The Dangote Academy: Structure, Current Status & Future Direction.

Presentation on “Integrating Energy Efficiency into DVET” at Dangote Academy.
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Presentation Structure

• The Dangote Group
  – Who are we?
  – Mission, Vision & Values
  – Rapid Growth and Emergence to Global Stage
  – Current and future Businesses

• A snap shot on Nigeria
  – Its economic indices
  – Government policies
  – Industrialization
  – Skills development scenario

• The Dangote Group Employability & Technical Skills Development Initiative
  – The Dangote Academy
  – The business imperative
  – Structure and strategic objectives
  – Programs & On-going collaborations
  – Future Direction
The Dangote Group

• **Who are we?**
  – The Dangote Group is a diversified and fully integrated conglomerate with interests across a range of sectors in Nigeria and Africa with a capitalization in excess of US $ 20 billion.
  – Our current interests include cement, sugar, flour, salt, fertilizer, petrochemicals, and steel sectors of the economy.

• **Our business focus**
  – Building local large scale manufacturing capacities to generate employment in Nigeria & Africa.
  – Providing value-added products & services that meet the “basic needs” of Nigerians through import substitution.
Our Mission, Vision & Values

• **Mission**
  – To touch the lives of people by providing their basic needs

• **Vision**
  – To be a world-class enterprise that is passionate about the quality of life of the general populace and giving high returns to stakeholders

• **Our Key Values**
  – Customer service
  – Entrepreneurship
  – Excellence
  – Leadership
A Snap Shot on Nigeria

• Population
  • 173.6 Million (World Bank)
• Demographic profile
  • Below 14 years: 43.2%
  • 14-64 years: 53.7%
  • 65 years & above: 3.1%
  • Median age: 18.2 years
• Literacy level: 61.3%
• Unemployment rate: 23.9% (2012)
• GDP per capita: $1098 (2013)
• GDP Real growth rate: 6.23% (2013)

• Nigeria as an emerging economy has come a long way.
• Gained her independence from colonial rule in 1960
• Fought civil war from 1967-1970
• Mostly governed by military rule in the sixties to nineties
• Has enjoyed uninterrupted democratic rule since 1999 to date.
• Has become potentially a key player in African Economic Affairs
• Continues to face economic challenges of poverty, unemployment, poor infrastructure and slow industrialization

For Nigeria, that is blessed with vast resources, including young population, the key to employability is three-folds:

1. Development of infrastructure
2. Rapid Industrialization (More Investments in manufacturing)
3. Development of the skills of the young population for gainful employment.
Dangote Academy’s Mission & Vision

**Mission**
To be the Centre of Excellence for Corporate Leadership Skills, Technical Training and Vocational Skills acquisition

**Vision**
To provide the talent pipeline for the Dangote Group while filling the industrial skill-gap in Nigeria
Strategic Objectives of the Academy

1. To be the umbrella organization for all talent development & learning initiatives for the Group

2. To provide facility and platform for technical skills acquisition benchmarked to world-class standards

3. To attract & develop high quality talent from secondary and tertiary institutions through structured process

4. To align to the rapidly changing technologies by building long-term relationships with OEMs and institutions of learning

The Four Cornerstones
Business Imperative of the Academy

• There is a wide skill-gap between what the industries require and what the academic institutions offer
• For our business that is expanding and growing rapidly, sourcing the right skills in right number is a big challenge
• Therefore, the Academy is essential to providing talent pipeline for our businesses while promoting employability in Nigeria
The Structure of the Academy

DANGOTE ACADEMY OF LEARNING & DEVELOPMENT

……..building the pyramid for corporate excellence

DANGOTE ACADEMY

Institute of Management Training

Institute of Technical Training

LEADERSHIP SKILLS

Corporate Leadership
Strategic Management
Executive Development
Management Training
Supervisory Management
Specialized Technical Training for Engineers & Technicians
Vocational Trades for Technicians, Artisans & Operatives

MANAGEMENT SKILLS

Leadership Skills

EXECUTIVE DEVELOPMENT

Core Technical Skills

SUPERVISORY MANAGEMENT

VOCATIONAL SKILLS

Vocational Skills

DEVELOPING RE-SKILLING ENGAGING EMPOWERING

NIGERIAN YOUTH
Dangote Academy Training Schemes

**ELIGIBILITY**
- Selection from Universities, Polytechnics & Technical Colleges
- Graduate Engineers (B. Eng, HND)
- National Diploma (ND)
- Technical College Leavers (SSSC)
- Literate & Driving Experience

**PROGRAMME**
1. Graduate Engineers Training Scheme (GETS)
2. Vocational Training Scheme (VTS)
3. Junior Technicians Scheme (JTS)
4. Fleet Drivers Training Scheme

**TARGET SKILLS**
- Engineering & Plant Skills
- Technical & Vocational Skills
- Vocational & Craft Skills
- Safe Driving & Fleet Management Skills

**PRODUCTS**
- Skilled Engineers & Team Leaders (5th batch is under training)
- Technicians & Operators (5 batches trained)
- Artisans & Craftsmen (2nd batch currently under training)
- Fleet Drivers (2000 trained and absorbed)

**Absorption into Dangote Group Workforce**
- 2500 Trained

...Finance, Petroleum, Fertilizer, Food Technology etc. Training Schemes under planning
Vocational Training Scheme

- **Main Objective**
  - To train and develop fresh polytechnics ND graduates to become skilled technicians & operators

- **Trades Covered**
  - Welding & Fabrication
  - Fitting & Mechanical Maintenance
  - Heavy duty automobile maintenance
  - Instrumentation & Automation
  - Electrical Maintenance
  - Process Operation

- **Program Status**
  - Five streams of trainees in a batch size of about 50 have been trained from 2010-2013
  - About 90% of those graduated have been mostly absorbed into DCP and a few in other SBUs
Graduate Engineers Training Scheme

- **Graduate Engineer Trainee Scheme (GETS)**
  - The 1st and 2nd batch of Graduate Engineers have been trained and absorbed in the Group
  - The 5th batch of 50 trainees are currently undergoing training.

- **Entry Requirements**
  - Minimum entry requirements is 5 credits in WASC, NECO or GCE including English and Mathematics, BSc/ B. Eng. / HND or equivalent with minimum 2(1) or upper credit in Mechanical, Chemical, Mining, Electrical/ Electronics Engineering

- **Selection Process**
  - Candidates are selected from reputable Universities/ Polytechnics through rigorous selection test and interview

- **Objectives**
  - “GETS” is designed to enable young engineers pursue a careers in Dangote Group
  - The scheme prepares fresh graduates with technical and supervisory skills to become team leaders, thus meeting our middle level manpower requirements
Junior Technician Scheme (JTS)

• Junior Technician Scheme (JTS)
  • This is the latest addition to our vocational/artisan skills training scheme
  • It was conceived in direct response to observed attrition rate of the VTS trainees
  • The 1st and 2nd batch of 150 trainees have been selected and are undergoing training
  • The trainees were selected from reputable Federal /State Government Technical Colleges through rigorous test and interview process
• Trades Covered:
  • Welding & Fabrication
  • Fitting & Mechanical Maintenance
  • Heavy Earth Moving Machine (HEMM) Maintenance
  • Electrical & Instrumentation
Construction of the Academy Campus Obajana

- Our multi billion naira academy campus is nearing completion.
- Campus infrastructure under planning & execution
  - The Academy complex will be equipped with high-tech workshops, simulators, online learning facilities etc.
- Campus will house 550 trainees in phase 1 & 2
Collaboration & Partnerships

To achieve world-class standards in learning and development we collaborate with:

- OEMs
  - Haver & Boecker
  - FLS
  - Siemens
  - Losche
  - HEMM Manufacturers

- Universities & Business Schools
  - Renowned Universities and Business Schools for management education/training
**Multi Lateral Agencies**

- Collaboration with ITF for developing construction skills in Nigeria
- Participation in Nigerian TVET reforms initiative
- Work closely with technical training institutions in pursuance of technological excellence & program accreditation
- Collaboration with German consortium of PTS, VDMA & the Germany Govt to establish the German model of Dual Vocational Education System at Dangote Academy
- Currently in partnership with the German Ministry of Economic Cooperation and Development to establish German DVET model in Nigeria.
FUTURE PLANS

- Establishment of African Regional Centres (Satellites)
  - Establishment of regional satellite academies for South & East Africa and Central & West Africa clusters to support business
    - Need to train and develop local talent with industrial skills.
    - The operations of these academies will remain centrally guided (for consistency and quality) but executed locally

- Transforming the Academy into Technology & Management Institute and finally into a University of Technology & Management
Dangote Academy Transformation Roadmap

2015: DANGOTE ACADEMY
- Institute of Technical Training
  - Vocational & Artisan Skills
    - Junior Technicians (JTS)
    - Technicians (VTS)
  - Engineering /Supervisory Skills (GETS) & Technical Training for Existing Staff
    - Fresh SSSCE Holders (Technical Colleges)
    - Fresh ND Holders (Polytechnics)
    - Fresh HND, B.ENG Holders
    - Existing Employees (SBUs)

2018: DANGOTE INSTITUTE OF MANAGEMENT & TECHNOLOGY
- Institute of Technical Training
  - Cement Technology (SCT)
  - School of Fertilizer & Petroleum Technology (SFPT)
  - School of Food Technology (SFT)
  - School of Mgt. Education (SME)
- Institute of Mgt. Training
  - Leadership & Mgmt. Skills
    - MDPs
    - Communication Skills
    - Supervisory Skills
    - Performance Mgmt. Skills
    - IT Skills
  - On-going programs

2020: DANGOTE UNIVERSITY OF TECHNOLOGY & MANAGEMENT
- Future Plans

Technology Institute founded on collaboration & partnership with world class Institutions of Excellence
Adopting Energy Efficiency in Dangote Cement Plc
...Environmental impact of Cement Manufacturing

• Consumption of raw materials and fuels
  – Large amount of energy and materials are consumed in producing millions of tons of cement annually. This has some environmental consequences which must be addressed
Green manufacturing in cement industry

- **Fuels & Waste Material Recycling**
  - The cement kiln provides opportunity for disposing many waste materials as alternative energy sources.
  - This has the advantages of waste reduction, conservation of fossil fuels and emission reduction.
Blended Cement and use of Clinker Replacement Materials (CRM)

Production of blended cement using the CRM option has provided a remarkable avenue for green manufacturing in the cement industry.

Materials like slag, fly ash, pozzolans, limestone and others are used as CRM in cement.

This has led to reduced specific energy consumption, utilization of waste materials and environmental protection.

...Low energy cement
Energy Efficiency Strategy in Dangote Cement

- Energy Efficiency in our plants
  - Our kiln system is equipped with Mechanical Flow Regulator for optimal heat recovery in the clinker cooler
The pre-calciner Kiln technology is designed for energy efficiency. This also provide opportunity to use Alternative Fuels Resources (AFR) in the pre-calciner.
All our grinding operations are done with Vertical Roller Mills using grinding aids, this comes with high output and low specific energy consumption in comparison with older plants using ball mills.

Adoption of CRM option (L/S cement) results in lower energy consumption per ton of cement.

All these help in environmental preservation.
Our Dangote Academy enables us to align the future leaders of the Company to Energy Efficiency Technologies through class room learning and in plant training.
Thank you!