BIO-ENERGY POLICY IN NEPAL

Dr A N Das & Manahari Khadka



3rd June 2011

Jointly by MFSC & NPC, Nepal

1 Energy Use in Nepal



Energy consumption in Nepal, 2008/09



- Bio-energy remains primary source of energy in Nepal
- Firewood dominates bio-energy source followed by animal dung, and agriculture residue
- Fuel crops and municipal waste are yet to appear as source of bio-energy in Nepal

2 Feed Stock and Existing Use



- Firewood use is quite higher than sustainable supply
- There exists high potential for utilizing other bio-mass sources such as agriculture residue, bio-gas and animal dung for bio-energy
- Country energy requirement for the year 2008/09 can be fulfilled from agricultural sector only if managed properly

3 Bio-fuel Crops in Nepal

- Potential bio-fuel crops of Nepal are Jatropha, maize, soybean, sugarcane (Around 100,000 ha)
- Less developed/less research and technology developed
 - Jatropha cultivation are mostly confined to degraded land, forest area, barren land and waste land, may not compete with food crops
 - At present, extent of cultivation is very small, fragmented and scattered
 - Less profitable to farmer if utilized agricultural land and local varieties
 - Processing and blending of bio-fuel not fully developed
- No reliable data on existing status of cultivation of bio-fuel crops, including Jatropha
- Impact and implication on food security not fully known
 - Impact on farming system in general and food security in particular is not fully explored
 - Private sector involvement is increasing rapidly
- Hence, appropriate policy measures including periodic monitoring is necessary for minimizing adverse impact on food security
 - National Planning Commission is developing Jatropha policy in Nepal

4 Bio-Energy Policy in Nepal

- No comprehensive policy on bio-energy development, but covered by different sectoral policies and strategies,
 - Revised forest policy, 2000 Wood fuel
 - Agricultural residues (crop and livestock) None
 - Bio-fuel crops –strategy being prepared, draft stage
 - Bio-gas Rural (Renewable) Energy Policy, 2006
 - Waste Sold waste management national policy, 1996
- Three Year Plan Approach paper (2011-2013) aims to improve living condition and employment opportunities of local communities while enhancing productivity of traditional energy sources, reducing dependency and linking with sustainable environment development while integrating alternative energy development in social and economic development activities
- WECS is formulating Energy Resource Strategy, which identified bio-mass energy as one of the priority thematic area (Work on progress)

5 Issues and Challenges

- Lack of clear policy on use of bio-mass energy including energy security issues and energy mix
- Inadequate policy and incentive mechanisms for other sector of bio-energy especially on agricultural residues, bio-fuel crops, resource base creation outside forests
- Lack of integrated energy planning
- Bio-energy sector come under jurisdiction of different sectoral ministries and No designated ministry or institutions
- Fragmentation of responsibilities, overlap in mandates, roles and functions
- Inadequate appropriate technologies suited to a variety of biomass materials and energy applications
- Inadequate government funding
- Weak information and statistical data in resources, production

6 Priority

Bio-energy development should give priority to



WAY FORWARD (Future Priorities)

Comprehensive Bioenergy policy formulation and amend Acts and Regulations accordingly

Improved efficiency in meeting Household Needs

Provide efficient and varied biomass energy solutions to rural areas for cooking & heating purposes

Strengthen institutional capacity of concerned government, public, private and community institutions

Form a dedicated institution for Bioenergy Dev.

R & D for improving productivity of Jatropha and other potential species.

Technical cooperation and technological transfer

 Attract investment in the bioenergy sector (government, private and donor)







Jatropha fruit



Jatropha Seeds



Bio-Diesel: Nursery, Plantation and Processing Plant for Jatropha, Palpa



Bio-diesel production plant



Bio-gas Plant



Improved cooking Stove(ICS)



Thank You