

Next Steps Towards Scaling up of Eco-Village Development Solutions

Regional Event to Chart Roadmap for Accessing Climate Finance

February 12, 2018

Hotel Bengal Canary Park, Dhaka, Bangladesh



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Presentations:

- Jeebanjyoti Mohanty; INSEDA, India
- Mohammad Mahmodul Hasan, Grameen Shakti, Bangladesh
- Shovana Maharjan, Center for Rural Technology (CRT), Nepal
- Dr. K. P. Majagaiya, Alternative Energy Promotion Centre (AEPC), Nepal
- Dumindu Herath, Integrated Development Association (IDEA), Sri Lanka
- Leel Randeni, Ministry of Mahaweli Development & Environment, Sri Lanka
- Gunnar Boye Olesen, INFORSE
- Santosh Kumar Patnaik, CANSA

Regional Event: Next Steps Towards Scaling Up Eco Village Development Solutions

Dhaka, Bangladesh: February 12-13, 2018

By

Jeebanjyoti Mohanty

(Email: jeebanjyoti@inseda.org)

**Integrated Sustainable Energy and Ecological
Development Association (INSEDA, India)**

www.inseda.org



EVD SA 2

Backdrop

- ❖ Eco-village Development' Involves the Implementation of Appropriate, Environmental Friendly Renewable Energy Technologies and Capacity Building Activities for Climate Change Adaptation and Mitigation in the Villages
- ❖ Eco Village Development (EVD) Concepts And Solutions Effectively Address Poverty And Climate Change Related Challenges by Diversifying Livelihood, Generating Employment Opportunities, Developing Capacities of Women and Men by Using Local Resources.
- ❖ Thus, Investment In EVD Is Desired to Secure Sustainable Development more Efficiently For Vulnerable Population of South Asia.

EVD SA 2 by INSEDA, India

❖ **Location:** Implemented in 6 villages in Tehri Garhwal, Uttarakhand State, India

❖ **Problems:**

(i) Loss Of Livelihoods, (ii) Migration Of Men In Search Of Jobs, and (iii) Increase in Burden of Women's Workload.

Community Participation & Capacity Building



Solutions



Solar Dryer



Solar Poly Green House



Compost Basket



Organic Farming and Kitchen Garden



HEERA (Hybrid Improved Cook Stove)



HEERA (Hybrid Improved Cook Stove) (Contd..)



Achievements

- In Guriyali, **60% of households (18 out of 30) adopted tank for water storage** to mitigate the earlier water scarcity;
- **INSEDA designed a new chulha Heera (HICS)** - benefitted the women which further created demand from other women of same and adjacent villages (INSEDA may think of providing them selectively based on certain criteria who can not afford gas connection)
- **Women farmers are producing organic food** thus having the food security. They are also producing vegetables in Poly green house and kitchen garden for their own consumption and selling to neighbors and local market
- **Women farmers are organized in the Mahila Mandals** thus gaining self confidence, sharing of issues and solving problems among themselves

Achievements

- **Being able to get small credit through SHGs.** they are now able to have their friend circles and get opportunity to learn new things.
- **Their credit needs are fulfilled** and they don't have to take loan from the external money lender
- **Increased Social status of the Volunteers/ Climate Champions** as they lead the groups of women farmers and get respect in the family and society as well
- **Food security:** Small solutions like Compost basket, Kitchen garden help the women to get the food security

Challenges in Accessing Financial Resources

- Difficult to include EVD concept at the policy level, since India is a big country.
- Difficult to get funding for small organisations from Green Climate Fund as they need wider outreach of implementation
- Uncertain policies and sudden changes in economic policies such as changes in FCRA Rules and Regulations and Income Tax Rules and Regulations relating to NGOs act as constraints
- Companies having their own NGOs divert fund for their own implementation
- Long time taken by the funders/CSR for to process the proposal for approval
- Inadequate number of CSR summits of the companies interested to give fund on Climate Change

Thanks Very Much for Patient Listening

Comments and Suggestions are Welcome



Regional Event to Chart Roadmap for accessing Climate Finance

Next Steps Towards Scaling up of Eco-Village Development Solutions



Grameen Shakti

Mohammad Mahmodul Hasan
Manager

Dhaka
February 12, 2018

Conceptual View of Eco-Village Development (EVD)

- ❑ The Eco-Village Development (EVD) concept and solutions facilitate a development path that is compatible with poverty reduction and other development objectives of the South Asian countries and also with a development with low greenhouse gas emissions.
- ❑ Eco-Village Development (EVD) of existing villages is a practical, flexible concept allowing poor rural communities to achieve gradual climate-resilient, low-carbon, socio-economic progress.



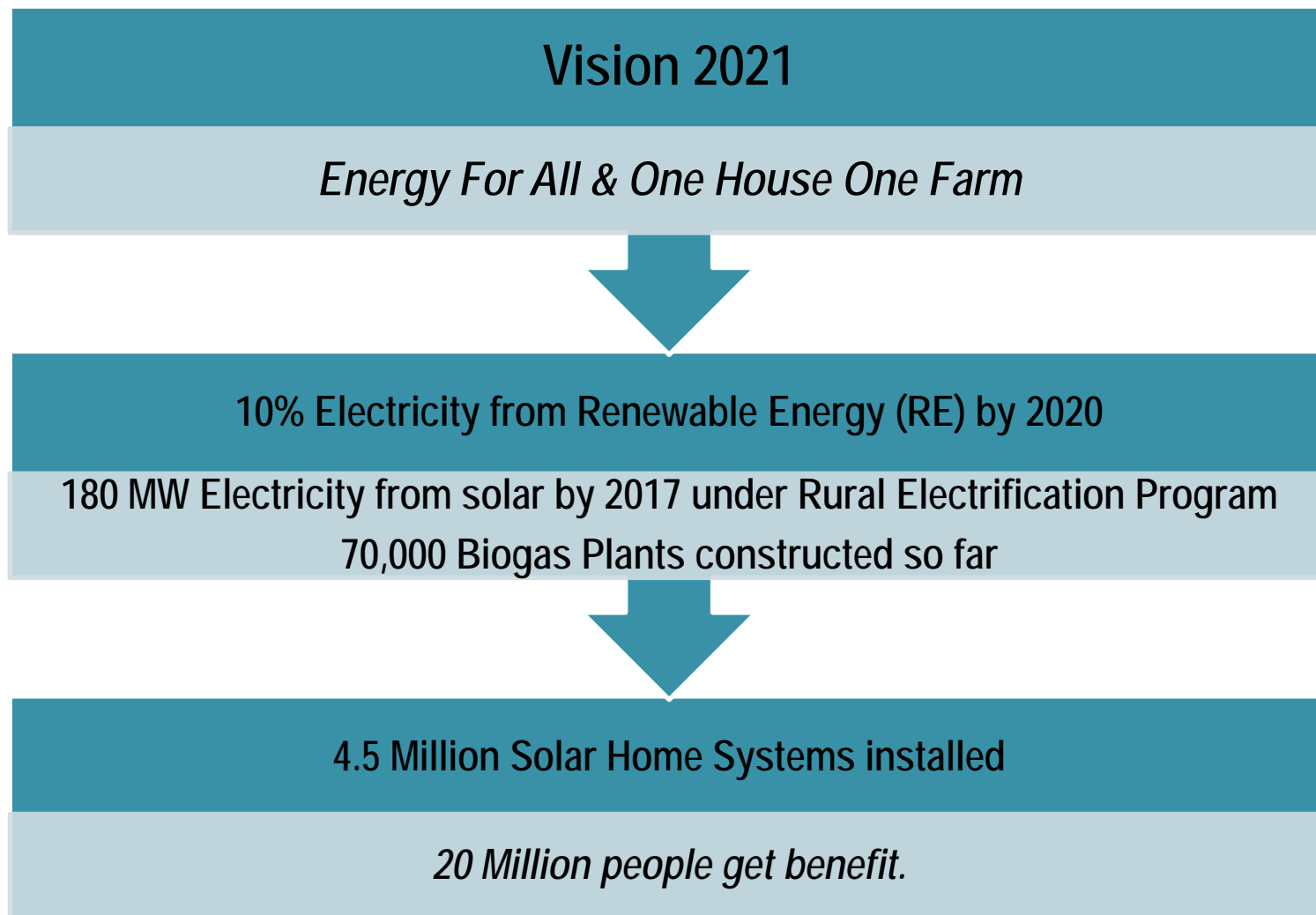
EVD: A basket of tools

Examples of solutions for EVD, where the partners have experiences in:

- Solar System: Solar Home System, Solar Drier, Solar Pump
- clean cooking solutions: Biogas plant, Improved Cook Stove
- Roof rain harvesting
- Mini hydro for water pumping
- Low cost toilets
- Agro –forestry
- Organic farming, etc.



Focus of Bangladesh & Eco-Village Development



Contribution from Grameen Shakti



The Solar Home Program providing electricity to off-grid villages

1.8 Million homes connected by solar power



Improved Cooking Stove all over the country
1 Million Improved Cook Stove



Biogas plant all over the country
35,000 Biogas plants

Sunny Smile of off-grid village Khowamuri

Khowamuri, Singair Sub-district, Manikganj

- Around 35 Kilometers from Capital City Dhaka.
- Around 50 families live in the village of the area.
- This village is outside of the grid connection.

Available Technology:

Technology	Purpose of use
Solar Home System	Solar Home System is used for the lighting, mobile charging and switching fans
Improved Cooking Stove	For daily cooking activities
Plastic Cover Bag	For cultivation of conflux
Cow-dung compost within Bamboo	For using in the cultivation field
Bamboo Item	For using in the cultivation field

Available solutions in the village



Introducing Street-light as per villager's demand



Solar Power Village Market Shudhkhirā

Sudhkhirā, Singair Sub-district , Manikganj District

- Around 28 kilometers from Dhaka City
- Around 70 families live in the area.
- There is no grid connection in the village.

Technology	Purpose of use
Solar Home System	<ul style="list-style-type: none">- Solar Home System is used for the lighting, mobile charging and switching fans in the house- Solar Home system is used in the village shops after sun set for mainly lighting. Besides, television/DVD player is also used. Digital measuring machine run by solar power is found in the village market.
Improved Cooking Stove	For daily cooking activities
Traditional water filter	Traditional sand based water filter is used for removing iron from the drinking water.

Available Solutions in the village



Introducing solar pump for safe drinking water



Biogas Village Ashulia (Demran)

Ashulia (Demran), Dhamrai Sub-district, Dhaka District

- Around 50 Kilometers away from Capital city Dhaka
- Around 40 families live in the area.

Technology	Purpose of use
Biogas Plant	Biogas plant used for producing gas to be used in the households as well as cattle farm
Slurry	Slurry is used in the agriculture field and pond also
Bamboo macha	Bamboo macha is used for drying cow-dung as well as slurry

Available solutions in the village



Introducing bamboo-cement made slurry pit



Meetings in Villages and Demonstrations

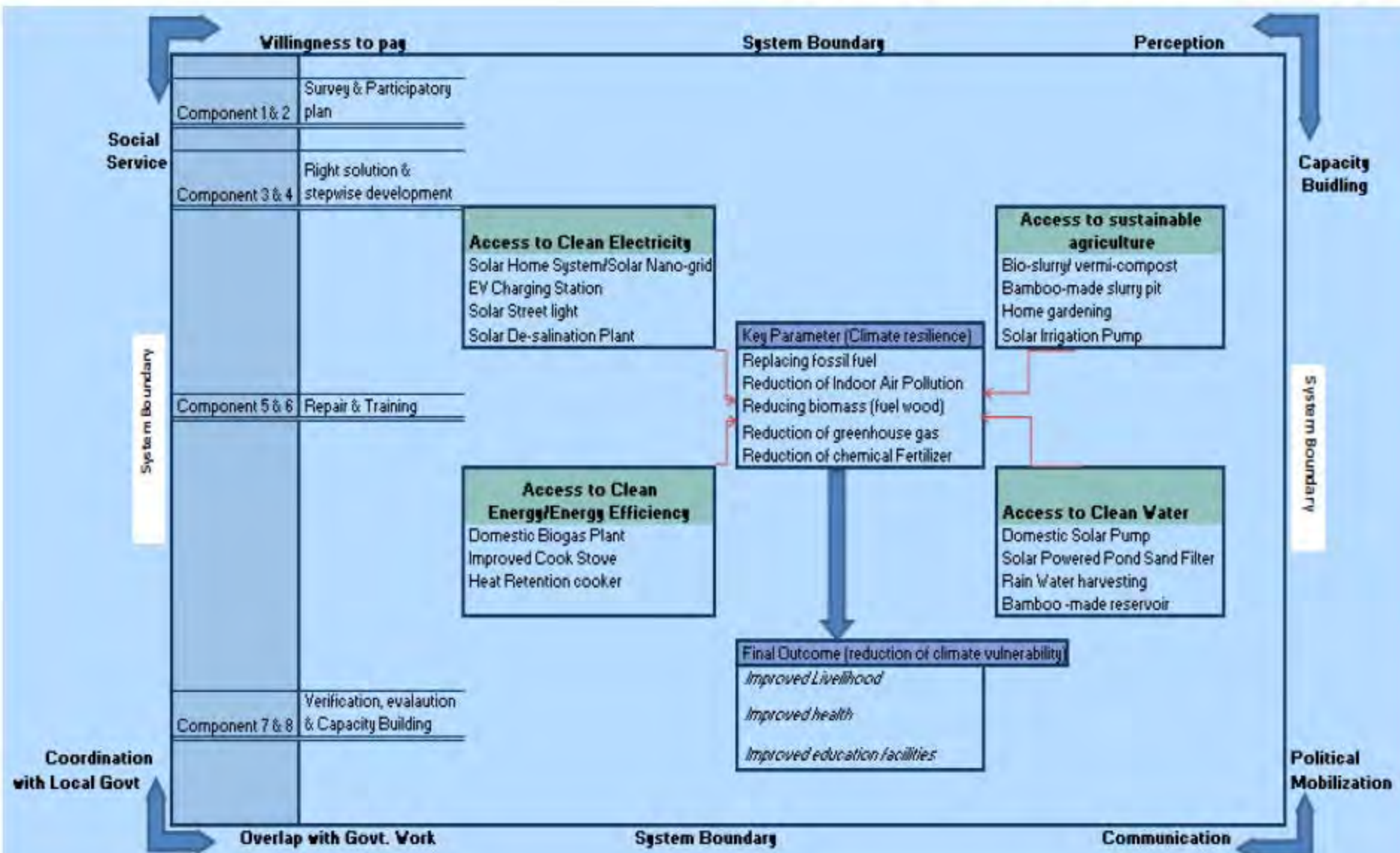
Meetings with the villagers and Demonstration in Khowamuri, Shudhkhira and Ashulia regarding Slurry Pit Management, Solar Street Light and Solar Water Pump.



Challenges Experienced

- ❑ Mobilizing the EVD concept and capacity building in the villages
- ❑ Integration the development plan with Local Government
- ❑ Social Development Vs Social Business
- ❑ Peoples' perception
- ❑ Prolonged and heavy rainy seasons
- ❑ Influencing the policy makers.

Scale-up for Eco-Village Development: In the light of Climate Fund



Scale-up for Eco-Village Development: In the light of Climate Fund

- ❑ 'Concept of Eco-Village Development in Bangladesh' has been shortlisted in the Country Program (CP) for Green Climate Fund of Bangladesh.
- ❑ Out of 230+ Project Proposals, only 71 Proposals has been included.
- ❑ Project Number: A24. Website:
http://erd.portal.gov.bd/sites/default/files/files/erd.portal.gov.bd/npfblock/Bangladesh_GCF-CP_Draft.pdf

Scale-up for Eco-Village Development: In the light of Climate Fund

- ❑ Climate Fund/Green Fund or any fund for mitigation activities as well as adaptation activities can be asked.
- .
- ❑ Activities continuing to influence the government agencies to take the comprehensive model of Country perspective Eco-Village Development/Sustainable Village Development/Smart Village Development in their “National Action Plan” or “5-10 Years Master Plan” for development road map.

Thanks and...

...do it with joy



Challenges for Up-scaling Eco-Village Development in Nepal



Shovana Maharjan

Project Coordinator

Centre for Rural Technology, Nepal
(CRT/N)



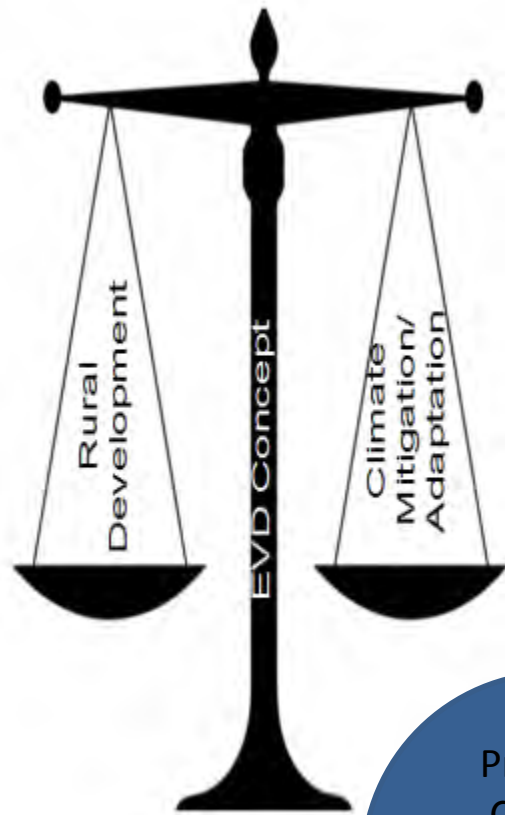
Centre for Rural Technology, Nepal (CRT/N) Highlights

Established 28 years ago to develop, promote and disseminate environmentally sound rural/appropriate technologies and strengthen capability of rural communities in creating better opportunities through mobilization of local resources to improve livelihoods.

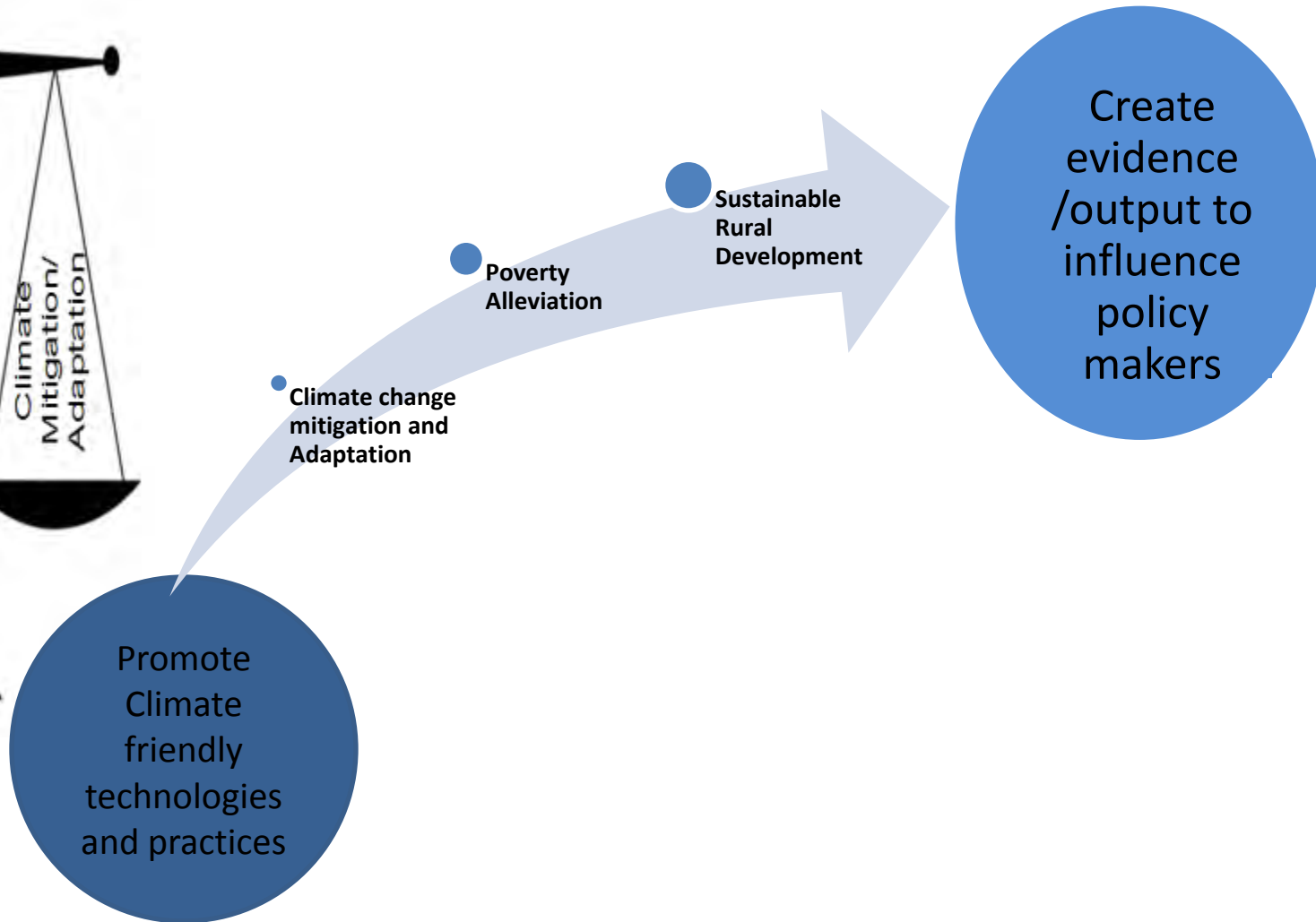
- **Biomass-based Programme**
 - Household/ Institutional Improved Cooking Stoves (ICS/IICS), rocket stove
 - Bio-briquette/Charcoal
- **Hydro-based Programme**
 - Improved Water Mill (IWM), electrification
 - Hydraulic Ram Pump
- **Solar based Programme**
 - Solar Dryer
 - Solar Parabolic Cooker
- **Climate Change**
- **Gender Mainstreaming**
- **Enterprise Development**



Background



Objective



Project Site



EVD Solutions Promoted in Nepal





Capacity Building Training conducted in Nepal



Glimpse of Project Activities



Participation in Renewable Energy week



Group Photo after National Dialog meeting



Stakeholder during exchange visit





Student participating in Essay Competition



Art by student during competition



School awareness program on climate change

SDGs

- 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



New Administrative Structure of Nepal



Federal Government

Province-7

District-77

Metro city-6

Sub-Metro City-11

Municipalities-276

Rural Municipalities-460



Efforts made to replicate EVD activities in rural areas

- Meetings
 - Bethanchok Rural Municipality
 - Alternative Energy Promotion Centre
 - National Planning Commission
- Capacity Building Trainings
- Awareness
- TOT training to local government officials
- Seeking fund for intervention + advocacy to replicate in larger area



Challenges

- At local Level
 - 100% subsidy oriented mentality specially after earthquake of 2015
 - Lack of knowledge among local communities and organization about government programme and policy and other assistance programmes that support promotion of RET among villagers
 - MFI's and Banks not willing to invest in RETs



With Local Government

- With a new federal system, all power are vested with local government.
 - This is taking time for their capacity building, planning and for awareness on EVD.
 - All the priorities are focused more on bigger infrastructure development like road, and the priority for climate change and environment conservation issues are low in comparison to other.
 - Funding ; more focus on advocacy but less on program at the ground level
- Opportunities: newly formed government, with new working modality and new enthusiasm



At National Level

- With the provincial government, it has power to formulate state policies and laws, carry out local development infrastructures etc.
- Systematic formation of all governmental structure is in process
- Need to sensitize relevant government line agencies and stakeholder at provincial and centre level on the impact of EVD solutions and prospect for its scale up.
- Evidences generated so far from only few project sites with limited household coverage appear to be insufficient to advocate and influence the national policies; now 460 rural municipalities
- More interaction between government's EFLG program and EVD required.
- No priority for local solution like EVD (integrated package of technology promotion +livelihood development) in NDC



At international Level

- Short project period to show actual impact
 - Donor seeks quick output from short term project
 - Challenge to convince Donors and funding agency for long / mid term period (3-5 years project and beyond)
 - Good proposals for projects/programs need to be formulated for mid and long term period to convince the Donors as well.



ACCESS TO ENERGY LOW COST ECONOMIC GROWTH LIVELIHOOD
GREENHOUSE GAS REDUCTION
CAPACITY BUILDING TRAININGS INDG CONSERVATION BIODIVERSITY
GENDER EQUALITY WATER AGRICULTURE VILLAGE CLIMATE CHANGE CLIMATE ADAPTATION DEVELOPMENT
ENVIRONMENT COP ECO VILLAGE DEVELOPMENT POLICIES
SUSTAINABLE DEVELOPMENT LOW CARBON ENERGY ADAPTATION MITIGATION NAP'S
LOCAL SOLUTIONS RURAL DEVELOPMENT
LOW CARBON APPROACH RENEWABLE ENERGY AFFORDABLE SOLUTIONS MODERN ENERGY
FOOD SECURITY RESILIENT VILLAGE UNFCCC
PARIS AGREEMENT SE4ALL



A woman wearing a red and green checkered shirt and a blue shawl is working in a greenhouse. She is reaching into a tomato plant that is supported by a wooden trellis system. The greenhouse has a translucent plastic covering and a wooden frame. The plants are lush green and have many yellow and red tomatoes hanging from them.

Thank you

For more information
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Centre for Rural Technology, Nepal
shovana@crtnepal.org
www.crtnepal.org



RE technology and ways to scaling up EVD in Nepal

Alternative Energy Promotion Centre, Nepal

Dr. K. P. Majagaiya

“Next Steps Towards Scaling up of Eco Village Development Solutions”

Dhaka, 12-13 February, 2018





Alternative Energy Promotion Centre

- **Focal agency of GoN for promotion and development of RETs** (estd: 3rd Nov 1996)
- **Semi autonomous status under MoPE:** Board represented by public sector, private sector & financial sector
- **National Executing Agency** for renewable energy programmes & projects
- **Mandate:** policy and plan formulation, resource mobilization, technical support, M&E, quality assurance & coordination.
- **Technical arm of Government in the sector of RE and Carbon Projects ,**



Major Programmes Implemented by AEPC

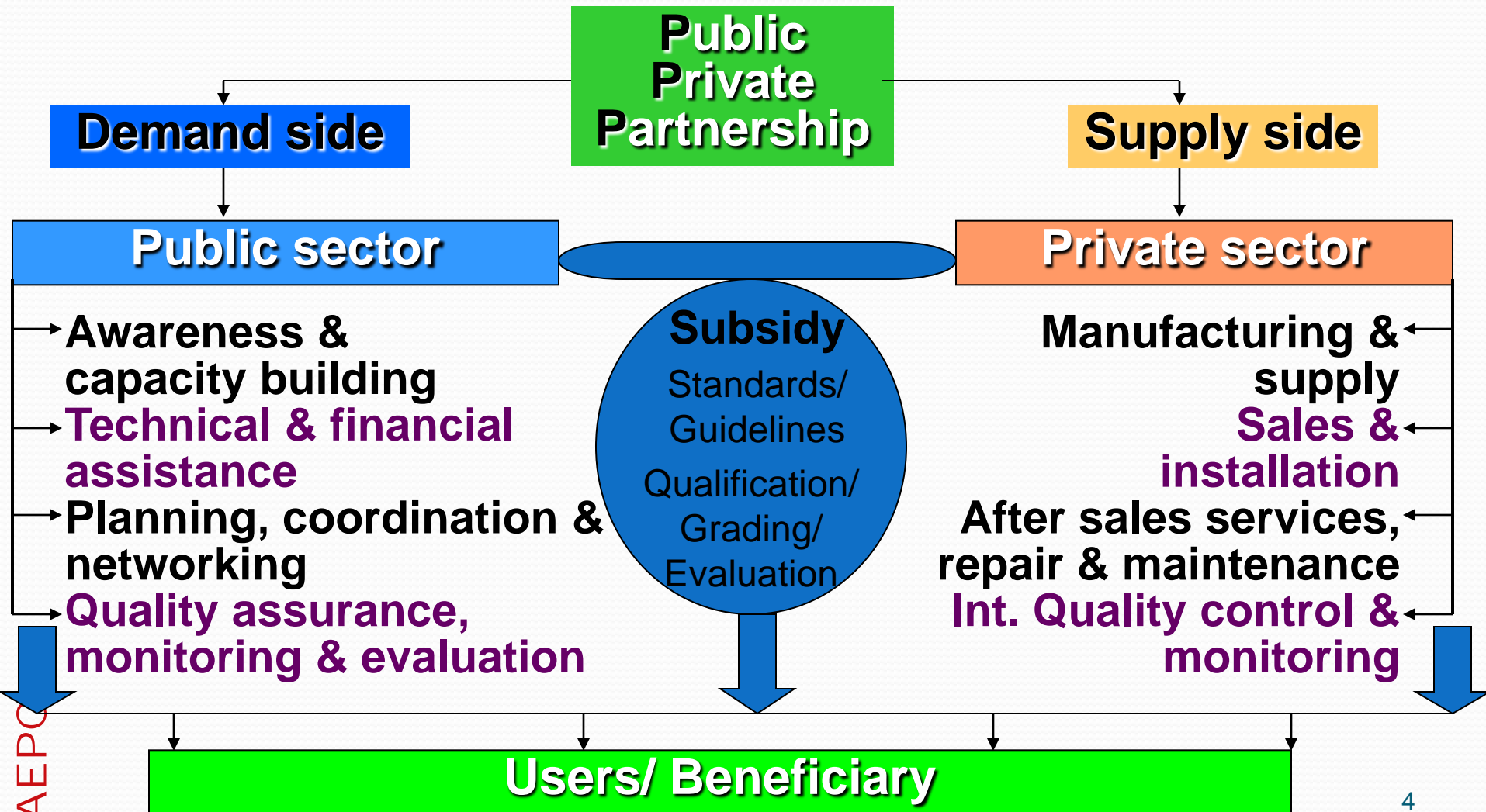
Name	Period	DPs	Main support areas
Energy Sector Assistance Programme (ESAP I & II)	1999 - 2012	Denmark, Norway, KfW, DFID	Hydro, Biomass, Solar, Institutional Development
Biogas Support Program (BSP I, II, III & IV)	1992 - 2012	SNV, KfW, WB	Biogas
Renewable Energy for Rural Livelihoods (RERL)*	1996 - 2019	WB, UNDP	Hydro, PEU, Institutional support
Renewable Energy Project (REP)	2004 - 2010	EU	Solar
Improved Water Mills Support Programme (IWMSP)	2003 - 2010	SNV	Water Mills
Climate & Carbon Program	2010 - 2012	SNV, DFID	Carbon
National Rural Renewable Energy Programme (NRREP)**	2012 - 2017	Denmark, Norway, DFID, KfW, GIZ, ADB, WB, SNV, UNDP, UNCDF, UNESCAP	Finance (Subsidy & Credit) Technical (hydro, solar, biomass, biogas), Cross cutting (GESI, Carbon, Monitoring, Institutional Development), PEU

* Previously "Rural Energy Development Programme (REDP)" till March 2011

**Operational as single programme modality, activities from all programs/initiatives are incorporated/aligned {Scaling up Renewable Energy Program (SREP), South Asia Subregional Economic Cooperation (SASEC), RE-Source}



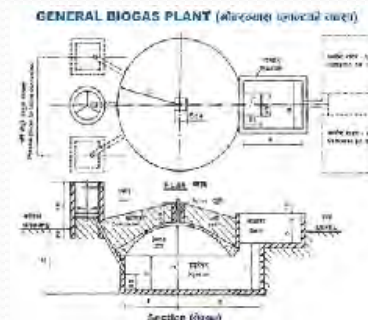
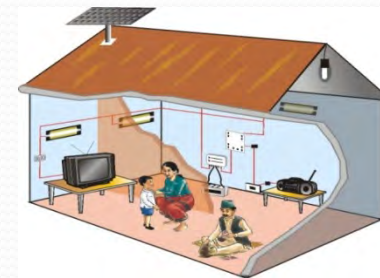
Working Modality





Scope of AEPC

- Micro/mini/small hydro (up to 10 MW) & Improved Water Mills (IWM)
- Solar energy (PV & thermal)
- Bioenergy: Biogas, Improved Cooking Stoves (ICS), Biofuels, Briquettes, Gasifiers
- Wind energy
- Other RETs (Geothermal, etc.)
- Energy Efficiency
- Climate Change





WHY RENEWABLE ENERGY FOR NEPAL?

RURAL CONTEXT

- Difficult terrain and Remoteness
 - Scattered and Sparse population
 - Lower load densities
 - Lower utilization rates
- the extension of grid-based electricity is more expensive than the alternative energy technologies

URBAN CONTEXT



समुदाय/गाउँ	बाईलगाउँ	कोटगाउँ	कोटगाउँ	मुसुगाउँ	मिर्जागाउँ	मुसुगाउँ	कोटगाउँ
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	११:००-१२:००	१२:००-१३:००	१३:३०-१४:३०	१३:३०-१४:३०	१४:३०-१५:३०	१५:३०-१६:३०	१६:३०-१७:३०

Thus, Today RE is for

- Mainstream energy supply in rural areas
- Alternative of existing supply system in urban areas

Which enables

- Decentralized Energy Solution
- Regional and Local Development
- Local Employment Generation
- Ownership

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PROSPECTS / OPPORTUNITIES OF RE DEVELOPMENT

National Context

- Favorable Geo Physical Situation
- Favorable Policy Environment
 - Energy promotion has been an integral part of national development agenda since 1985
 - RE Policy, Subsidy Policy and SDM
 - Dedicated institution and established network
- Priority Sector of Government (CCLS4ALL initiative from GoN)
- Vibrant Private Sector
- High dependence on traditional fuel
- High dependence on imported petroleum products

International Context

- Priority Sector of Development Partners
- Sustainable Energy for All” UN program
- Separate SDG Goal 7
- LDCs’ are being focused for CDM/Carbon revenue specially POA type of CDM programs
- Target of Global Alliance on Clean Cook stove
- Climate investment fund (CIF)
- GCF (500 Million USD)
- NAMA Facilities (20 Million USD)
- UNFCC Opportunities



RE POTENTIAL AND ACHIEVEMENT

S.N .	Technologies	Achievement So far	Estimated Potential	Basis
1	Mini/micro Hydro	27.8 MW	>100 MW	Possible in 55 districts of Nepal
2	Domestic Biogas	363,847 nos	1.1 million plants	At existing livestock population
3	Solar Energy	719,485 nos of SHS & SSHS 1,636 nos of ISPS & PVPS (45 MWp)	2,100 MW	4.5 kWh/m ² /day radiation if 2% area is taken as suitable
4	Improved Cooking Stove	1.29 Million	>2.5 Million	Considering 75% eligible households as of total household of 2001 census
5	Improved Water Mill	10,594	25,000 -30,000	
6	Wind	64 kW	3,000 MW	Considering 10% of area with more than 300 W/m ²
7	Bio-fuel		11,00,000 tons	

Source: AEPC, 2010 & 2016



Ways

- AEPC is working in the sector of RE and that are the major activities for the eco village development solution .**We can link our work on RE with Eco village Development Solution with less efforts .**
- AEPC being the Nodal Agency for RE , working with different donors like DFID, SNV, GIZ, UNCDF etc and we can **coordinate with those donors for the Eco-village Development Solution, because this integrate renewable energy promotion and development and livelihood enhancement.**



Ways

- Evidence from three year work on EVD has shown positive result and there is a potential to upscale the Eco-Village Development Programme implemented by CRT/N at Nepal in other villages in order to address climate change and enhance livelihood as a local solutions.
- We are planning to develop Bethanchok Rural Municipality, where EVD programme has been going on, as 100% Renewable Energy Municipality. This will be model village municipality and pioneer effort in Nepal in context of new federal structure.
- Now GoN has been changed in to federal context . Most of the central authority has been transferred to the local level. Few months later ,new policies & mechanism have to developed in the local level and Provenance level and we can prepare some polices & mechanism that can promote and support EVD.



Ways

- Newly elected members of local level, they are really interested for the new concepts/ model but they are lacking form the new concepts/ model, So its right time to orient & sensitize them.
- Several workshop and seminar was held at regional for the **Low Carbon Economic development Strategy** and has been submitted to Ministry.
- Several trainings were contacted for the carbon projects like MHP and Biogas.
- 10 Million USD has been received from the carbon projects as a carbon revenue.



Alternative Energy Promotion Centre

Making Renewable Energy Mainstream Supply to Nepal



Thank you very much for your
kind attention !!!

www.aepc.gov.np

AEPD

Scaling-up Eco Village Development (EVD) in Sri Lanka

Regional Event - Dhaka , Bangladesh 12/02/2018

Dumindu Herath, Project Manager
Integrated Development Association (IDEA)



Eco Village Development in Sri Lanka

Evidence Based Advocacy for Low Carbon Pro poor Sustainable Eco Village Development in South Asia :2015-2017

Phase 2 "Advocating for up-scaling for local climate solutions as Eco Village Development as a mean to strengthen pro-poor climate agenda in South Asia" :2017-2018

Project Objective: *The overall objective of the project is to strengthen the development to reduce poverty in ways that limit greenhouse gas emissions (mitigate climate change) in South Asia.*

Planning and Implementation

Galahitiyagama (Pallepola DS)

Dalupothagama (Pallepola DS)

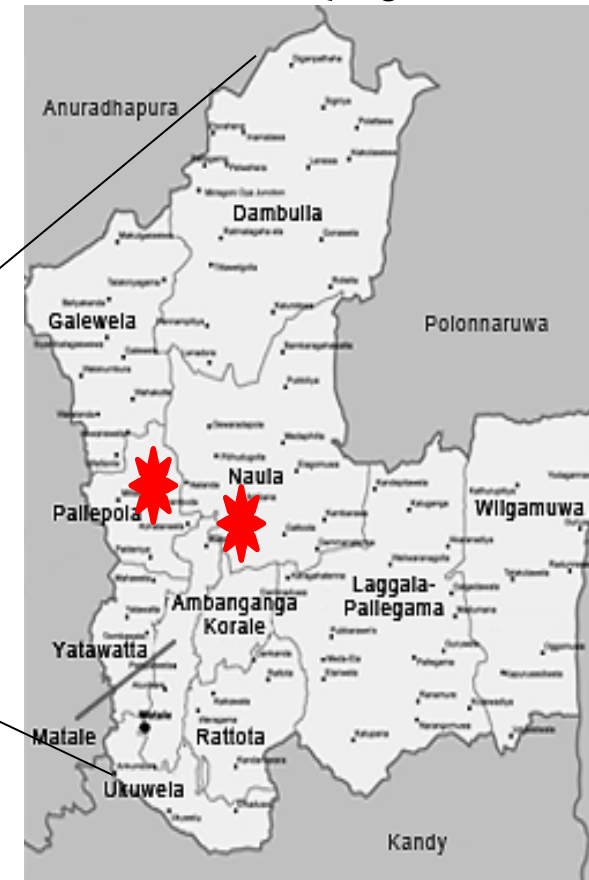
Hapugasyaya (Naula DS)

<http://ideasrilanka.org/evdproject.html>

<http://ideasrilanka.org/>

Matale District

මාතලේ දිස්ත්‍රික්කය



Bottom-up approach : Village Development planning (PRAs)



**Community Based
Sustainable Village
Development Planning**

Environment

Socio-Economic, Spiritual

Livelihood Development

Infrastructure



3 Village plans developed



Glimpse of EVD Solutions and Capacity Building



Organic Farming



Improved cookstoves and Kitchens



Appropriate crops



Improved Industrial stoves



Biomass/ Solar Food dehydration



Mushroom Cultivation



Rainwater Harvesting



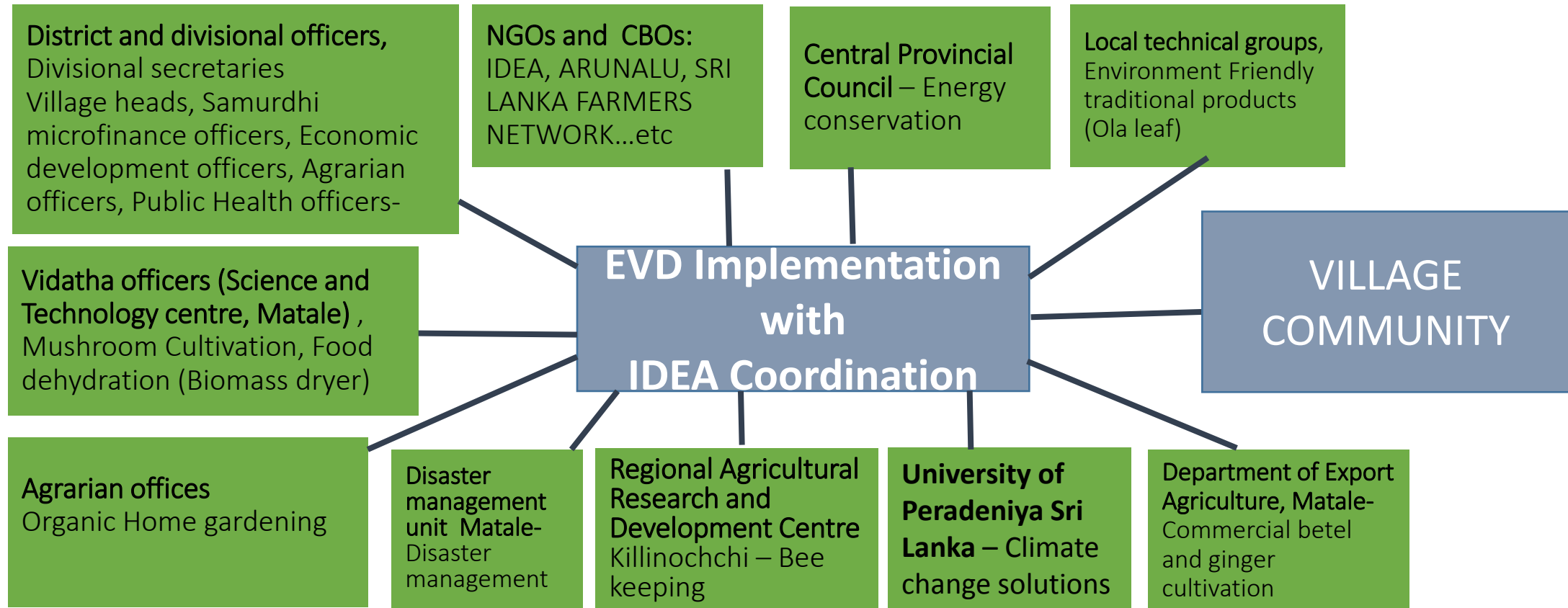
Natural Products-
Ola leaf



Over 30 Capacity building and training workshops – Climate change adaptation, mitigation and solutions, Energy conservation and Managements, Soil conservation, Disaster management, Organic farming and agricultural crops, Entrepreneurship and business management, Mushroom farming, Kitchen improvements and health, Improved household and industrial stoves, Food dehydration, traditional products

Coordination, Collaborations and facilitations

Facilitations and Involvements of Line agencies and other Stakeholders



Scaling-up and Mainstreaming EVD

Decentralized bottom up approaches



Information and finance flow to grassroots



Effective utilization of Local administrative structure



Synergy of similar programmes and drivers Actors



- 10000 BlueGreen villages
- Gramashakthi People's Movement

Advocacy at National , subnational, local

Linking up-

Sri Lanka NEXT 10000 Bluegreen villages

Gramashakthi People's Movement

Climate change secretariat, Ministry of Mahaweli Development and Wildlife



Linking and replication of EVD activities

Linking up with Gramashakthi People's Movement
5-day in-house ToT in Village development planning (PRAs) :
Development officers of Matale district
ToT Manual



Way ahead and Challenges: EVD in NDCs

Challenges

- Carbon Abatement measurements and proxies –NDCs
- Mechanism for information and financial flows
- Synergy and collaboration of similar programmes

What is to follow

Collaborations with Ministry of Mahaweli Development and Environment and Ministry of Sustainable development and wildlife, Gramashakthi People's movement, Presidential secretariat

THANK YOU

- www.ideasrilanka.org : EVD Project page, Videos page for case studies, Downloads for case studies
- IDEA Kandy FB <https://www.facebook.com/idea.kandy>
- Integrated Development Association Youtube channel



**“Next Steps Towards Scaling up of Eco Village Development Solutions”,
Dhaka from 12th -13th February ,2018**

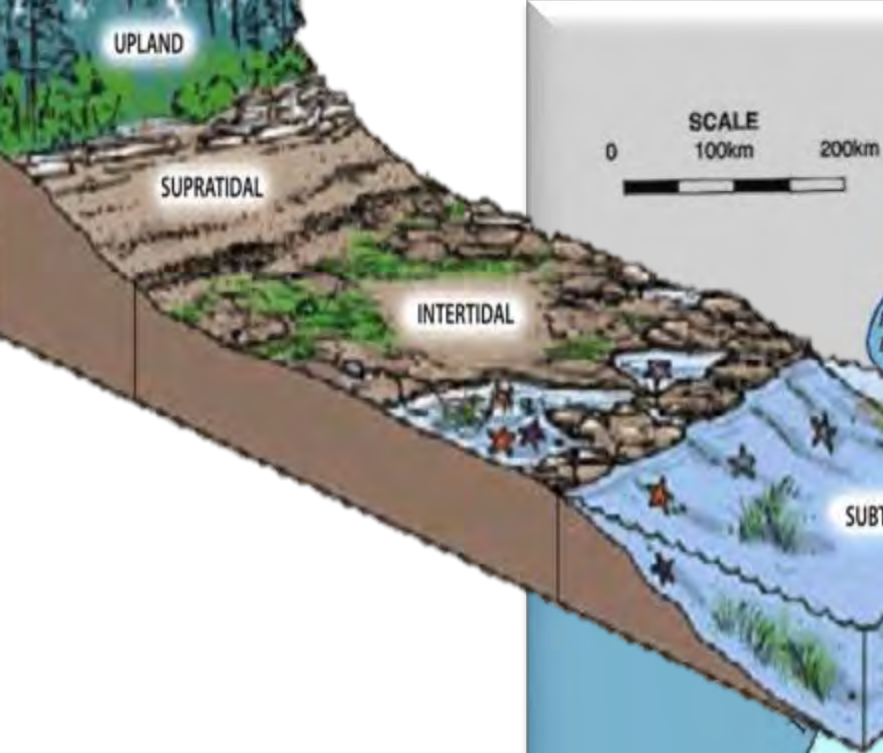
Mainstreaming of EVD activities in on-going policies and schemes at sub national levels: Perspectives from Government



Leel Randeni
Assistant Director
Environmental Planning and Economics Division,
Ministry of Mahaweli Development and Environment ,
Sri Lanka

Contact: leelrandeni@gmail.com





We are all connected.

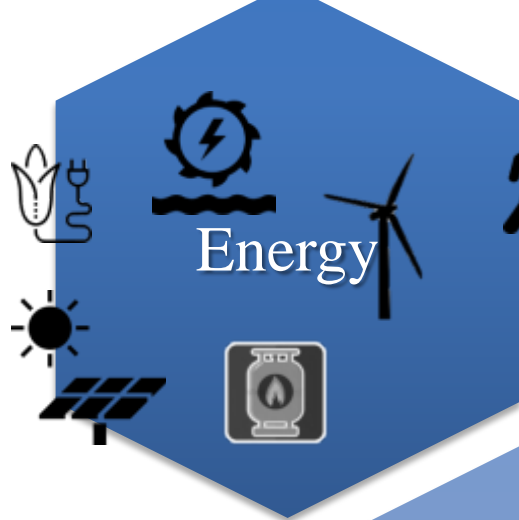


Launching National Programme



Obligation and Strategy

- **Obligation under Paris Agreement- NDCs**
 - Face adverse effects of climate change
 - key strategies
 - mitigation, adaptation, loss and damage and means of implementation.
- **“Blue Green Beautiful Lanka Villages” (BGBLV) programme**
 - Eco- friendly, Green-Smart villages for Sensitizing people to climate change
 - 10,000 villages in Sri Lanka within 2017-2025.
 - Cabinet decision was taken in March 2016



Energy



Transport

NDCS from Paris Agreement



Industry



Forestry



Waste



Mitigation

Agriculture
Livestock
Fisheries

Health

Water

Human
Settlements

Coastal
Marine

Biodiversity

Irrigation

Tourism
Recreation

Adaptation

Forecasting
capabilities

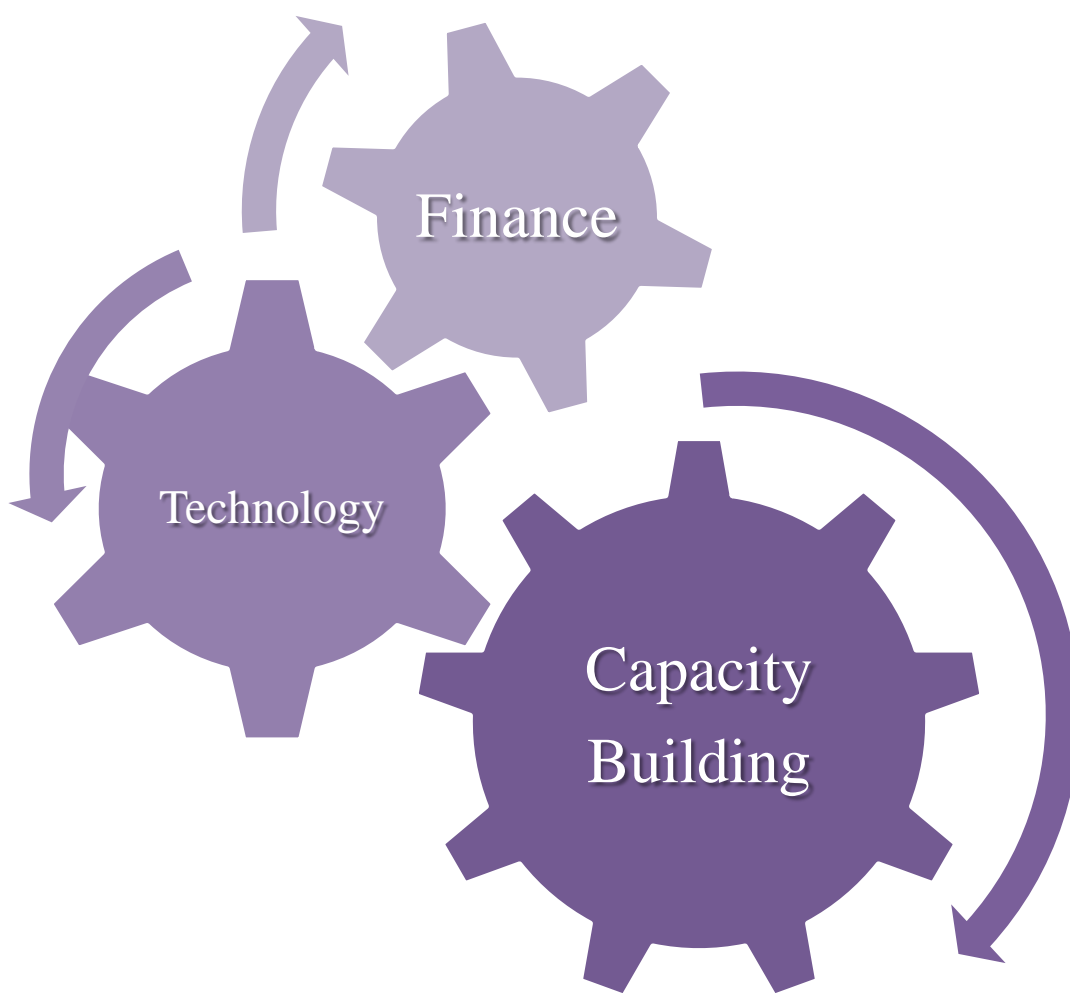
Accounting
loss &
damage

Local
mechanisms
of
overcoming
damage

Strengthening
existing
national
mechanism

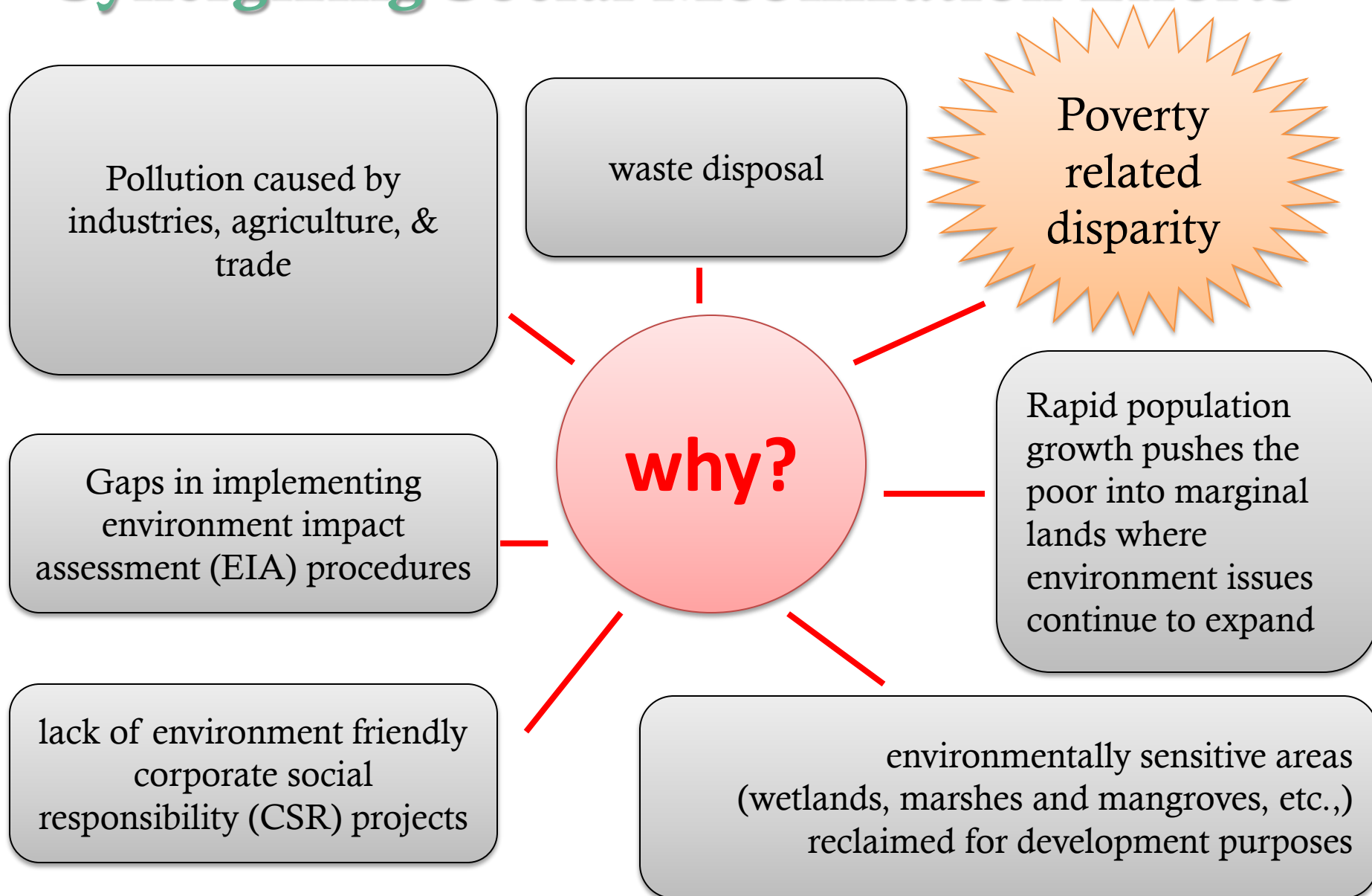
Insurance

Loss & Damage



Means of Implementation

Synergizing Social Mobilization Efforts



Synergizing Social Mobilization Efforts, Contd.,

How?

Empowering & mobilizing the village poor

Inter-sectoral and integrated approach for synergistic positive outcomes

Social mobilization efforts of existing government administrative network including;

1. ministerial efforts
2. district secretariats and provincial councils
3. efforts of social movements, civil societies, private sector and non-government organizations

more sustainable outcomes.

Cross sectoral relationship of environment sector in a collaborative manner synergizing all possible social mobilization and environment conservation efforts



VISION

A Blue Green Beautiful Lanka through establishing economically prosperous and ecologically regenerated eco- friendly village network where empowered communities and nature co-exist in harmony, ensuring long term sustainability of natural resources base

MISSION

Mobilize and empower village communities to promote natural, healthy organic lifestyles, eco-friendly green socio-economic rural growth to ensure the equitable and sustainable development safeguarding natural resources base

සහභාගීත්ව මෙවලම්
Participatory Tools

**Participatory Rural Appraisal (PRA) & Participatory
Learning and Collective Action (PLCA) Tools**

Village Development Plan (VDP)

Components

1. History, Legends, Collective bio cultural heritage (rituals, taboos, etc.,)
2. Demographic distribution (social stratification, etc.,)
3. Village Land use Map (include socio ecological production landscape; *owita*, *kamatha*, *bada wetiya*)
4. Resource profile including Peoples' Biodiversity Register, Seasonal calendar
5. Needs assessment/SWOT analysis/Barrier Analysis and Enabling Framework (Economic/social/environmental/spiritual outcomes)
6. Log Frame Analysis
7. Action Plan
Prioritized activities, Time frame, Responsibility ,Monitoring & evaluation, Outputs & outcomes (RBM)
8. Institutional analysis including presence of CBOs and acceptance of CBOs by villagers
9. Participant list

Photo story (10 pics), Video clip (03 mins), hard copies (03 no.s)

Mapping

PVDPs

NDCs

RMP

SUSTAINABLE
DEVELOPMENT
GOALS

Stakeholders and Planning

ගෝලීය
Global

ජාතික
National

පළාත්/දිස්ත්‍රික්
Provincial/District

ප්‍රා.ලේ. කාර්යාල
Divisional

ග්‍රාමීය
Village

MMD&E

Line Ministries/ Donors/
Facilitators/Corporate
sector

Provincial/District .Sec

Divisional.Sec

Village Communion

Cooperatives

Community

CBOs

Village Officers

ජාතික මහා සැලැස්ම
**National Master Plan
(NMP)**

සම්පත් රාශිකරණ සැලැස්ම
**Provincial/District
Resource Mobilization Plan
(RMP)**

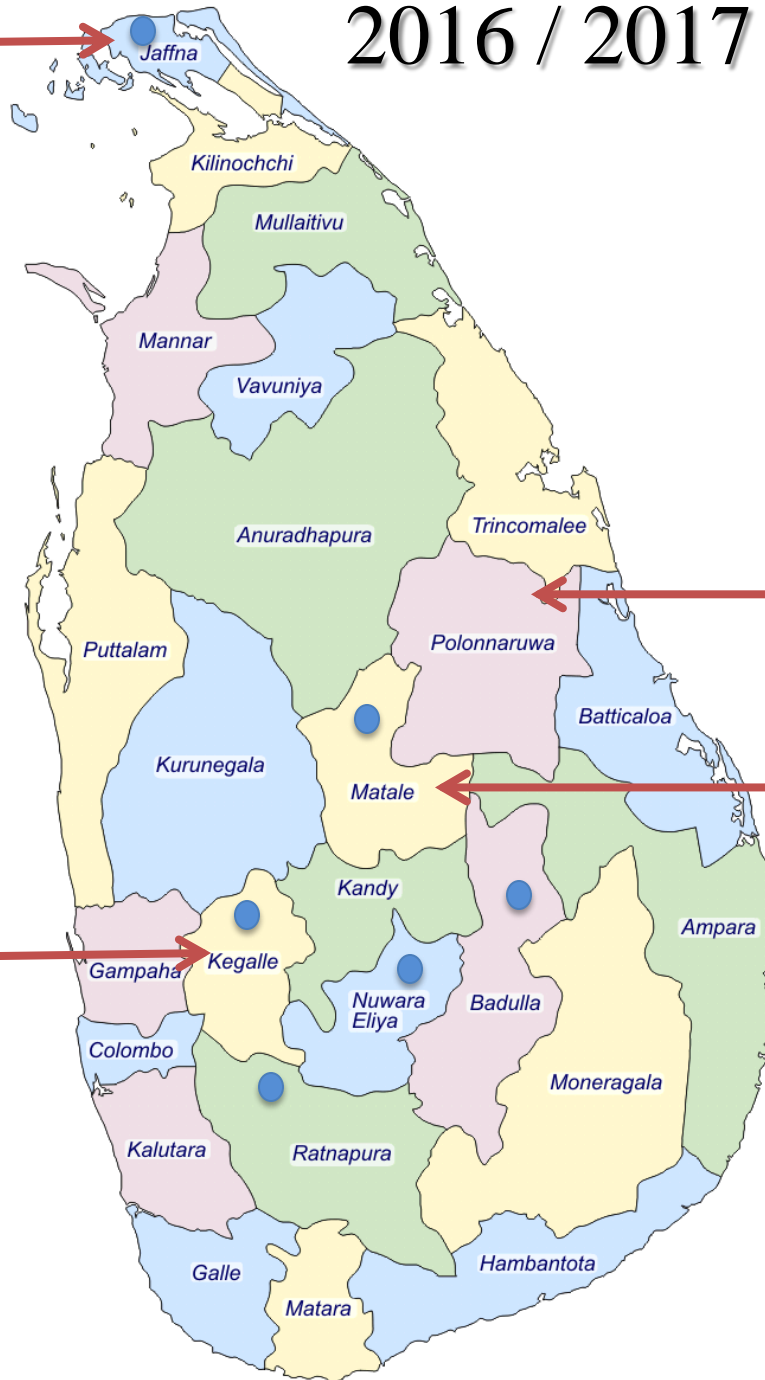
ප්‍රාදේශීය ක්‍රියා සැලැස්ම
**Divisional Implementation
Plan (DIM)**

ග්‍රාම සංවර්ධන සැලැස්ම
**Village Development Plan
(VDP)**

**PRA &
PLCA**

2016 / 2017

15



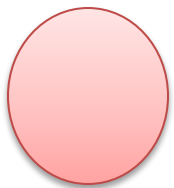
10

40

40



Capacity building



PRA/PLCA

Bluegreen Village Pilot Programme

- 10,000 Green-smart Villages
 - Covers 1/3 of the island.
 - 400 villages/ district
 - Achieve NDCs nationally.
 - Resource Pooling
 - Synergistic and Integrated Approach
 - Resilience Action Plan and Strategic Resource Mobilization

Basis of a Blue Green Village

Spiritual

**Economically
viable**

**Eco-
friendly**

**Socially
acceptable**



Resources Pooling and Synergy

- Samurdhi Model Villages සමෘද්ධි ආදර්ශ ගම්මාන
- Mahaweli Green Villages මහවැලි හරිත ගම්මාන
- Tropical Fruit Villages පළතුරු ගම්මාන
- Productivity Promotion Villages ඵලදායීතා ප්‍රවර්ධන ගම්මාන
- Tank with a Village, Sustainable Fishery Promotion Village “වැවක් සමඟ ගමක්” ධීවර ගම්මාන වැඩ සටහන
- Kitul Production Villages කිතුල් නිෂ්පාදන ගම්මාන
- **Networking with all the villages and converge with Bluegreen Village Programme**
- සියළු ගම්මාන වැඩ සටහන් නිලහරිත ගම්මාන සංවර්ධන වැඩ සටහන සමඟ සම්බන්ධීකරණය



Collaboration with Other Similar Initiatives

- **Samurdhi Model Villages**
- **Eco villages of IDEA – 03 villages already**
- ***“ Tropical Fruit Villages ”* of Department of Agriculture**
- **Model Villages of Ministry of Housing and Construction**
- ***“Reservoir and a Village “* Program**
- **Proposal for Donor Funding**

Strategic Perspectives

Introducing Positive Reciprocity in to Blue green Village Program

Networking Blue Green Villages

Social marketing Strategies

Establishment of Fruit Gardens



Officers Training Workshops



- Officers Orientation Workshops held in Matale ,Jaffna, Nuwaraeliya, Rathnapura and Kegalle districts.
- All other district trainings will be finished this year.

Tree distribution for planting in Home gardens



සියලුමගමුව ගමේ තොරතුරු උත්පාදනය සඳහා අප කණ්ඩායම

තාවිතා කළ ක්‍රම වේදයන්.

- * ගමේ නිලධාරී , ප්‍රජා හා ප්‍රජා නායකයින් සමඟ සාකච්ඡා.
- * ගම හරහා හරස්තබ්ඩ වාරිතා,
- * සාමුහික නිරීක්ෂණ.
- * අර්ධ ව්‍යුහගත සාකච්ඡා
- * අවිධිමත් සාකච්ඡා.
- * සමූහ සාකච්ඡා.
- * කුඩා කණ්ඩායම් සාකච්ඡා.
- * රෙකිහාසික විකාශය පිළිබඳ සාකච්ඡා
- * ගමේ සිහියම ප්‍රජා සහභාගිත්වයෙන් නිර්මාණය කිරීම.
- * වෙනත් රූප සටහන් සැකසීම.
- * පොදු ගැටළු හඳුනා ගැනීම හා සහභාගිත්ව විග්‍රහය.
- * යුගල සන්සන්දනාත්මකව ගැටළු ප්‍රමුඛතා කිරීම
- * ගැටළු ගස නිර්මාණය කිරීම.
- * වෘත්තමය ප්‍රස්ථාර සටහන් කිරීම.
- * සාකච්ඡා දර්ශන සැකසීම.
- * කාන්තාවන්ගේ හා පිරිමින්ගේ ලේඛනමය පිටපත රටාව
- * ලබාගත් තොරතුරු ප්‍රජාව විසින්ම ප්‍රජාවට දැනුම් කිරීම.
- * කාන්තාවන්ට ස්වෝත්සාහයෙන් කළ හැකි කෙටිකාලීන දැනුවත් සැලැස්මක් සැකසීම.
- * ප්‍රදේශයට ගැලපෙන හඬ වර්ග හඳුනා ගැනීම.
- * සහභාගිත්ව ඇගයීම.

දායකත්වය :

මහවැලි සංවර්ධන හා පරිසර අමාත්‍යාංශය
විල්පොත කාන්තා ඉතුරුම් පරිශ්‍රමය

Participatory Rural Appraisal



ප්‍රභව	සාපේක්ෂවය							
	①	②	③	④	⑤	⑥		
මුද්‍රාණය වලට වැඩි ලැබුණු නොමැතිවේ	2	3	4	5	6			
2) ජලය භාවිතය	X	3	4	5	6	1	⑤	
3) ක්‍රීඩා ක්‍රීඩා: කාමර කාමර		X	3	3	3	5	①	
4) වන සතුන්ගේ හානි			X	4	6	3	③	
5) පිළිගැනීමේ හේතු				X	6	2	④	
6) ගොවිතැන වගා කොටු						4	②	

ප්‍රමුඛතා වූ ගැටළු :-

01. කාන්තාවන්ට ආදායම් නොමැතිකම.
02. ගෙවතු වගා නොකිරීම.
- 03 වන සතුන්ගේ හානි.

Issue : Not enough income opportunities for Women

කාන්තාවන්ට ආදායම් නොමැතිකම

Remedies පිළියම් :

- Pant nursery පැළ තවාන - සී/ස ජයශක්ති ධීවර කාන්තා සමිතිය
- Training on alternative Livelihood Opportunities තෙදින මැහුම් පාඨමාලාවක් පැවැත්වීම
- Bee Keeping අවිධිමත් මී මැසි පාලනය ව්‍යාප්ත කිරීම
- One day training on Mushroom farming බිම් මල් වගාව පිළිබඳ එක් දින ක්ෂේත්‍ර පුහුණු වැඩමුළුවක් පැවැත්වීම

Plant Nursery - “Jayashakthi” Fisher Women Society



- Launching of the Nursery
- Registration
- Three Day Training on Nursery Management
- Technical Know how and Extension Service
- Fruit and Vegetable nursery management one day training

Social Issue : Absance of Organized Homegardening ①

පිළියම් :

- Grouping 5 members for each group and made 13 such groups
- Informal bee keeping
- Goat rearing
- Poultry
- Mushroom Farming



Medirigiriya Blue Green Villages

Puranagama ,Pahalagama
and Arunagama Villages



Walapane Blue Green Villages

Ritiella, Mirisawththa and
Gangaragolla villages



Participatory Village Development Plans



District Secretariat Higher Officers made aware on the Process



Collective biocultural heritage

knowledge, innovations, and practices of Indigenous peoples and local and mobile communities that are collectively held and inextricably linked to,

- traditional resources and territories,***
- local economies,***
- the diversity of genes, varieties, species and ecosystems,***
- cultural and spiritual values, and customary laws shaped within the socio-ecological context of communities.***

Traditional Livelihoods

Traditional Snake-bite Healers

Traditional Kithul Tappers



Traditional Snake-bite Healers



Traditional Ecological Knowledge and Wealth



Traditional Snake-bite Healers: Collective Action & Discourse



Kithul Products sugar Palm



Way Forward

- Prepare PVDPs and joint implementation – in Collaboration with IDEA
- Adopt “City-Sharing Methodology” for global & regional collaboration.
- Grass-root level officers and stakeholder mobilization
- Networking and resource pooling
- On-going Projects
- Mid country degraded land rehabilitation project
 - Project for Adaptation and improve the Resilliance of Farmers in Mahaweli River basin to the adverse impacts of Climate Change.

Outreach

- Island-wide open competition for calling innovative Proposals for Blurgreen Villages
 - Low cost.
 - Community and people given more opportunities to participate in the process .
 - Develop Social enterprises
 - Sharing ownership

Networking with Stakeholders and provide resources

- Universities and Research Institutions
 - Making BGVs as their business.
- Reciprocity Research – Agribusiness Management Department, Wayamba University of Sri Lanka
- Include Green Villages developed by other like minded organizations (IDEA, etc.) in to the Bluegreen Village Programme. .

A serene sunset scene with a bright orange sun low on the horizon, casting a long, shimmering reflection on the calm water. The sky is filled with soft, wispy clouds in shades of orange and yellow. In the distance, a dark silhouette of a shoreline with trees and a small boat on the water are visible.

Thank You

Leel Randeni

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Ministry of Mahaweli Development & Environment

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Eco-Village Development (EVD) & Climate



*Gunnar Boye Olesen, International Network for Sustainable Energy (INFORSE)
Project: Upscaling Local Climate Solutions - Eco-Village Development to Strengthen
Pro-Poor Climate Agenda in South Asia*

*“Next Steps Towards Scaling up of Eco Village Development Solutions”,
12th -13th February ,2018, Dhaka. Bangladesh*

International Network for Sustainable Energy

- **Network of 150 NGOs worldwide, active regions in South Asia, East Africa, West Africa, Europe, formed in 1992**
- **An international voice of NGOs promoting renewable & energy efficiency**
- **Follow climate negotiations**
- **Active on EU Climate EU policies**
- **Sustainable Energy News**
- **Lowcarbon Development Strategies**
- **Sustainable energy visions & scenarios**
- **Eco-Village Development**



Eco-Village Development (EVD) & Climate

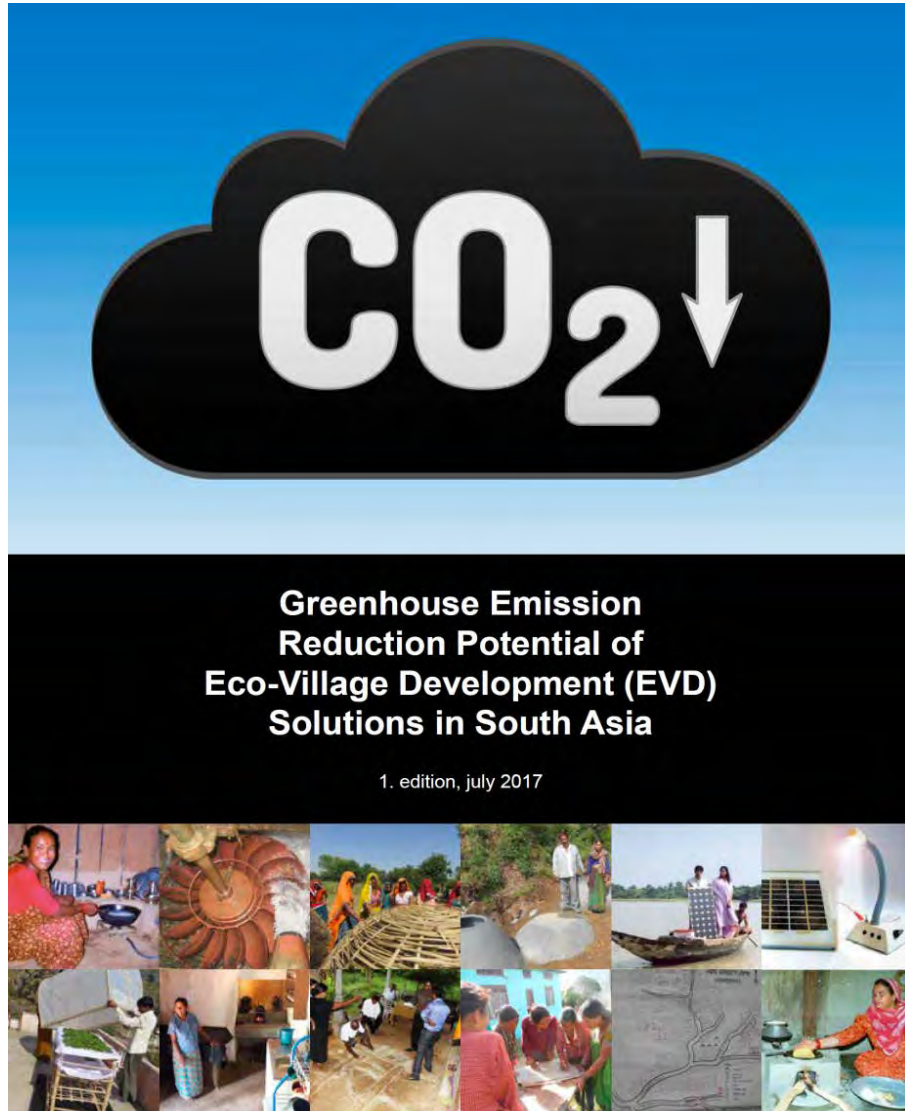
- When EVD Solutions reduce emissions and help climate adaptation, they should be part of climate strategies, Nationally Determined Contributions (NDCs) to the Paris Agreement
- Then NDC guidelines and other implementation tools for the Paris Agreement should embrace local solutions, development, poverty reduction



We take EVD to UN Climate Negotiations

- INFORSE has followed UNFCCC negotiations (annual COP, intermediate sessions in Bonn) since 2008
- Since 2015 we have promoted EVD at climate negotiations with side-events, exhibitions, dialogue with negotiators
- Since 2016 we have promoted that NDC guidelines include sustainable development, poverty reduction, local solutions, CSO participation in development





EVD - What is the mitigation potential?

Gunnar Boye Olesen
International Network for
Sustainable Energy

INF  **RSE**
International Network for Sustainable Energy

**We
reviewed 12
of the most
popular EVD
solutions
and
analysed 5
(in bold)**

- 1. Improved Cookstove (ICS)**
2. Large ICS for Rural Household Industries
- 3. Household biogas**
- 4. Solar light in homes**
5. Improved water mill
- 6. Solar and hydro micro and mini grids**
7. Hydraulic Ram pumps
8. Organic farming & gardening
9. Compost baskets
10. Rainwater harvesting
- 11. Solar dryer**
12. Greenhouses



**Main results
from the 5
EVD
solutions
analysed
per
household
that use the
solution**

Improved Cookstove (ICS)

Mitigate 1.3 – 4.3 ton CO₂e/yr (0-50% CO₂)

Household biogas

Mitigate 2.6 – 5.4 ton CO₂e/yr (0-50% CO₂)

Solar light in homes

Mitigate 0.34 ton CO₂e/yr (100% CO₂)

Solar and hydro micro and mini grids

Mitigate 0.72 ton CO₂e/yr (100% CO₂)

Solar dryer

0.45 – 1.1 ton CO₂e/yr (100% CO₂)



Examples for a village with 100 households adopting EVD solutions

Example 1:

Village with 100 SHS, 100 ICS of high
quality (GACC* tier 3), 25 solar dryers:
Mitigate 500 tons CO₂e/yr

Example 2:

Village with mini-grid, 50 ICS of high
quality, 50 biogas, 25 solar dryers:
Mitigate 600 tons CO₂e/yr

* GACC = Global Alliance on Clean Cookstoves



Thank you

– Read full report on www.inforse.org/asia

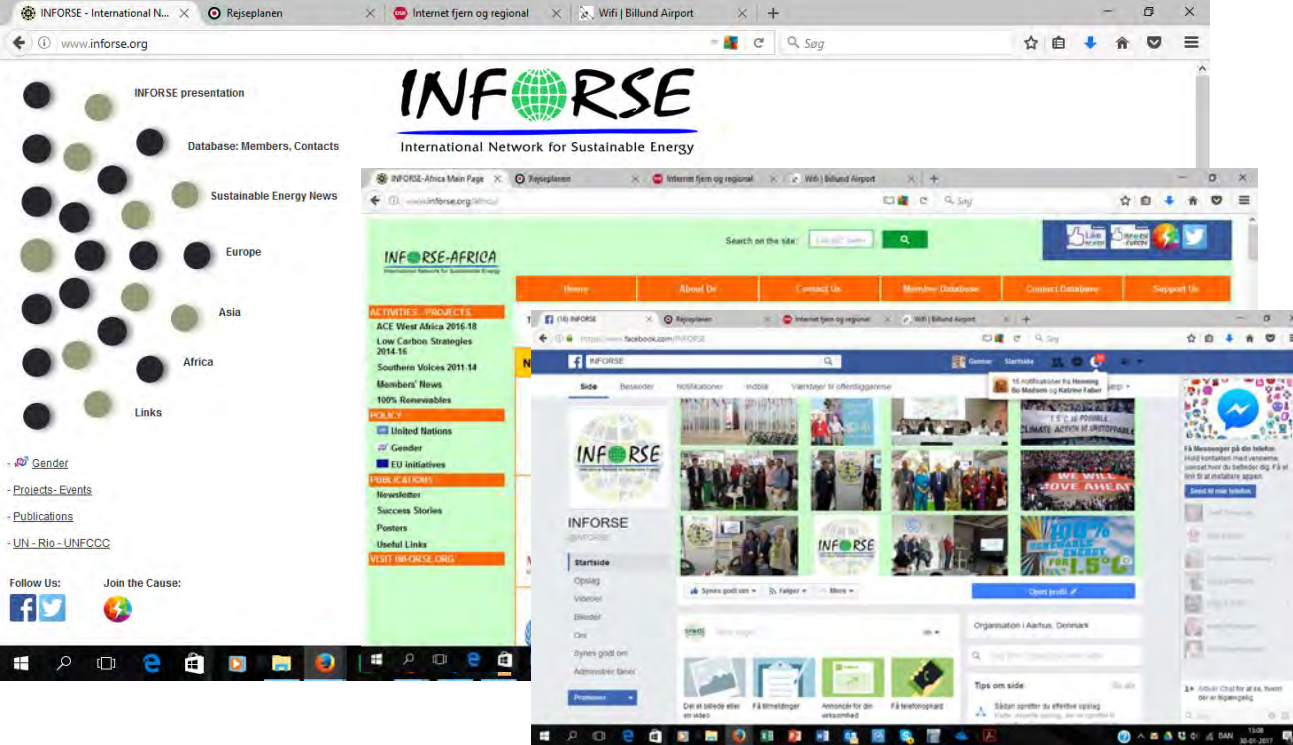


“PROMOTE LOCAL CLIMATE SOLUTIONS TO END POVERTY”



Important lessons

- **Total greenhouse emission reductions (particles, CH₄, etc.) with improved cookstoves and biogas replacing traditional fire are twice as large than just CO₂ reductions**
- **The high mitigation of biogas is achievable with up to 7% CH₄ loss**
- **Biogas improves soil and reduces chemical fertiliser use, but the related GHG se reductions are an order of magnitude lower than reductions of direct emissions**
- **There are considerable uncertainty on greenhouse effects of particle emissions and soil improvements**
- **We will study effects further, also in real life**



INFORSE on Internet

www.inforse.org
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EVD Project in South Asia:

www.inforse.org/asia/EVD.htm
www.ecovillagedevelopment.net

Eco-Village Development as Climate Solution: Publication in English, Hindi, Bangla, Nepalese, Sinhala:

www.inforse.org/asia/Pub_EcoVillageDev_SouthAsia.htm

Financing Local Climate Solutions in South Asia

Next Steps Towards Scaling up of Eco-Village Development Solutions

12th February 2018

Hotel Bengal Canary Park, Dhaka, Bangladesh



Santosh Kumar Patnaik
Climate Action Network South Asia
www.cansouthasia.net



Why Financing is Important

- To avoid dilemma of technology transition at community level

Example: In household energy, LPG or biomass use

Sustainable practices or input intensive agriculture

- To face realities of 3⁰C rise in global average temperature by 2100
- Sustainability of micro level initiatives for providing solutions to vulnerable population
- To facilitate convergence of mitigation and adaptation co-benefits

Approach to the Regional Event

- The outcome expected is a draft roadmap for accessing finance to fund eco village development activities at local level
- The entry points for integrating EVD to ongoing policies and schemes of national and sub national government are to be explored