



Sustainable Energy Consumption and Low Emission Development

Dissemination of Energy Saving Solutions

Mohammad Hasnain



Groupe Energies Renouvelables, Environnement et Solidarités





Operational Themes

Clean Energy Production



Energy Saving and Efficiency



Local Policy and Land use



Economic Development



Climate Change



Problem

- Heavy pressure on natural resources
- The more vulnerable the community, the less efficient the equipment and the greater the share of the budget devoted to energy expenditure



Solutions

- Disseminating efficient appliances to make the best use of energy
- Minimizing energy consumption without sacrificing convenience or comfort
- Providing information and raising awareness on energy-saving and energy-efficient practices
- Carrying out action research on efficient appliances and alternative solutions



Afghanistan context and challenges



Afghan climate zones

Zone 1: very cold

Zone 2: Cold

Zone 3: Warm



Energy Saving Solutions (ESS) promoted

- o Wooden Veranda
- o Metal Profile Veranda
- o Tandoor Cap



Wooden Veranda



Metal Profile Veranda



Tandoor Cap

- o Concentrated Solar Cookers
- o Metal Pipe Veranda
- o Improved Digdan with Oven



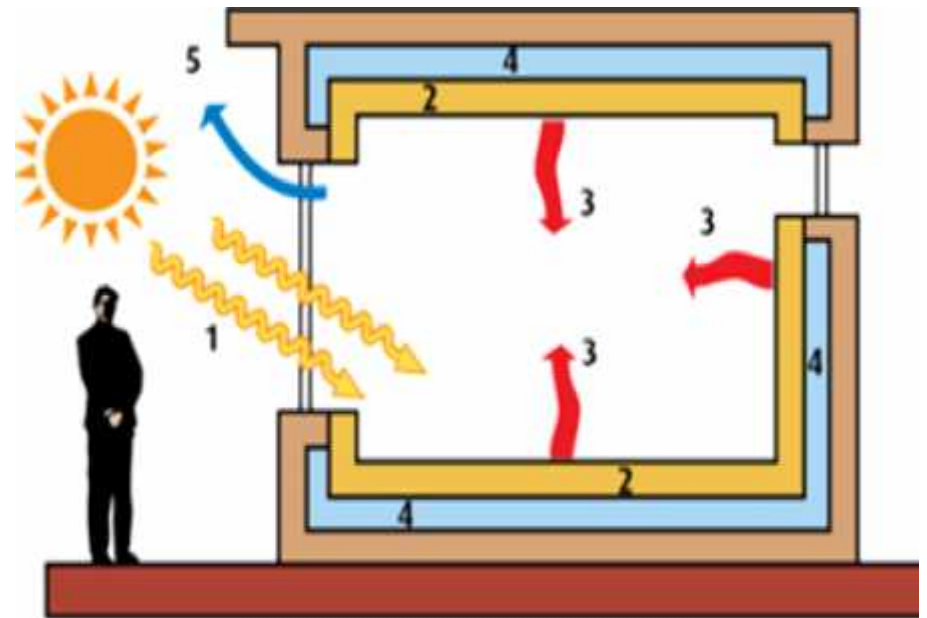
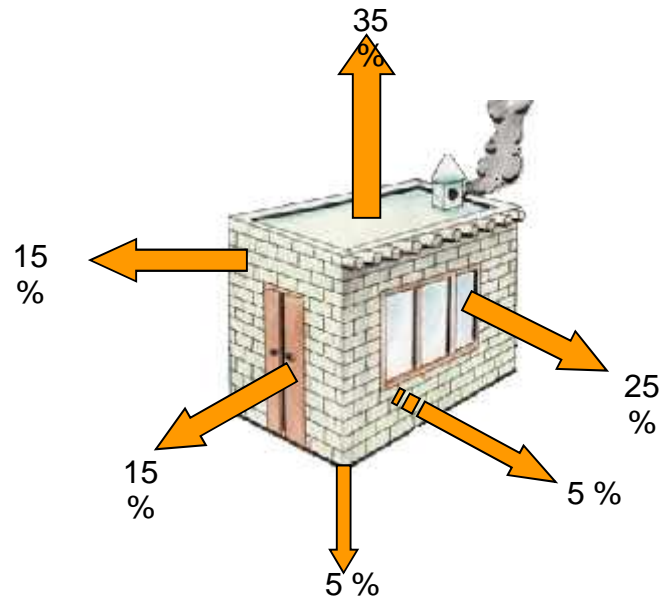
Solar Cooker with mirrors



Metal Pipe Veranda



Improved Digdan with oven



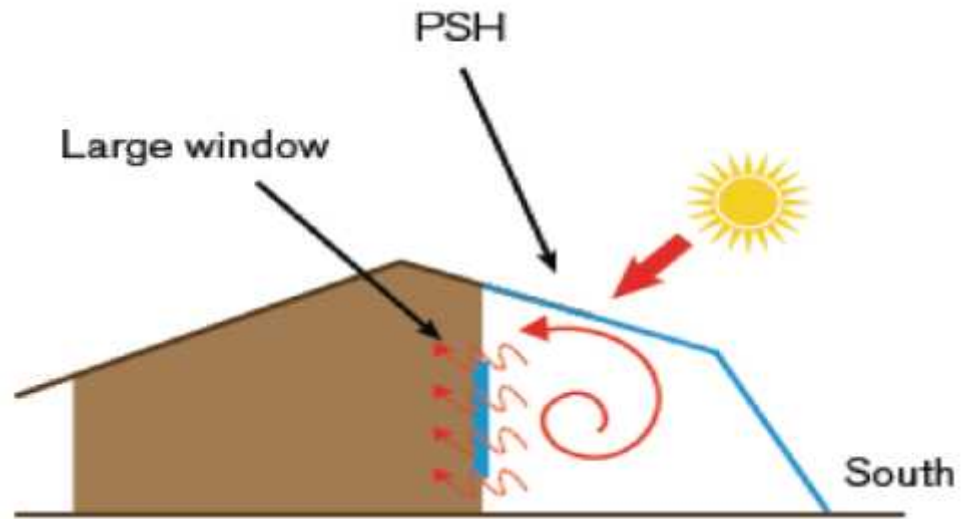


Passive Solar Veranda

Decrease your fuel
consumption by at least 30%!



Energy Efficiency in Domestic Housing



Additional warm room, impact on health



Micro-enterprises development



30-50% fuel savings

Gain passive solar energy;
Reduce heat losses



Packages of solutions,
for more efficiency!



+

Passive Solar Veranda



+

Double-Glazing



+

Roof Insulation

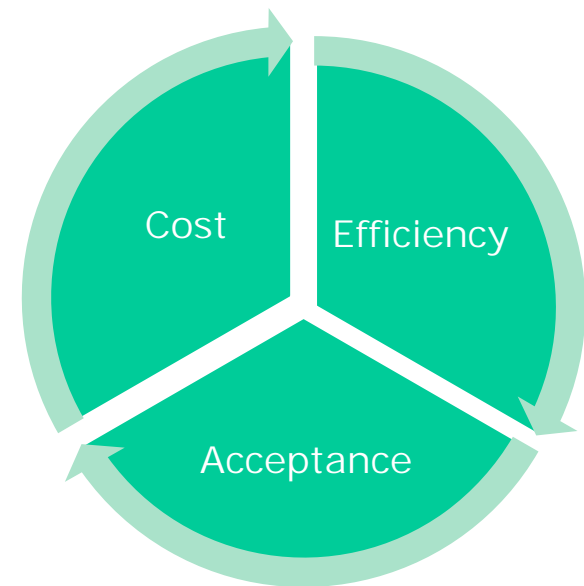


Local context analysis:

- Domestic energy use practices
- Assessing existing techniques
- Value chain analysis

Adaptation of the technologies to the local context

- Research and Development
- In Situ assessments and Social acceptance
- Economic results (investment capacity, payback period) and marketing surveys
- Monitoring of additional impacts



Dissemination and Scaling up

- Strengthening private sector
- Marketing based approach
- Access to finance
- Awareness and communication campaigns
- Involvement of Civil Society Organizations



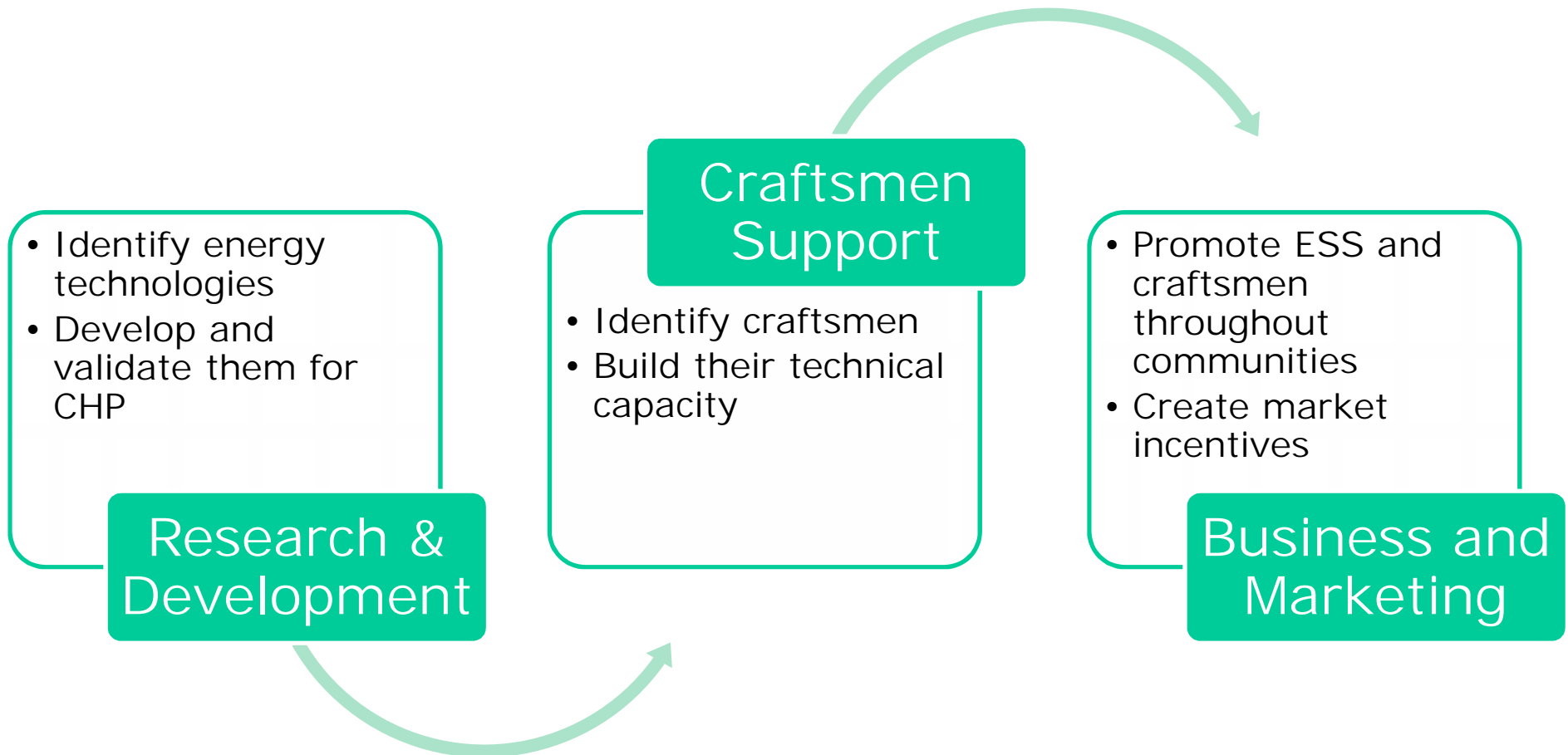
Mainstreaming

- Interprofessional organization
- Labelling and certification
- Professional curricula
- Regulations from institutions and codes

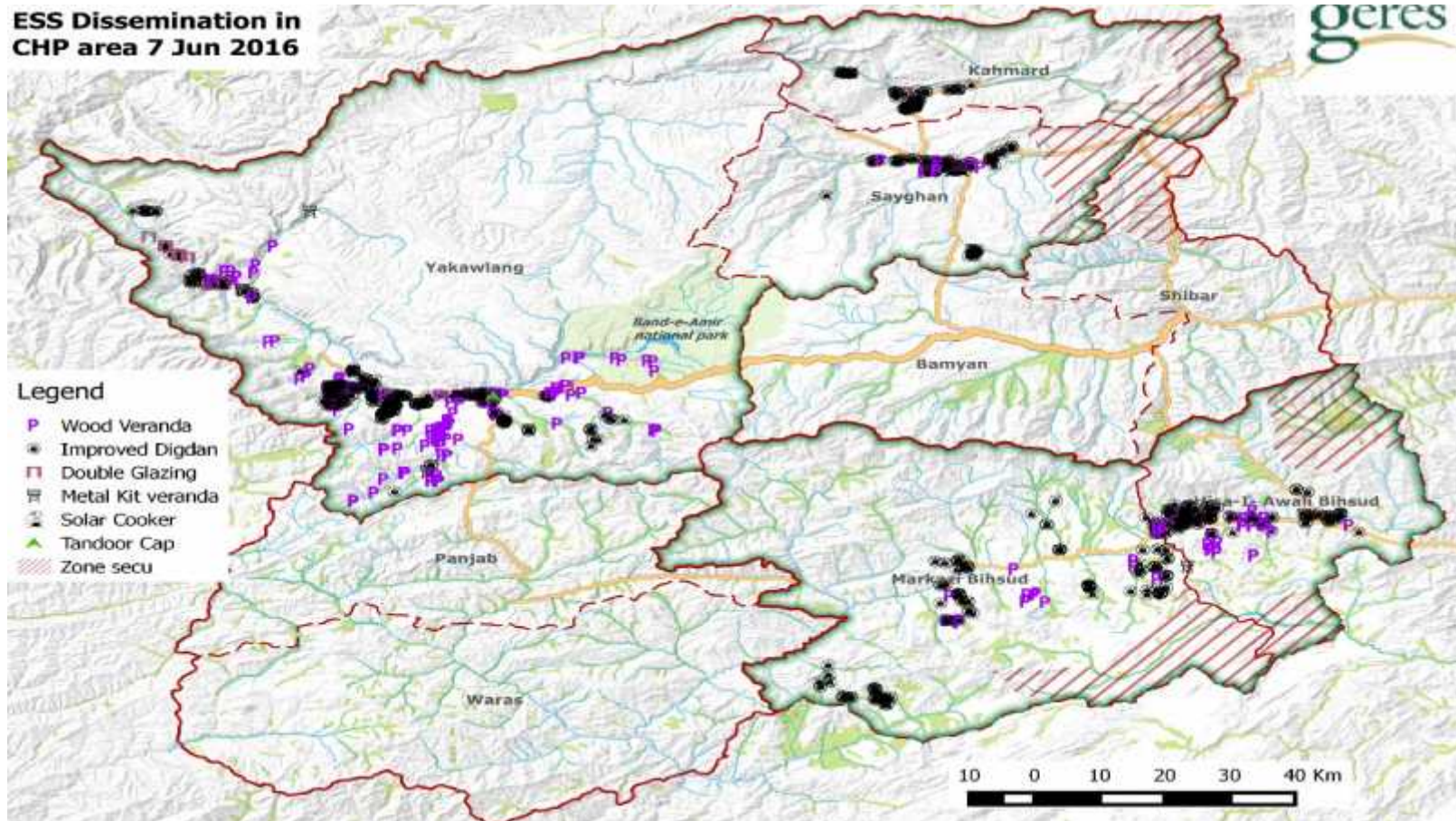
1: Development & Demonstration

2: Dissemination & Scaling up

3: Mainstreaming

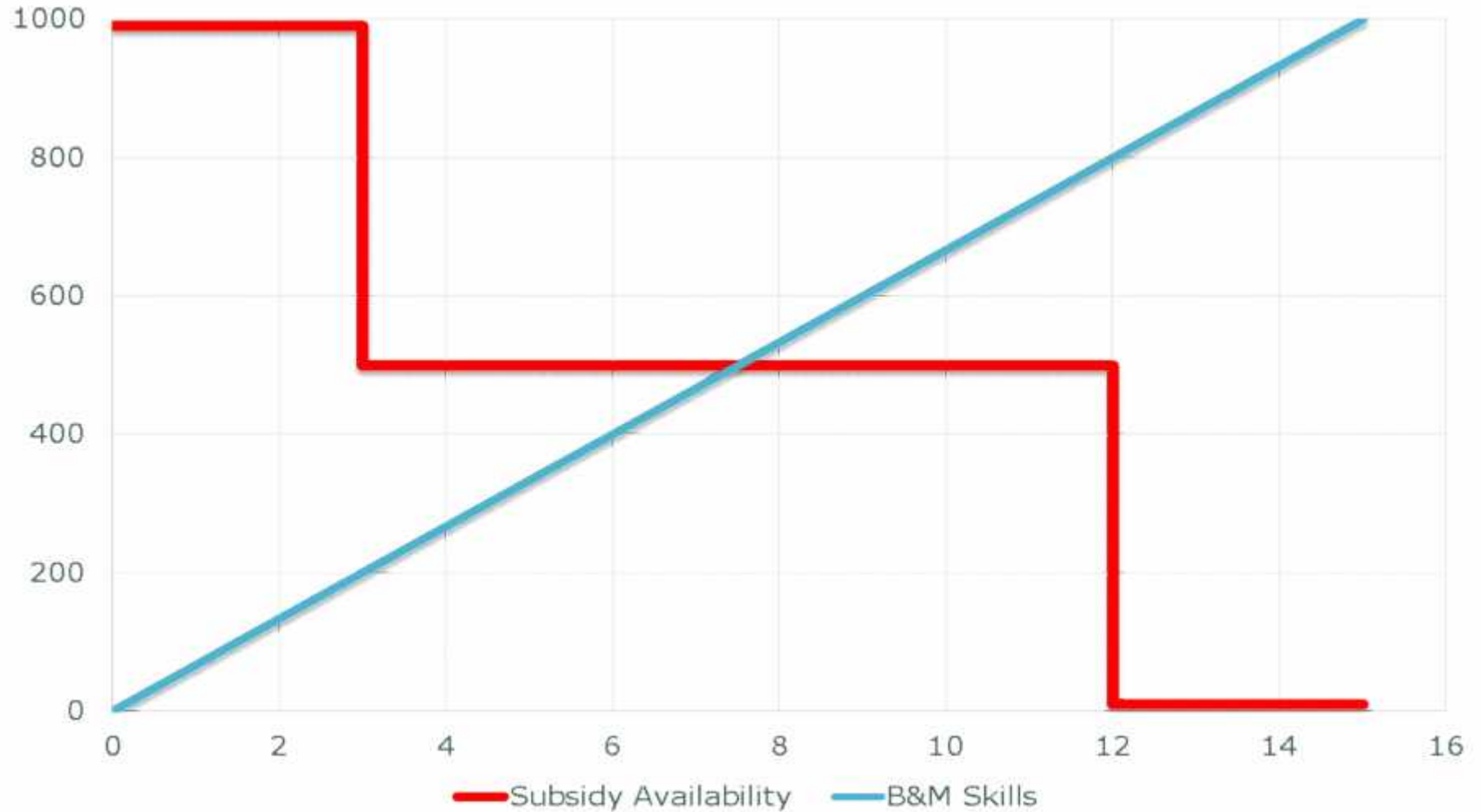


ESS Dissemination in
CHP area 7 Jun 2016





Subsidies v/s Business and Marketing support





*40 years of energy
for a fair and sustainable world*

Thank you

more info on:
www.geres.eu