

Forestry sector

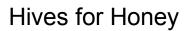








Technologies discussed for the Agro-Forestry sector



Availability of Seeds – Multipurpose species

Non-Forest Products – Shea Butter, Gum Arabic



Small group – no need to duplicate technology analysis here









Results and actions on a chapter for this sector



Chair – Kathy Mbondo

Membership Growth – targeted via CTC-N & attendees / NDEs

Reporting from Nairobi meeting (end April – early May)

Charter meeting – Immediate needs analysis (Chair driven)









Energy sector









Energy sector Solar

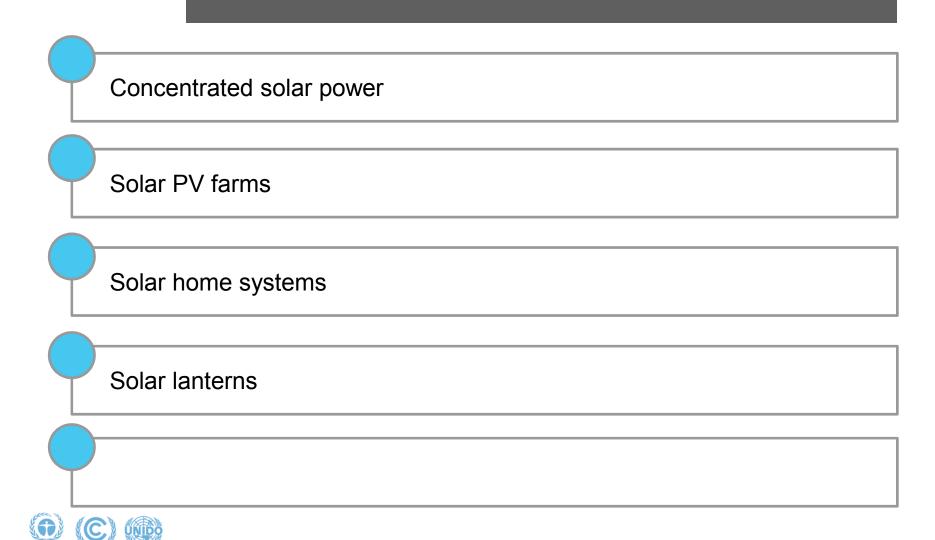








Solar technologies discussed for the Energy sector





Findings for the Energy sector: solar



There is continuous improvement through R&D to produce appropriate cost effective products



Governments in the region have provided an enabling environment for the growth of the sector



Weak enforcement of standards have led to the influx of counterfeit products



High initial investment cost is hampering rapid deployment especially due to the high cost of storage (for lanterns and solar home systems)



The financing for mini grid systems is not available nor suitable

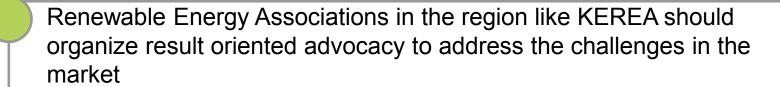








Results and actions for the Energy sector: solar



Renewable Energy Associations should have an effective and up to date information management system accessible to the public

Renewable Energy Associations should coordinate with bureaus of standards and pre-shipment verification bodies to limit the influx of counterfeit products

There is a need to create channels of awareness about financing options available to the consumers









Energy sector Bioenergy









Bioenergy technologies discussed for the Energy sector



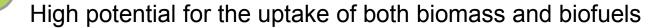








Key findings for the Energy sector: bioenergy



Main opportunities include: huge market, finance available, local technology available

Key challenges include: lack of standards, public awareness, weak legal frameworks

Hurdle to overcome: how to make it sustainable through combination of land use, alternative fuels against a background of climate change?









Results and actions for the Energy sector: bioenergy



Improve standards, build local skills and foster public awareness

Provide incentives to RET equipment/products

Promote R&D collaboration between research institutions and technology providers









Energy sector Hydro/Wind









Hydro and wind technologies discussed for the Energy sector



FOCUS ON OFF-GRID SOLUTIONS: WHY? LOW GRID PENETRATION RATE



Small hydroelectric power solutions (MHP)



Wind energy solutions (i.e. wind mills & wind turbines)









SWOT Findings for the Energy sector: hydro and wind

STRENGTHS: Eco-friendly and clean*, Easy deployable, technology maturity*, have baseload potential, lower capital investment and maintenance cost, job creation, available resource maps (atlases)**, wind is a manageable resource due to clear forecasts

WEAKNESSES: Lack of standards/regulations/policies, Site selection (Land issues), Unaffordable tariffs (power sales), Community management issues (if with Govt. involvement), Lack of commercial use for power, seasonal variations (for wind, intermittency)**, Energy storage, Higher upfront costs*.

OPPORTUNITIES: Local manufacturing* & installation, Speeding up energy access to off-grid communities**, income generating activities**, innovative business models can be designed**, significant technological improvements*, possibility for community investment**









SWOT Findings for the Energy sector: hydro and wind

THREATS: Limited business models**, lack of long term income assurance for the investor**, Lack of political will**



** Applies to both small hydros and wind

NB: FOR THE ACTION-PLAN BELOW, THERE IS NEED TO ENSURE FLOW OF ACTIONS FROM SHORT, THRO MID TO LONG TERM.









Actions for the Energy sector: hydro and wind

SHORT TERM: Attractive business plans, Feasibility studies (incl. resources maps, hybrid systems analysis etc.), stakeholder engagement, technology investors/suppliers inventory, Nature of Government interaction (e.g. incentives, taxation, long term grid-plans), skills and competency development, standards/regulations/policies addressed

MEDIUM TERM: Align technologies with INDCs, Understanding of local financing mechanisms, create innovative financing mechanisms, promote local innovations, promote one-stop-shop to give investors' easy time to implement, identification of technology needs and creating public awareness for these needs, energy planning (urban, sub-urban, rural)

LONGTERM: Reliable Govt. policies, public acceptability, scalability (identify what and how is scalable), Ensuring energy security (community grid plans etc.)







STAKEHOLDERS



CTCN

INVESTORS

CONSUMERS

LOCAL COMMUNITIES

FINANCIAL INSTITUTIONS

ACADEMIA

SOCIAL CHAMPIONS

RESEARCH INSTITUTIONS

CBO's

NGO's

FBO's

DEVELOPMENT PARTNERS et cetera





Water sector









Technologies discussed for the water sector



A number of technologies were discussed, such as: Purification, water use efficiency, Reuse & Recycling, distribution



We selected to focus on the following:



1. Water storage



2. Water harvesting



3. Water shed management (did not manage to discuss)









Issues discussed for Water storage



Quality control, delivery systems, geotechnical competence, access to flexible tanks

Socio economic assessment issues:

Cost, Ownership of equipment and land acquisition, Poor governance, Monitoring and evaluation of water situation

Water specific issues Ground water recharge, evaporation and leakage, siltation

Climate change effects: Better climate scenarios, Cracking of tanks due to heat, flood resilience









Results and actions for water storage



Pre-feasibility study on suitable sites for identified technologies

Preparation of bankable projects

Long term objective:

Ensure water availability for all users for enhancing the resilience of the communities









Results and actions on water harvesting



Collect and evaluate data considering the specific contexts of rural and urban areas



Evaluate demand-supply relations



Recommendations for enhances governemntal structure



Recommendations on overcoming risks resulting from land property issues that prevent governmental direct interventions for improved rain water harvesting (ownership of land)



Facilitate access to technology (e.g. water treatment for contaminated water)









Agriculture sector

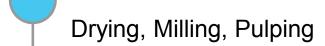








Technologies discussed for the Agricultural Sector



Storage & Preservation (Cold Chain)

Food Extraction

Packaging / Bottling / Pelleting

Spinning / Weaving

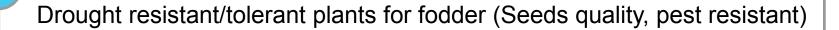








Technologies



Measuring & Testing Equipment

Queen bee tearing equipment to be promoted

Shea promotion (shorten time of maturity + commercialisation)









Issues for Agricultural Sector





- Processing Storage Packaging Quality Assurance Marketing Branding
- Linkages between SMEs & Small-Holder Farmers
- Policy Issues regulation & tax

Dissemination of Information on Appropriate Technologies











Results and actions on a chapter for this sector



Sub-Chapter on Processing and Value Addition (Down-stream)

Sub-Chapter on Production (Up-stream)





