

# NEPAD ENERGY - AFRICA

Energy access in rural areas

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# NEPAD ALIGNMENT

- ERADICATING POVERTY(ENERGY, WATER, MARKETS)
- PROMOTING THE ROLE OF WOMEN
- (GOAL OF SUSTAINABLE GROWTH & DEV- HIGHER SCALE)

# WHAT ACCESS

- HIGH QUALITY ENERGY-  
MODERN/COMMERCIAL ENERGY  
(electricity, gas, oil, RETS)
- SOCIAL NEEDS- COOKING, HEALTH,  
WATER, EDUCATION ETC
- FOR DEVELOPMENT- MICROENTERPRISES  
+ SME?-IMRPOVE INCOMES
- SCARCITY & PROTECTING THE  
ENVIRONMENT

# ISSUES OF ACCESS

- INCOME ( Lack of employment, low income earning opportunities, low potential of agric production)
- LOW CAPACITY FOR AVAILING AND DISTRIBUTION-SUPPLY CHAIN CONSTRAINTS.
- INFORMATION ON ENERGY CHOICES.
- LOW CONSUMPTION & COST OF SUPPLY
- WHAT COMES FIRST HIGH ENERGY CONSUMPTION OR INCOME

# MODES OF MODERN ENERGY DELIVERY

- GRID BASED RURAL ELECTRIFICATION
- PV ELECTRIFICATION
- INTEGRATING GRID AND NON GRID
- APPLICATION OF THE CONCESSION CONCEPT- FOR ENERGY DELIVERY(electrification and thermal)
- MULTIPLATFORM APPROACH
- WIND FOR WATER PUMPING

REGION	Electricity Access %
Central Africa	9
East Africa	10
West Africa	18
Southern Africa	21
North Africa	86

Apart from NA average <15% access

# RURAL ELECTRIFICATION

- BASED ON GOVT SUPPORT FOR GRID- CREDIT SCHEMES, RURAL ELECTRIFICATION FUNDS/ RE PLAN IN PLACE-WIDELY IMPLEMENTED.
- MASTER PLAN-ESTABLISHES STDS, INSTITUTIONAL AND FINANCING MECHANISMS
- WHERE COST RECOVERY SOME IMPROVEMENT IN ACCESS 5 FOLD IN BOTSWANA-IN <7 YRS. AFTER INCREASING DENSITY OF NETWORK- STD COSTING.
- LOW UTILIZATION OF 11% CONNECTED ONLY 1% USED FOR COOKING.

# PV ELECTRIFICATION

- PV ELECTRIFICATION- commercial driven(Kenya), Govt supported, P-Pvt (ESKOM), GEF (Zim), Bilaterals/partnerships(Sahel).
- COMMERCIAL VS CREDIT SCHEMES, DONATIONS
- SOLAR PV WITHOUT POLICY FOR COMPLEMEANTARITY.
- GEF BARRIER REMOVAL INITIATIVES-ONGOING
- MASTER PLANS BEING PUT IN PLACE- THROUGH PARTNERSHIPS



# LPG

- LARGEST POTENTIAL FOR THERMAL SUBSTITUTION-LIKED BETTER THAN ELECTRICITY.
- SUCCESSFUL CASES OF MARKET DRIVEN LPG DISTRIBUTION E.G. BOTSWANA 4% TO>30% 1993-2001-  
?FUELWOOD BEING USED
- GHANA GOVT INTERVENTION INCREASED 7 TIMES 1989-1995
- TECHNICALLY LPG CAN SATISFY H/H REQUIREMENTS
- SETBACK IS AVAILABILITY & ADDRESSING SAFETY ISSUES\*\*\*-COST NOT A STRONG DETERRENT.
- SENEGAL SUCCESS STORY BY IMPROVING SUPPLY CHAINS.
- CAN BE BOOSTED BY TAPPING NG RESOURCES

# LESSONS LEARNT

- CASES OF PUBLIC- PVT PARTNERSHIPS BUILT- E.G. ESKOM/SHELL- FOR PV ELECTRIFICATION
- NEED FOR SMART PARTNERSHIPS BETWEEN ANALYSTS, POLICY MAKERS/PLANNERS AND IMPLEMENTORS
- LEVELLING PLAYFIELD BETWEEN GRID/OFF GRID TO BE RESOLVED.
- LEVEL OF ENTREPRENEURS CAPACITY NOT ADEQUATE (AREED)-NEED NGO SUPPORT-ENTERPRISE DEVELOPMENT.
- BEST TO LINK ENERGY DELIVERY TO DEV INITIATIVES- ENHANCE PRODUCTIVITY-
- NEED FOR FINANCIAL RESOURCES TO SUSTAIN RE.

# LESSONS LEARNT

- SUBSIDY REQUIRED
- PV BEST FOR SOCIAL ENERGY NEEDS BUT NOT RURAL ENERGY FOR DEVELOPMENT
- FOR PV BARRIERS ARE ECONOMIC & FINANCIAL, INFO/AWARE THAN TECHNICAL
- INSTITUTIONAL ISSUES WHERE RETS ARE LARGE.

# STRATEGY AND POLICY CHALLENGES

- INCREASE ENERGY SERVICES DELIVERY-  
INFRASTRUCTURE-FINANCING FOR INCREASED ENERGY  
ACCESS.
- INVOLVING MARKET FORCES ENERGY DELIVERY AND  
PROTECTING THE POOR-electricity reforms detrimental to access  
by poor.
- ENSURING SUSTAINABILITY THROUGH PROMOTION OF  
PRODUCTION-SMME market-INCREASING THE MARKET
- INVOLVEMENT OF RURAL POPULATIONS IN PLANNING-  
women have special needs- often supported as targets of welfare  
improvements but not as agents of change.

# FOCUS AREAS TO IMPORVE ACCESS

- TAPPING OF SIGNFICANT ENERGY RESOURCES- FOREST/AGRIC PRODUCTS/RESIDUES/WIND- Electricity-reduce costs of supply.
- SHARING EXPERIENCES OF TECHNOLOGY DEVELOPMENT AND DEPLOYMENT
- POLICY TO SIGNAL INVESTMENT OPPORTUNITIES- FOR PVT SECTOR e.g. Ghana wish list.
- COMMON STANDARDS FOR RETS/LPG- to regulate the market
- INFORMATION SHARING ON ENERGY CHOICES
- POLICY ON RIGHT TO QUALITY ENERGY
- TARGETTING SME AS ENGINES OF GROWTH-e.g. Coffee growers of Kenya

# ACTION PLAN

- MARKET DEVELOPMENT SUPPORT-MARKET POTENTIAL & RISK FOR INVESTMENTS & BUSINESS & FEASIBILITY FOR PVT PARTICIPATION.
- SUBSIDY TO RE-CRITICAL LEVEL
- WISH LIST FOR ENERGY DELIVERY INFRASTRUCTURE-SIGNAL TO PVT SECTOR
- TT- S-S EGYPT CASE- INFORMATION NETWORKS
- PARTNERSHIPS FOR TECH AND INDUSTRIAL CAPACITIES DEVELOPMENT-tapping on partnerships
- DEVELOP ENERGY PACKAGES FOR VARIOUS RURAL CONSUMERS- SOCIAL & PRODUCTION