



UNFCCC COP27 SIDE EVENT: 12/11 2022 15:00-16.30 Room: Memphis (Blue Zone)



Local Climate Sustainable Energy Solutions in Global Stocktake (GST) Why, How and From Where

Welcome by the organisers INFORSE – SusWatch Kenya, - INSEDA - SE

Moderator: Judit Szoleczky, INFORSE, Santosh Patnaik, CANSA

East Africa:

Promoting local solutions as important climate and development solutions in East Africa

Mary Swai, TaTEDO, INFORSE-East Africa, Tanzania (@)

Launch: 100 % Renewables Scenario – Uganda

Richard Kimbowa, UCSD, INFORSE East Africa Chair (@)

Local Solutions in GST, Key message from East Africa

Nobert Nyandire, Suswatch Kenya

Europe: Paris compatible scenarios for reducing emissions with transition to 100% RE, EE, sufficiency, key message for GST from Europe.

Gunnar Boye Olesen, Sustainable Energy, Denmark INFORSE-Europe

South Asia:

Promoting local activities in South Asia supported by eco-village development initiatives *Anzoo Sharma, CRT Nepal*

Successes with local solutions in South Asia & their promotion

Sanjiv Nathan, INFORSE South Asia & INSEDA, India

Launch of database, documenting successful local solutions

Abdul Arif, Grameen Shakti, Bangladesh

Local Solutions in the GST, Why and How

Dumindu Herath, IDEA, Sri Lanka

Comments:

Stephen Nzioka, Ministry of Energy, Dep. RE Kenya

Dr. Thusitha Sugathapala, Delegation of Sri Lanka

Dialogue, Conclusion

Proceedings: <https://www.inforse.org/cop27.php>





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**COP27 SIDE EVENT 12/11: Local Climate – Sustainable Energy Solutions in GST,
Why, How and from Where**

Successes with local solutions in South Asia **(India Nepal, Bangladesh and Sri Lanka) and promotion of them**

Sanjiv Nathan

Integrated Sustainable Energy and Ecological Development Association

INSEDA & INFORSE South Asia, INDIA



About INSEDA

- INSEDA is an **NGO Registered in 1995**, working in **India and South Asia**
- **INSEDA** has an **observer status at UNFCCC since 2015**.
- **Dr. Raymond Myles**, President-cum-Chief Executive, INSEDA is **one of the Founder members of INFORSE**
- Hosting the **Regional Secretariat of the INFORSE-SA** since 1995
- **Dr Myles is the innovator of low carbon, bamboo-based affordable green technologies** developed by INSEDA .
- Designed developed **three kinds of biogas plants** namely, **Deenbandhu, Grameen Bandhu and High-rate Bi-phasic**
- **Innovated Climate-Friendly, Eco Village Development (EVD) model as effective Mitigation & Adaptation solution**
- **Transferred technologies** to different countries - **Cameroon and Uganda**
- Implementing **carbon credit projects** in India **under Gold Standard**



UNFCCC Conference



International training on EVD conducted by INSEDA

Low carbon, Climate Resilient Eco-Village Development in South Asia Since 2015

Rolled out NextGen EVD project in July 2020 for village-based, local, low-carbon development in four South Asian countries :

- INSEDA – India
 - CRT - Nepal
 - Grameen Shakti – Bangladesh
 - IDEA – Sri Lanka
 - INFORSE-South Asia - Regional
 - CANSA – Regional
- With programme management support by DIB Denmark and
 - Technical Support by INFORSE

EVD consists of a package

- of eco-friendly, low carbon, green technologies *within villages,*
- which can be easily implemented and replicated
- that helps in mitigation of climate impact or adaptation of new solutions to build climate resilience
- focuses on local people, especially the poor, marginalized, women and weaker sections of local community

Support by CISU, Denmark



EVD Solutions in India – INSEDA, India



Bamboo reinforced Biogas – Gremmenbandu **Bamboo reinforced Rainwater Harvesting** **Solar Poly Green House – Bamboo frame**



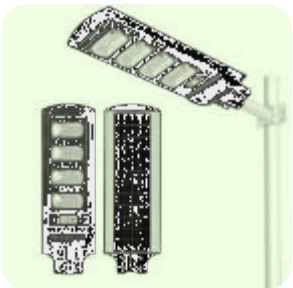
Solar Tunnel Dryer – Bamboo frame

Bamboo house/ shelter

Bamboo Compost Basket

Vermi-compost

Organic Kitchen Garden



Solar Street light and lantern



Day-night Solar cooker with battery



HEERA Hybrid and JWALA Improved Cookstove



Energy plantation, horticulture, bamboo, household forestry



EVD Solutions in Nepal - Centre for Rural Technology, Nepal



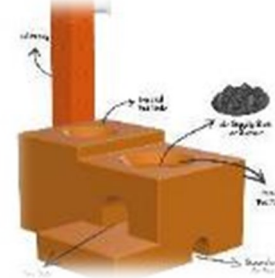
Hydraulic Ram Pump (Hydam)



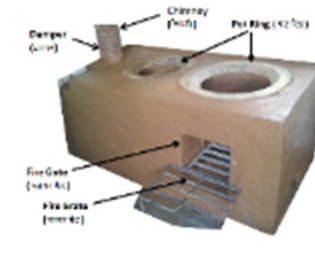
Improved Water Mill (IWM)



SF2 Solar Water pumps



Matribhumi Improved Cook Stove (M-ICS)



Improved Institutional Cook Stove



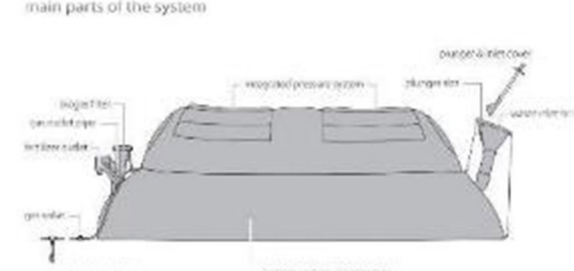
Cabinet Solar Dryer



Rooftop Rainwater Harvesting



Vermi composting



Homebiogas



Greenhouse Tunnel with drip irrigation



High-value Tree plantation

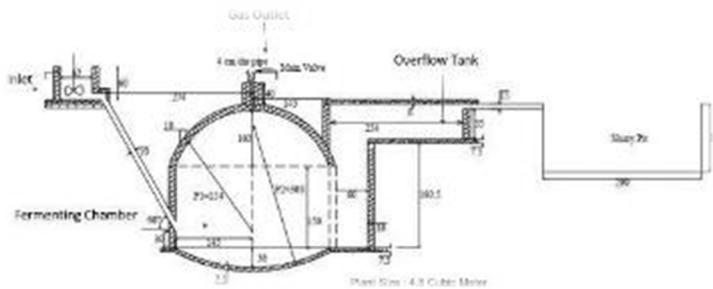


Induction Cook Stove



Renewable water lifting system

EVD Solutions in Bangladesh - Grameen Shakti, Bangladesh



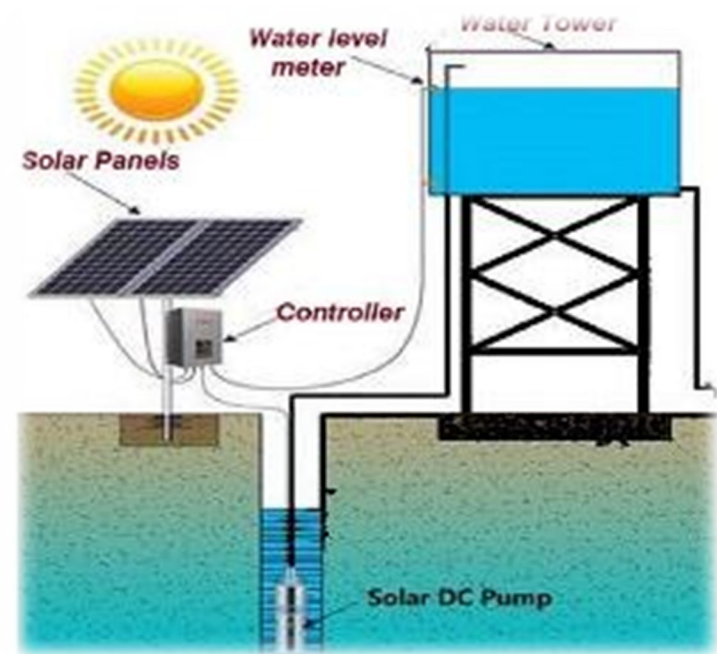
Household Biogas Plant



Solar Home System



Bamboo reinforced Slurry Pit



Solar water pump



Solar Street Light



Retained Heat Cooker



Improved cookstove (single Burner, with chimney)



Rainwater Harvesting System



Kitchen garden



Solar System for village shop

EVD Solutions in Sri Lanka – IDEA, Sri Lanka



Anagi- Improved Biomass Stove



Movable and sunken type institutional stove



Roof rainwater harvesting.



Non portable Bio-mass dryer



Improved Kitchens



Movable Institutional Biomass stove with Chimney



Mushroom cultivation



Composting



Home gardening and sustainable paddy farming



Improvement in brickmaking

EVD Model - an integrated development approach to help reducing emissions and to provide social benefits

Huge potential to reduce GHG emissions using local solutions as 60% to 80% population is in rural areas in four countries

Improved Cookstove –150 million families in India can save

- 100 Mt firewood and 150 M t CO₂ per year

Biogas - 75 m BGP (2cum) from 300 million bovine population

- Can save at least 200 Mt of firewood and 300 M t CO₂ Per year

Rooftop rainwater harvesting

- 150 m families in India can save 1.5 b cum water

Solar Home System

- the 6 m SHSs have reduced GHG emissions by 10 M t CO₂ per year.

Induction cookstoves

- 25% (1.5 m) households in Nepal can use electric cooking by 2030, saving GHG

Anagi cookstove

- There is potential of installation of at least 1.5 m again stoves in Sri Lanka

Environment and Social Impact

- Increased climate resilience, mitigation and adaptation
- Reduction of GHG emissions and pollution.
- Conservation of water and soil.
- Improved soil health .
- Carbon sequestration.
- Enhanced income of poor communities.
- Clean kitchen Improved health of women and children and reduced drudgery.

Bamboo plantation helps in:

- Drawdown CO2
- Environment restoration
- Soil rejuvenation
- Reforestation and erosion control
- Moisture conservation
- Adding source of income for farmers and women
- Improves the local and surrounding environment

Thank you

For more information please contact:

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Relevant websites:

www.inforse.org/asia/EVD.htm

www.ecovillagedevelopment.net

http://www.inforse.org/asia/Pub_EcoVillageDev

[TOT Manual SouthAsia.htm](http://www.inforse.org/asia/Pub_TOT_Manual_SouthAsia.htm)

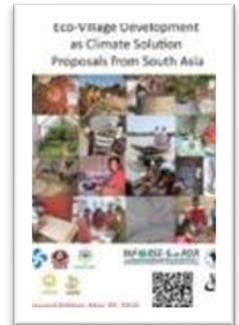
EVD Catalogue www.inforse.org/evd

Proceedings: <http://www.inforse.org/cop27.php>



Publications under partnership project

Eco-Village Development as Climate Solution Proposals from South Asia



White Paper: Mitigation and Adaptation with Eco-Village Development (EVD) Solutions.

Describes calculation for CO₂ reduction through various EVD solutions

The calculations can be used in NDCs



Training of Trainers Manual on Eco-Village Development in South Asia

Available in English and four South Asian languages - Hindi, Bangla, Nepali, Sinhala.

