



UNFCCC COP22 - Mini Side Event:

Eco Village Development: A Low-carbon Adaptation and Mitigation Strategy for Development in South Asia

UN Climate Change Studio
8/11/2016 - Marrakech, Morocco





MARRAKECH COP22|CMP12

MINI SIDE EVENT

ECO VILLAGE DEVELOPMENT

A LOW-CARBON ADAPTATION AND MITIGATION STRATEGY FOR DEVELOPMENT IN SOUTH ASIA

Practitioners from South Asia will make a brief presentation on the Eco Village Development model that has been implemented in 21 villages in South Asia for building climate resilience amongst grassroots populations. This will be presented within the framework of each of the 4 countries' NDCs along with a strategy for scaling up.

SPEAKERS

M.Mahmodul Hasan

Grameen Shakti, Bangladesh
Bangladesh's perspectives and experiences on EVD

Zareen Myles

Women's Action For Development, India
How EVD has been a useful strategy for gender mainstreaming

Dumindu Herath

Integrated Development Association, Sri Lanka
Sri Lanka's perspectives and experiences on EVD

Kavita Myles

Integrated Sustainable Energy and Ecological Development Association, India
India's perspectives and experiences on EVD

Shovana Maharajan

Centre For Rural Technology/Nepal, Nepal
Nepal's perspectives and experiences on EVD

Santosh Patnaik

Climate Action Network South Asia, South Asia
EVD as a climate resilient development solution for South Asia

VENUE

**CLIMATE CHANGE
STUDIO, BLUE ZONE,
UNFCCC COP22**

DATE

**TUESDAY, 8TH
NOVEMBER 2016**

TIME

12:00 - 13:00

ORGANISED BY





Link to Publication: http://www.inforse.org/asia/pdf/Pub_EVD-SouthAsia.pdf
Evco_village Development Project: <http://www.inforse.org/asia/EVD.htm>



**Perspective of Bangladesh:
Road towards Sustainability through Eco-Village
Development**

**Mohammad Mahmodul Hasan
Manager
Grameen Shakti, Bangladesh**

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Focus of Bangladesh & Intended Nationally Determined Contribution (INDC)

- Bangladesh's emission- *less than 0.35% of global emission*

Aim of INDC:

- *To limit temperature to two degrees or preferably 1.5 degree above pre-industrial level.*
- *To move to a low-carbon, climate resilient economy with ensuring it will not cross the average per capita emission of the developing world*

Target of Bangladesh

Vision 2021

Energy For All & One House One Farm



10% Electricity from Renewable Energy (RE) by 2020
170 MW Electricity from solar by 2015 under Rural Electrification Program

70,000 Biogas Plants constructed so far



4 Million Solar Home Systems installed

20 Million people get benefit.

Existing Mitigation actions: *Focus of Eco-Village Development (EVD)*



The Solar Home Program providing electricity to off-grid villages

4 Million homes connected by solar power



Improved Cooking Stove all over the country

1.5 Million Improved Cook Stove



Biogas plant all over the country

70,000 Biogas plants

EVD partner in Bangladesh: Grameen Shakti *Outreach 2016*

Solar
Energy

1.8 Million Solar Home Systems

Biogas

35,000 Biogas Plants

Improve
d Cook
Stove

950,000 Improved Cooking Stoves

Better
Life

Above **18 Million** Beneficiaries

Solar Powered Villages Khowamuri & Shudhkhira: Changing of life

- Dirty fuel kerosene has been replaced by Solar Home System and indoor air pollution has been reduced.



EVD Solution:
Ensuring sustainability & replicability as well

1.8 M Solar
Home
Systems
installed by
Grameen
Shakti

8.5 M
villagers
get
benefits

180 M liter
of
Kerosene
saved

EVD Solutions in the rural Bangladesh



Solar Powered Mosque in cyclone-prone Patuakhali District



Installed Solar Home System at Khowamuri village



Solar Home system at remote village in Patuakhali



Solar powered cluster village



Studying & sewing activities under solar light



Solar powered village pharmacy



Poultry based biogas plant



Cooking with biogas stove



Gas & bio-slurry come from biogas plant



Cow-dung composting in bamboo cage



Cooking with Improved Cook Stove



Smoke free kitchen by using Improved Cook Stove

Eco-Village Development (EVD): Road to sustainability



Solutions of EVD are contributing to rural livelihood

- Reducing indoor air pollution
- Facilitating children education
- Reducing daily burden for women
- Income generation

Thanks and...

...do it with joy



Nepal's Perspectives and Experiences on Eco-Village Development



Shovana Maharjan

Program Officer

Centre for Rural Technology, Nepal

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Building up Evidences for Advocacy



Priorities of NDC: Nepal

- **Climate Change Policy**
 - To reduce GHG emissions by promoting the use of clean energy, enhancing climate adaptation and resilience capacity of local communities for optimum utilization of natural resource and their efficient management and adopting a low carbon development pathway by pursuing climate-resilient socio-economic development.
- **Energy Policy**
 - To accelerate renewable energy services, and increase access to the Renewable Energy technologies with subsidy provision
- **NRREP**: to have access to not only energy but also energy efficient technologies through various subsidy programs
- **National Framework on Local Adaptation Plans for Action (LAPA)**
 - To ensure integration of adaptation and resilience into local to national planning processes
- **Environment Friendly Local Governance Framework**
 - To make local governance system environment-friendly and initiate sustainable development activities at the field level such as household and communities.

Adaptation and Mitigation Actions

- **Adaptation Actions**

- **Building Climate Resilience**

- To build climate resilient communities through private sector participation.

- **Mitigation Actions**

- **Clean Energy Development Pathways**

- Increase the share of biogas up to 10% as energy for cooking in rural area
- Equip every household in rural areas with smokeless (improved) cooking stoves (ICS) by 2030

Up scaling Potential

- **SDG**

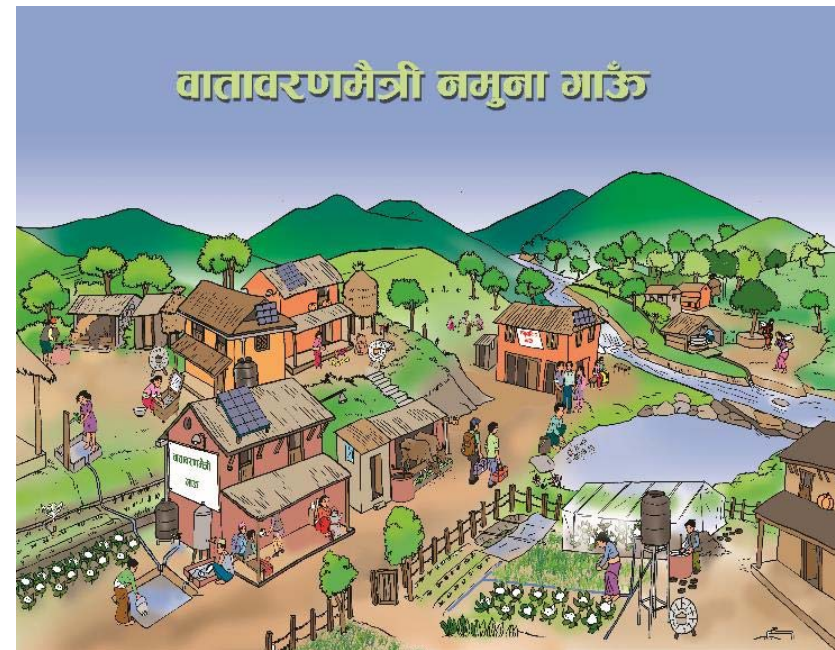
- Affordable and Clean Energy (Goal 7)
 - By 2030, ensure universal access to affordable, reliable and modern energy services
 - By 2030, increase substantially the share of renewable energy in the global energy mix
 - By 2030, double the global rate of improvement in energy efficiency
- Climate Action (Goal 13)

- **SE4all**

- Ensure universal access to modern energy services.
- Double the global rate of improvement in energy efficiency.
- Double the share of renewable energy in the global energy mix

Challenges for up scaling

- Lack of general information
- Reluctance of local MFIs to finance EVD solutions
- Climate driven migration
- Women friendly financial schemes
- 100% subsidy mentality
- Market access for organic farm product



Thank You



www.crtnepal.org



Eco Village Development: Sri Lankan Perspectives



Dumindu Herath

Integrated Development Association (IDEA),
Kundasale , Sri Lanka
www.ideasrilanka.org

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Eco Village Development (EVD) and Sustainability



Past Interventions more towards individual interventions

- Holistic and integrated approach! (Based on Participatory Sustainable village development planning)
- Robust, affordable and decentralized adaptation and mitigation solutions!
- Perfect mix of Central and decentralized solutions!
- Rural Sustainable development!

Where is it applicable?

Rural communities! With hidden ,underutilized potential..



Population By Sector %

Urban -18.3 Rural - 77.3 Estate- 4.4

EVD, Adaptation and Mitigation: Agriculture and Energy



Agriculture

Sectoral Composition of GDP of Sri Lanka:

Agriculture 11%

Industry 31%

Service 58%

Low Productivity: Agricultural Labour force 30%

Boost productivity– EVD solutions



Organic farming, sustainable home gardening



Preserving- Vegetable, fruit, spices drying



Mushroom production



Organic fertilizer production

Energy –Biomass

2.8 Billion Worldwide!

Over 50% of Sri Lankan energy demand

77.5% -Sri Lankan households

Over 80% -Rural households

95.3% -Estate sector,

35.2% -Urban households



Indoor Air pollution (IAP)– 4 Million Premature deaths

Deforestation –Rural Industries

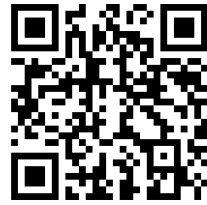
EVD Solutions:

HH Industrial stoves



Improved kitchens and Improved cookstoves





What villages lack –Based on EVD plans

- Capacity and awareness on Climate change and affordable adaptation solutions
- Strong and effective linkages and information flow/communication with local officials
- Awareness on Ecological conservation: soil, energy, water conservation
- Awareness and capacity on efficient utilization and conservation of local resources –Livelihood opportunities
- Strengthened community groups
- Infrastructure



Up-scaling EVD



Strengthening Divisional context

- R&D, Pilot demonstrations and commercialization of appropriate, robust , affordable solutions – **Technology!**
- Knowledge and Information centres/banks at local level- Effective communication – **Solutions and Integration!**
- Capacity of Development officials working in Grassroots **Agents of Change!**

Nationally

- Linking up with National programmes – Sri Lanka NEXT – 10,000 Climate smart Village development- INDCs **Support Infrastructure: Climate Adaptation**
- Solar power Programme, Non toxic nation programme support systems with larger level Adaptation measures- Watershed, flood Management,



Case of Success: Nationwide Rural Dissemination and Commercialization of “Anagi” Improved cookstoves



No National Biomass Policy – But 400,000 Anagi stoves marketed annually

Lessons – Affordability, robustness, user friendly solutions, commercially friendly, provisions for R&D, Promotion, Agents of Change

Thank you