THE ROLE OF ENGINEERS IN THE DEVELOPMENT OF THE ECONOMY OF NIGERIA

PRESENTED BY ENGR. A.A. ADEYEMI
<table>
<thead>
<tr>
<th>TABLE OF CONTENT</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Title page</td>
<td>pg 1</td>
</tr>
<tr>
<td>What is Engineering</td>
<td>pg 2</td>
</tr>
<tr>
<td>Cadres of Engineering</td>
<td>pg 3</td>
</tr>
<tr>
<td>Skills and qualities required of an Engineer</td>
<td>pg 4</td>
</tr>
<tr>
<td>Durations to become a registered Engineer</td>
<td>pg 5</td>
</tr>
<tr>
<td>Divisions of Civil Engineering</td>
<td>pg 6</td>
</tr>
<tr>
<td>Flooding in Isheri area of Lagos State</td>
<td>pg 7-11</td>
</tr>
<tr>
<td>Flooding in Ibeju coastal area of Lagos State</td>
<td>pg 12-14</td>
</tr>
<tr>
<td>3D elevation of Ibeju coastal area</td>
<td>pg 15</td>
</tr>
<tr>
<td>Proposed development in Ibeju coastal area</td>
<td>pg 16-17</td>
</tr>
<tr>
<td>Levels of development in Lekki phase 1</td>
<td>pg 18</td>
</tr>
<tr>
<td>Roles of engineers in economic development</td>
<td>pg 19</td>
</tr>
<tr>
<td>Roles of Universities in economic development</td>
<td>pg 20</td>
</tr>
<tr>
<td>Conclusion</td>
<td>pg 21</td>
</tr>
</tbody>
</table>
ENGINEERING IS DEFINED AS THE APPLICATION OF SCIENTIFIC KNOWLEDGE TO ACHIEVE A DESIRED GOAL.

OUR FOREBEAR WERE THE FIRST ENGINEERS;

STONE AGE
BRONZE AGE
IRON AGE

USING KNOWLEDGE FOR CIVILISATION IE ORGANISATION OF GOVERNMENT, RELIGION, ART AND TECHNOLOGY
ORGANISATION AND DEVELOPMENTS
FROM VILLAGES
TO TOWNS AND CITIES

AT EVERY STAGE OF HUMAN CIVILISATION
ENGINEERS WERE THERE
GENERAL ENGINEERS
TO SPECIALISATIONS
CIVIL
MECHANICAL
ELECTRICAL
CHEMICAL
MINING AND METALURGICAL
COMPUTER
SOFTWARE
ETC
WHAT SKILLS REQUIRED TO STUDY ENGINEERING

MATHEMATICS
ADDITIONAL MATHEMATICS
PHYSICS
CHEMISTRY
BIOLOGY

WHAT QUALITIES ARE REQUIRED OF AN ENGINEER

OBSERVATION
CALMNESS
STEADFASTNESS
PERSEVERANCE
INGENIOUSNESS
ETC
MINIMUM TRAINING PERIOD FOR ENGINEERS
5YR UNIVERSITY PERIOD FOR PRELIMS ENTRY
4YR PERIOD FOR DIRECT ENTRY
ADD 1 YR NYSC
ADD 4YR COGNATE EXPERIENCE TO QUALIFY AS REGISTERED ENGINEER
ABOUT 8-9 YRS TO QUALIFY

HIGHLIGHT OF MY CAREER AND CASE STUDIES
6 YRS IN THE CONSULTANCY SERVICES
10 YRS IN THE LOCAL GOVT SERVICE
11 YRS IN THE STATE GOVT SERVICE
DIVISIONS OF CIVIL ENGINEERING

- GEOTECHNICAL ENGINEERING
- STRUCTURAL ENGINEERING
- HIGHWAY ENGINEERING
- ENVIRONMENTAL ENGINEERING

CAREER DEVELOPMENT FOR CIVIL ENGINEERS

CONSULTANCY SERVICES
LOCAL GOVERNMENT
STATE GOVERNMENT
FEDERAL GOVERNMENT
OIL & GAS COMPANIES
UNIVERSITIES AND POLYTECHNICS ETC
CONSTRUCTION COMPANIES
CBN & BANKS
ETC.
ISHERI NORTH FLOOD ALONG THE CARRIAGEWAY
ISHERI NOTH FLOOD ABOVE THE CARRIAGE WAY
ISHERI NORTH PICTURES AND COMMENTS

Flood Level On A Property Within The Scheme

Flood Level On A Property Within The Scheme
Isheri North Pictorial Description Of The Two Distributaries Of Ogun River Around Isheri North

Rise in water height due 1.5m to peak flow approximately 1m – 1.5m RISE

Opic scheme

Isheri North Scheme/

Isheri Foreshore

Rise in water height due 1.5m to Peak Flow

FLOOD PLAIN

PEAK FLOW IN RIVER Ogun
Isheri North Pictorial Description Of The Two Distributaries Of Ogun River Around Isheri North

Rise in water height due 1.5m to peak flow approximately 1m – 1.5m RISE

Opic scheme

Isheri North Scheme

Isheri Foreshore

Rise in water height due 1.5m to Peak Flow

PEAK FLOW IN RIVER OGUN
IBEJU COASTAL CITY
PICTURES SHOWING THE
LAND TERRAIN
IBEJU COASTAL CITY PICTURES SHOWING THE LAND TERRAIN AND NATURAL VEGETATION
IBEJU COASTAL CITY PICTURES SHOWING THE LAND IN ITS NATURAL VEGETATION
3D ELEVATION OF IBEJU COASTAL CITY
LEVELS OF DEVELOPMENT IN LEKKI PHASE I

1995

2000

2017
ROLE OF ENGINEERS IN ECONOMIC DEVELOPMENT

DO YOU THINK THERE IS A ROLE?

SECTORS OF THE ECONOMY

WHAT KIND OF ECONOMY
• DEVELOPING
• MONO PRODUCT
• BUDGET SIZE AND EXPENDITURE

WHAT ARE THE ISSUES?
• LOCAL CONTENT
• VEHICLE BRAND FOR NIGERIA
• MECHANISATION FOR AGRICULTURE
• EFFECTIVE INTERMODAL TRANSPORT SYSTEM
• UNEMPLOYMENT
• GROWTH
SOLUTIONS

ROLE OF PRIVATE UNIVERSITIES

RESEARCH AND DEVELOPMENT
CONCLUSION

INCREASE THE ROLE OF PRIVATE UNIVERSITIES TO EMPHASISE THE REAL SECTOR AS THE CATALYST FOR THE ECONOMIC DEVELOPMENT OF NIGERIA