TIRDO)
Inawaletea

KAUSHIO LA SAMAKI LA JUA
(FISH SOLAR DRYER)

FAIDA ZA KAUSHIO

Uhifadhi wa Virutubisho
Usalama wa Chakula
Kuongeza Thamani
Ufanisi
Inatunza Mazingira
Uchumi

Karibuni Sana

- Supported the establishment of OKOA Enterprises Company Ltd for Mushroom Production value addition
- Supported implementation of the value addition of Seaweeds together with Umwama Cooperative
- SMEs Value addition business supports
- Technically supports Survey Fish Market Limited in fish drying technologies

FUTURE PLANS FOR COMSATS NETWORK

- Submission of experts profiles for joint collaboration projects implementation
- Changes of focal point for COMSATS communication and coordination
- Continues recognition of the Commission (COMSATS) through members' websites
- Continues to introduce and recommend COMSATS to other National Organization such as Commission of Science and Technology of Tanzania (COSTECH) whom is the custodian of Science and Technology in Tanzania

AREAS OF COLLABORATION

- Collaboration in the following areas is highly encouraged;
 - **Waste Management,**
 - Climate Change,
 - Value Addition,
 - Energy Efficiencies/Clean Energies,
 - ICT,
 - Technological Innovation,
 - Incubation
- Training and coaching of SMEs, Entrepreneurs, Industries such as;
 - Supply Chain,
 - Quality Management System,
 - Entrepreneurship Management,

WAY FORWARD

The collaboration should be established through the signing of the MoU between TIRDO and other COMSATS members

