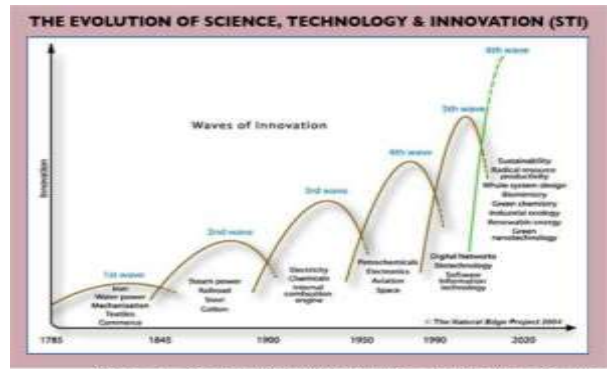


4, Blantyre street, off AdetokunboAdemola Crescent Wuse II, P.M.B 5074
Wuse Abuja, Nigeria. S

Tel: 09-4611195, 09- 4611 189, 4611 377 -
UL j^Web^www.notap.gov.ng <--mail:info@notan

NIGERIA - UNESCO/WT A2Ú13



NO FURTHER TIME TO WASTE!!

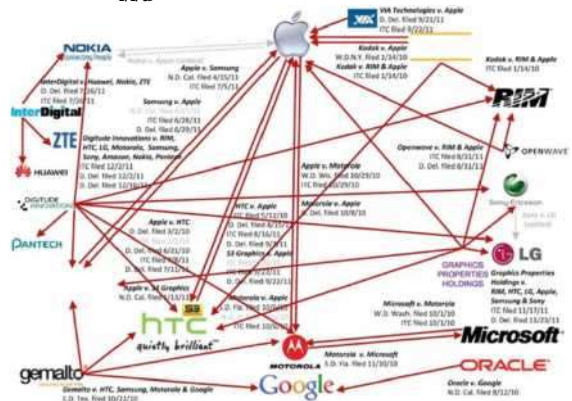


NIGERIA - 1st JUNE 2003

BUT BE CAUTIOUS OF TT/E MINE FIELDS!!

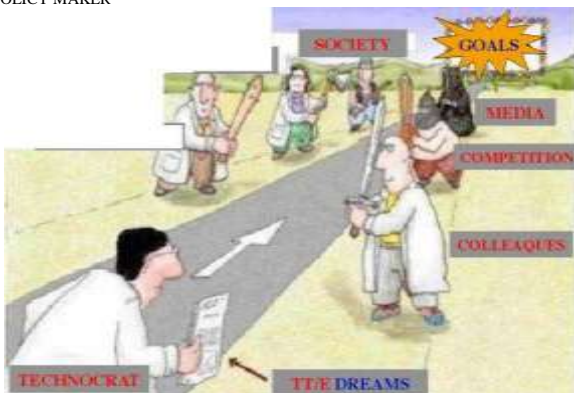
Smartphone Competitor Patent Suits

i/i/u



BE INNOVATIVE AND WATCHFUL!!

CRITICS
POLICY MAKER



NIGERIA - D8 TTEN 2013

UNLIMITED POSSIBILITIES



WE ARE HAPPY TO BE HERE

S/N	NAME	TITLE	AGENCY
1	Hajiya RabiShuaibu Jimeta	PS HMST	FMST NIGERIA
2	Engr Umar B. Bindir PhD	DG/CEO	NOTAP NIGERIA
3	Shafie A. Ahmed		NOTAP NIGERIA
4	J. U. Mo hammed		FMST NIGERIA
5	Rnth Danda		FMFA
6	Staff of the Embassy and D8 Office		FMFA

THANK YOU I. R. IRAN

NIGERIA - DS TTEN 2013

D-8 RECOGNITION/REALITY



Engr Umar B. Bindir PhD. ©
DIRECTOR GENERAL/CEO
(ubindir@yahoo.com)

NATIONAL OFFICE FOR TECHNOLOGY ACQUISITION AND PROMOTION (NOTAP)

MONDAY 07th - OCTOBER 2013

NIGERIA - D8 TTEN 2013

NIGERIA - DS TTEN 2013

GLOBAL DYNAMIC DEVELOPMENT TARGETS

- **Absolute poverty is totally eradicated**
- Every man, woman, and child in the Country should **have access, not just to basic minimum needs, but to all the**

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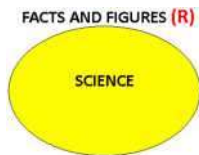
WHY ESTABLISH AND APPLY??

- opportunities** to lead a happy, safe and fulfilling life
- Country **emerges** as a

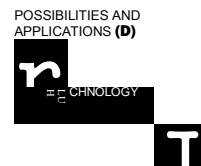
NIGERIA - DS TTEN 2013

knowledge and a learning society built
on values of *hard work, honesty,*
discipline, productivity, sincerity, and a
collective sense of purpose

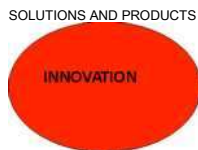
UNIVERSITIES POLYTECHNICS
RESEARCH INSTITUTES COLLEGES
OF EDUCATION TECHNICAL
COLLEGES INDUSTRIES *ETC ETC*
ETC?????



NIGERIA - D8 TTEN 2013



NIGERIA - D8 TTEN 2013



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IT WOULD HAVE BEEN NICE

ALL UNIVERSITIES
ALL POLYTECHNICS
ALL RESEARCH INSTITUTES
ALL FOREIGN AND LOCAL INDUSTRIES
ETC.....

IN THE D-8

NIGERIA - D8 TTEN 2013

IN NIGERIA...

STI INFRASTRUCTURE (SUPPLY)

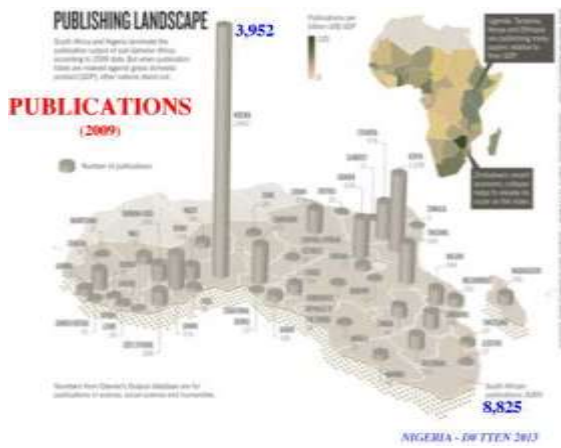
129 Universities (40:39:50)
125 Mono-Polytechnics 98 COE
Over 300 Research Institutions/Centres

• World-class Industries

Large pool of high class capacities (Professors, PhDs, Professional bodies, Diaspora capacity)

Research capabilities (Labs, Workshops, Libraries) LARGE

NUMBER OF EXISTING NETWORKS



SPACE TECHNOLOGY



NIIGERIA - D8 T7EN 2013

Temporary Bioreactor Immersion Systems



NIIGERIA - D8 T7EN 2013

Block moulding machines



NIIGERIA - D8 T7EN 2013

HOUSING!



NIIGERIA - D8 T7EN 2013

RENEWABLE ENERGY RESEARCH





NIGERIA - D8 TTEN 2013



NIGERIA - D8 TTEN 2013



NIGERIA - D5 TTEN 2013

FOOD AND DRINK PRODUCTS



NIGERIA - D8 TTEN 2013



NIGERIA - D8 TTEN 2013



NIGERIA - D5 TTEN 2013



- WINNER OAU/WIPO BEST AFRICAN INVENTOR,
- GOLD MEDAL AWARD, 1995, ADDIS ABABA

NIGERIA - D8 TTEN 2013

BASIC EDUCATION



NIGERIA - D8 TTEN 2013



NIGERIA - D8 TTEN 2013



NIGERIA - D8 TTEN 2013

NIGERIA'S STI BANDWIDTH

- HIGH
 - INTERMEDIATE
 - LOW
 - TRADITIONAL
- DESPITE THESE R&D**

NIGERIA - D8 TTEN 2013

NIGERIA - D8 TTEN 2013

GENERAL (DR) OVIEMO OVADJE - EATSET 1989

UNECA TIGA AWARD WINNER 2009

**OUTPUTS,
CREATIVITIES AND
INNOVATIONS ON
THE GROUND**

THE REALITIES???

RURAL LIFE DOMINATES

**OVER 60% OF THE POPULATION
- MORE THAN 100 MILLION OF THE
170 - 200 MILLION**

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BASIC EDUCATION



NIGERIA - D8 TTEN 201

WATER SUPPLY



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NIGERIA - D8 TTEN 2013

AGRIC PRODUCTION



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NIGERIA - D8 TTEN 2013

GENERAL (DR) OVIEMO OVADJE - EATSET 1989

UNECA TIGA AWARD WINNER 2009



STAPLE FOOD



CHALLENGES OF YOUTH UNDER EMPLOYMENT
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TT IN THE IMMEDIATE PAST?

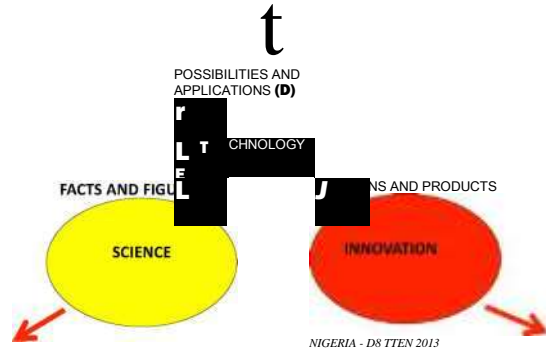
- STEEL INDUSTRY (Ajaokuta, Delta, Katsina, Jos, etc)
- AUTOMOBILE INDUSTRY (VW, MB, Styre, PG, etc)
- RIVER BASIN DEVELOPMENT (RBDAs)
- TRADE FREE ZONES (Numerous TFZs)
- OIL AND GAS COMPLEXES (Rigs, Refineries, Depots, Petrochemicals, Jetties, etc)
- POWER SUPPLY SYSTEMS (Generation, Transmission, Distribution, etc)
- STATE SPECIFIC EFFORTS (TINAPA, Ibom Tech Park, Kano IT complex, etc)
- SUCCESSES?!

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NIGERIA - DS TTEN 2013

REALITIES OF STI POSTURE



THE VALLEY OF STI DEATH

RESOLVED TO EVOLVE A PROACTIVE TA/TT/EN 3.0 SYSTEM



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NIGERIA - DS TTEN 2013

“PREVAILING SITUATIONS”

POPULATION (Nearly 200 Million)
 NATURAL RESOURCES (Agro/Minerals/Water)
 OIL & GAS RESOURCES
 POVERTY (60 - 70%) - **OVER 110 MILLION**
DOMINANCE OF RURAL LIFE
 WEAK PHYSICAL INFRASTRUCTURE
 WEAK SOCIO-ECONOMIC SYSTEM
WEAK EDUCATION SYSTEM
 WEAK “LOCAL” INDUSTRIES
 INSECURITY/CORRUPTION CHALLENGES
 EMERGING CHALLENGES - ENVIRONMENT
 MATURING DEMOCRACIES, etc *etCNIomn-mTTENzois*

STRONG STI COUNTRIES KEY ATTRIBUTES

- National SETI Policy (practical and implementable) on moving ALL SECTORS)
- Vibrant Science, Technology and Innovation (STI) system
- Institutional Systems of Innovation (NSI)
- Sustained Research and Development (R&D) Investment
- Raw Material Endowments and downstream value addition
- Prioritised Sectoral Technology Acquisition Focus and Mentor
- Innovative, Deliberate and Intense Deployment of ICT
- Viable Research - Industry Linkage models
- Strong Intellectual Property (IP) Management

NIGERIA - DS TTEN 2013

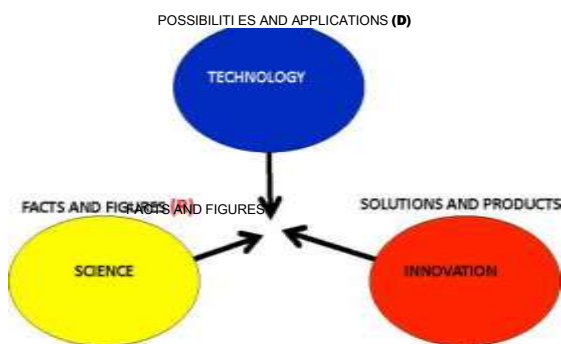
THE NIGERIAN DEVELOPMENT PLAN (2007 - 2020)

TTEN IS TIMELY TRANSFORMATION AGENDA and VISION 20-2020

NIGERIA - D8 TTEN 2013

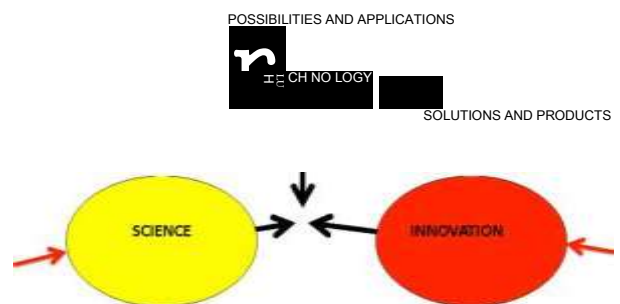
NIGERIA - D8 TTEN 2013

NETWORK THE STI ELEMENTS



STI GOVERNANCE

1

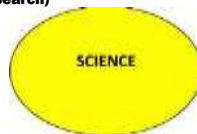


NIGERIA - D8 TTEN 2013

NIGERIA - D8 TTEN 2013

RESEARCH

FACTS AND FIGURES (Research)



SPECIALISTS (SCIENTISTS)

HIGHLY TRAINED AND QUALIFIED EXPENSIVE
TOOLS AND FACILITIES CLEAR KNOWLEDGE,
DISCOVERIES CONCEPTS, DOCUMENTS, DATA AND
STATISTICS PUBLICATION S/PhDs (PROMOTION ?)

NIGERIA - DS TTEEN 2013

RESEARCH INFRASTRUCTURE (Labs & Equipment)

CITATION/ACADEMIC PARTNERSHIPS... RELEVANCE?

STI...

HIGH LEVEL, QUALITY KNOWLEDGE (S)



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DEVELOPMENT (T)

POSSIBILITIES AND APPLICATIONS



TECHNOCRATS (ENGINEERS, ARTISANS, CONSULTANTS ETC)
HIGHLY SKILLED IN TRANSFORMING KNOWLEDGE
PROOF OF CONCEPTS ON PRODUCTS AND PROCESSES
PRODUCTION PROCESSES INFRASTRUCTURE PROTOTYPES
AND PILOT PLANTS TECHNICAL & MANAGEMENT
SERVICES RELEVANCE ?

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STI...

HIGH LEVEL, QUALITY KNOWLEDGE (S)



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TARGETED OUTPUTS....

1. INDUSTRIAL PROPERTY RIGHTS

- PATENTS PAT #
- TRADEMARKS™
- INDUSTRIAL DESIGN ®
- TRADE SECRETS
- HIGH LEVEL KNOW

HOW

- TECHNICAL SKILLS
- MANAGERIAL SKILLS
- etc



TARGETED OUTPUTS....contd

2. COPYRIGHTS ©

CREATIVE EXPRESSION LITERARY MUSIC
SOFTWARE DATABASES PLANT VARIETIES
GEOGRAPHICAL INDICATORS TRADITIONAL

NIGERIA - DS TTEEN 2013

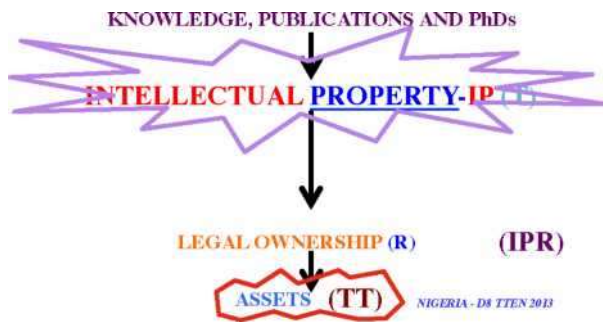
KNOWLEDGE LAYOUT DESIGN

etc

NIGERIA - DS TTEEN 2013

SETI...

HIGH LEVEL, QUALITY KNOWLEDGE (S)



TECHNOLOGY (IPR) TRANSFER AND NETWORKING (Skills)



INNOVATION (I) SOLUTIONS AND PRODUCTS

(IP)
AND



EVERYBODY.....ARTISANS
TECHNOLOGY
INTEGRATION
FEASIBILITY
FINANCING IP
LICENSING &

MANAGEMENT PRODUCTION, MARKETING,
BRANDING.... BUSINESS
PLANNING/MANAGEMENT PRODUCTS
PROCESSES

KNOW-HOW SERVICES (Consultancy etc)

RELEVANCE?

Trade marks:

- Made by "Nokia"

NIGERIA-DITTENIOIS

- Product "N95"
- Software "Symbian", "Java"

registered):

Patents:

- Data-processing methods
- Semiconductor circuits
- Chemical compounds

Copyrights:

- Software code
- Instruction manual
- Ringtone

Trade secrets:
?

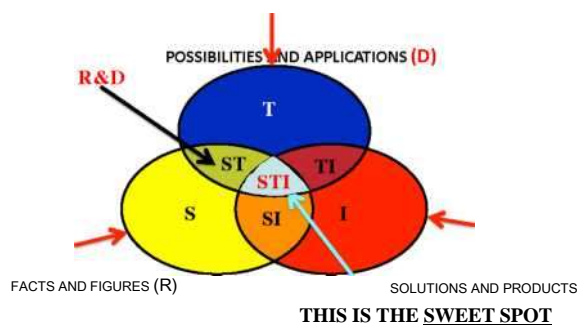
Industrial Designs
(some of them



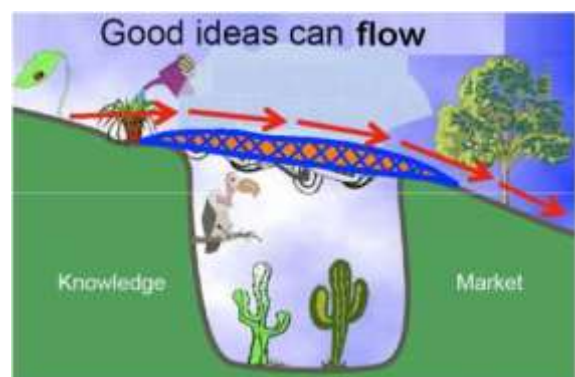
- Form of overall phone
- Arrangement of buttons in oval shape
- Three-dimensional wave form of buttons

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UNLEASH THE KNOWLEDGE ENERGY (STI)



NIGERIA - D8 TTEN 2013



NIGERIA - D8 TTEN 2013

NIGERIA and TTEN

(FOCAL POINT) TERMS AND CONDITIONS

- SWOT MATRIX

NEEDS & SUPPLY (DESTINATION)

S W O T

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NIGERIA - D8 TTEN 2013

NIGERIA and TTEN

MODELS, PROCESSES AND VEHICLES

- LICENSING
- JOINT VENTURE
- FRANCHISE
- FOREIGN DIRECT INVESTMENT (FDI)
- AID/GRANT/DONATIONS
 - JOINT R&D
 - SCHOLARSHIPS, STAFF/STUDENT EXCHANGE
- BILATERAL/MULTILATERAL
- etc

NIGERIA - D8 TTEN 2013

NIGERIA and TTEN

TIMELINES

NIGERIA - D8 TTEN 2013

NIGERIA and TTEN

~~TERMS AND CONDITIONS~~

~~MODELS, PROCESSES AND VEHICLES~~

~~TIMELINES~~

CLEAR TARGETS

NIGERIA - D8 TTEN 2013

NIGERIA and TTEN

~~TERMS AND CONDITIONS~~

~~MODELS, PROCESSES AND VEHICLES~~

~~TIMELINES~~

~~CLEAR TARGETS~~

OBJECTIVES ACHIEVEMENT

NIGERIA - D8 TTEN 2013

NIGERIA and TTEN

~~TERMS AND CONDITIONS~~

~~MODELS, PROCESSES AND VEHICLES~~

~~TIMELINES~~

~~CLEAR TARGETS~~

~~OBJECTIVES ACHIEVEMENT~~

KPIs

etc

NIGERIA - D8 TTEN 2013

TA/TT/EN JUSTIFICATIONS

- **POPULATION** (Nearly 200 Million) - S/O
 - Young, English Speaking, Entrepreneurial, etc etc
- **RESOURCES** (Agro/Minerals/Water, Oil/Gas etc) - S/O
- **HIGH POVERTY** (60/70%) - > 110 MILLION - W/T
 - Dominance of Rural life (bottom of the pyramid)
- **WEAK INFRASTRUCTURE** - W/T
 - Physical, Socio-economic
 - Weak Education System
- **WEAK “LOCAL” INDUSTRIES** - W
- **INSECURITY/CORRUPTION CHALLENGES** - T
- **EMERGING CHALLENGES OF ENVIRONMENT** - T
- **MATURING DEMOCRACIES** - O, etc etc

SECTORAL PRIORITIES

- **ENERGY (POWER)**
- **AGRICULTURE**
- **EDUCATION**
- **INDUSTRY (SMEs)**
- **RESEARCH AND DEVELOPMENT**
- **LINKING ACADEMIA TO INDUSTRY**
- **PHILANTROPY**
- **INTERNATIONAL RELATIONS**
- etc

NIGERIA - D8 TTEN 2013

KEY TARGETS

***CREATING A FUNCTIONAL
STI SYSTEM!!
TRANSFORMED
ACADEMIA
(UNIVERSITIES, POLYTECHNICS, RIs....)***

- **TRAINING CENTRES**
- **R&D AND EXPERIMENTATION**

NIGERIA - D8 TTEN 2013

CENTRES

- **PRODUCTION AND INDUSTRIAL CENTRES**
- **ENTERPRISES WHO NEEDS TO SELL THEIR PRODUCTS TO SURVIVE**
- **COLLABORATORS NATIONALLY AND INTERNATIONALLY**

NIGERIA - D8 TTEN 2013

KEY CAPITAL DEVELOPMENTS

- **HUMAN CAPITAL**
 - TO BECOME INNOVATIVE ENTREPRENEURS
 - HIGH VALUES
 - KNOW-HOWS
 - MANAGERIAL SKILLS
 - ORGANISATIONAL SKILLS
- **ENVIRONMENTAL CAPITAL**
 - TO RECOGNISE THE VALUE AND POTENTIAL OF THE NATURAL ENVIRONMENT
 - THE SUN, CLIMATE, RIVERS, SEEDS, INSECTS...
 - ORGANISE TO PRODUCE, PROCESS, COMMERCIALISE EFFECTIVELY
 - LITERALLY TO CREATE JOBS AND WEALTH

KEY CAPITAL DEVELOPMENTS

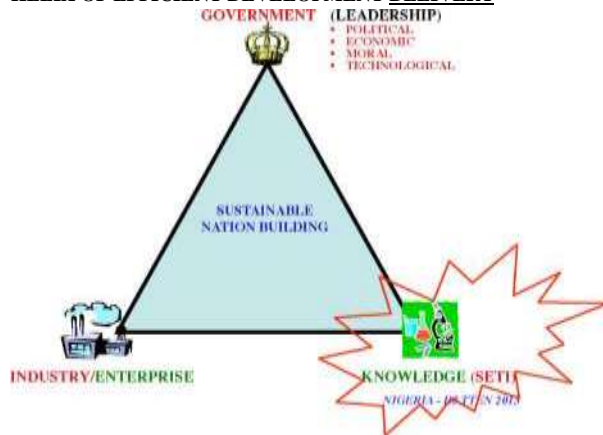
- **SOCIO-CULTURAL/INTERPERSONAL CAPITAL**
 - TO NETWORK AND CREATE STRONG CONNECTIONS
 - TO SHARE KNOWLEDGE, EXPERIENCES, DIFFICULTIES, OPPORTUNITIES
 - TO NEGOTIATE, DISCUSS AND WORK JOINTLY
- **TECHNICAL CAPITAL**
 - TO INVESTIGATE, DISCOVER, DEVELOP, INCORPORATE AND INTEGRATE INNOVATIVE TECHNOLOGIES

NIGERIA - D8 TTEN 2013

- SUCH AS NEW TOOLS, NEW MACHINES, NEW PROCESSES, PRODUCTION TECHNIQUES
- ALL TOWARDS IMPROVEMENT OF PRODUCTIVITY
- **FINANCIAL CAPITAL**
 - TO BETTER MANAGE FINANCES
 - TO START SUSTAINABLE PROJECTS

NIGERIA - D8 TTEN 2013

HELIX OF EFFICIENT DEVELOPMENT DELIVERY



KEY INDICATORS TO STI TRANSFORMATION AND ATTAINMENT OF VISION 20-2020

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SPACE TECH



umi
in







NIGERIA - D8 TTEN 2013



NIGERIA - D8 TTEN 2013

NIGERIA - D8 TTEN 2013

FARMING INPUTS



SMALL



MEDIUM AND LARGE





NIGERIA - D8 TTEN 2013



NIGERIA - D8 TTEN 2013



NIGERIA - D8 TTEN 2013

MANUFACTURING



NIGERIA - D8 TTEN 2013

CONCLUSIONS

THESE ARE POSSIBLE

[1]



(1)
**TAKE A DELIBERATE MASS JOBS/
WEALTH CREATION POSTURE**
(SUPPORT LEADERSHIP INNOVATIVELY)

**DELIBERATE SKILLS BASED GAINFUL
EMPLOYMENT GENERATION AND
WEALTH CREATION**

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VALUE CHAIN/DOWN STREAM

NIGERIA - D8 T1EN 2013





NIGERIA - D8 TTEN 2013

VALUE CHAIN/DOWN STREAM

NIGERIA - D8 TTEN 2013



NIGERIA - D8 TTEN 2013



NIGERIA - D8 TTEN 2013



NIGERIA - D8 TTEN 2013

VALUE CHAIN/DOWN STREAM

NIGERIA - D8 TTEN 2013



VALUE CHAIN/DOWN STREAM

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FOOD PRODUCTS



NIGERIA - D8 TTEN 2013



NIGERIA - D8 TTEN 2013



NIGERIA - D8 TTEN 2013



....WE MUST BE SMENNOVATIVE



[2]
BUILDING THE CRITICAL MASS OF
“INDUSTRIAL” MANPOWER
STRATEGICALLY

NIGERIA - D8 TTEN 2013

Policy - MPhil, PhDs and Post Doctoral
 Fellows on Technology based public projects
 (University, States and Federal Government
Capital Projects, etc)



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NIGERIA - D8 TTEN 2013



NIGERIA - D8 TTEN 2013



NIGERIA - D8 TTEN 2013

(3)
INTENSE AND PROUD PROMOTION
OF TECHNOLOGIES AND INNOVATIONS (STI
OUTPUTS)

REGULAR SCIENCE TECHNOLOGY AND
INNOVATION EXHIBITIONS

^BIASP

(4
)



THINKING OUT OF THE BOX
TO LINK ACADEMIA TO
INDUSTRY
(*Strategie Technology Transfer*)

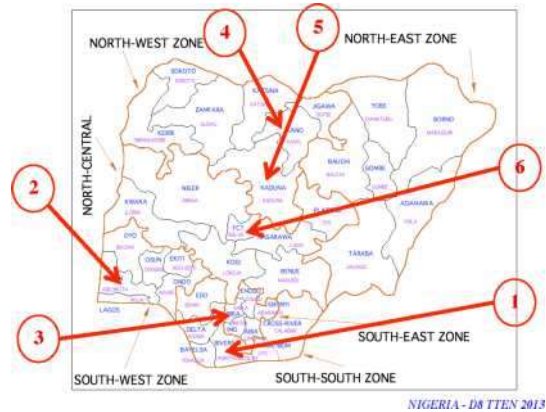
SCIENCE AND
TECHNOLOGY PARKS

WAITRO

NIGERIAN MAIN CLUSTERS OPPORTUNITIES

1. RIVERS STATE - OIL & GAS CLUSTER
2. OGUN STATE - AGBARA CLUSTER
3. ANAMBRA STATE - NNEWI CLUSTERS
4. KANO STATE - KANIICT PARK
5. KADUNA STATE - ZARIA CLUSTER
6. ABUJA TECHNOLOGY CORRIDOR
7. SHESTCO SILICON VALLEY

RIVERS OIL AND GAS CLUSTER



NIGERIA - DS TTEN 2013

(5) STRATEGIC NATIONAL POSTURE

AGENDA 1777

NOTAP'S CONTRIBUTION ON 20-2020

(J777

WHAT?

NIGERIA - DS TTEN 2013

NIGERIA - DS TTEN 2013

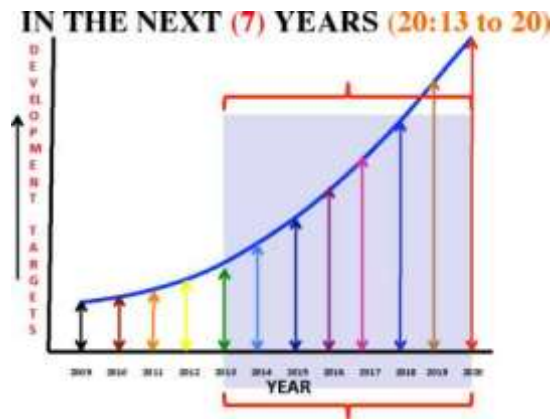
ONE UNITED NIGERIA (1)



NIGERIA ■ DS TTEN 2013

NIGERIA ■ DS TTEN 2013

ONE NIGERIA PROJECTS



NIGERIA - DS TTEN 2013
NIGERIA - D8 TTEN 2013

It7>

GLOBAL PRODUCTS - (7)

1. UNIQUE FOODS - **pomo**, garri
2. BIO-RESOURCE FRANCHISE - Red goats, mushroom, fish
3. HEALTH (Niprisan sickle cell drug - sorghum)
4. BASIC EDUCATION (Science lab & lab kits),
5. ICT Innovations (Tele-medicine/Tele-education)
6. HOUSING (Equipment and Houses)
7. SPORTS (football, boots, electronics, foods)

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1717)

BUILDING (7) MNCs

(KNOWLEDGE CONTROL & HIGH WAGE EMPLOYMENT)

BUILDING (7) NIGERIAN MNCs (WHY NOT? SOME EXAMPLES!!)

1. **DANGOTE** - Materials, inputs, food, etc
2. **GLO** - Communications
3. **ZINOX** - ICT Hardware innovations
4. **CWG** - Software and IT Services innovations
5. **BIO-ORGANICS NUTRIENTS** - Food fortification and food security
6. **WELTEI** - Oil and Gas Engineering

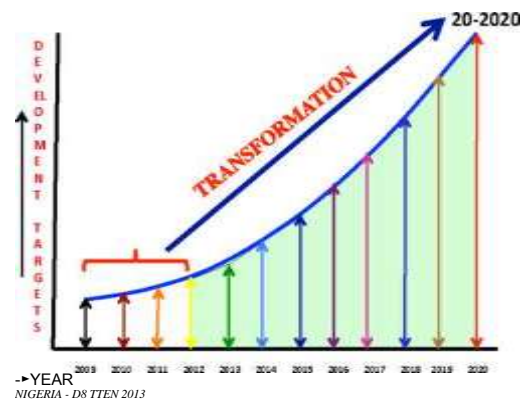
7. INNO/AUTOBAHN- Affordable Automobiles FUNCTIONALISE THE APPROVED NATIONAL RESEARCH AND DEVELOPMENT FUND (NRDF) “minimum of 1% GDP”?

CENTRALISE R&D FUNDS!!

(7) FUNCTIONALISE THE APPROVED NRDI COUNCIL (CHAired BY THE PRESIDENT)

POSITION KNOWLEDGE GOVERNANCE IN THE CENTRE

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TTEN CRITICAL COMPONENT



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NIGERIA - D8 TTEN 2013