

SouthSouthNorth: Southern-led approaches for tackling climate change and poverty

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SouthSouthNorth
COP 11, December 2nd, 2005

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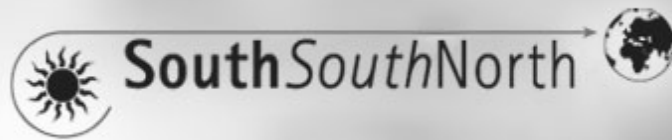
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SouthSouthNorth



- SSN Group
- network-based
- non-profit organisation
- shares two decades of experience
- in fields of
 - climate change, sustainable development, sustainable energy, poverty reduction, social transformation and gender equality.
- Operating since 2001
 - co-ordinating project activities in Southern Africa, Latin America and Asia
 - goal of building Southern capacity for sustainable development
 - and finding solutions to global climate change.





Doing GHG Mitigation in the South - co-benefits from hands-on
learning-by-doing experiences

Emilio La Rovere and Steve Thorne

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- Maximising the southern benefits.
- High sustainable development benefits.
- Appropriate technology development (bottom-up, context wise, endogeneous)
- Stringency.
- Hands-on learning-by-doing.
- Transparency...
- Etc...





- Mitigation – Compliance market CDM.
- Examples and lessons: low-cost housing, methane avoidance, renewable power generation, landfill, biodiesel and Industry.
- Some conclusions on doing mitigation in the South.
- Some suggestions on how to get more socio-economic benefits from doing mitigation.



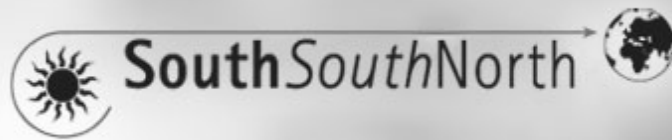


Points of departure for CDM



- Low hanging fruit: large quantities of low-cost emissions reductions from industry and methane reduction crowding out high SD CO₂ projects.
- SSN used maximum SD benefits as the starting point to maximise benefits to the South.
- SSN applies development facilitation to project design – units of development plus capacity.





Kuyasa low cost housing upgrades



Insulated ceilings, solar water heaters and CFLs reduce electricity for services



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2.8 tonnes CO₂/house/year



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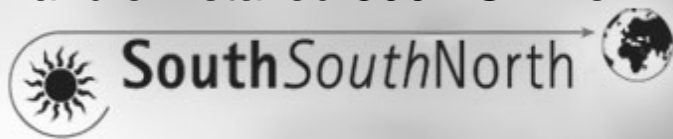


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Lwandle installed 300+ SWHs in hostels to homes project upgrade in 2001



A community learns



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- Projects with many beneficiaries are process heavy but this capacity has security and ownership co-benefits.
- CDM can be used to leverage funds for new energy services, new classes of energy service and poverty reduction (while it is a novelty) (high hanging fruit).
- CDM can avoid future emissions (current suppressed demand for energy services).





- Poverty reduction: New services and energy savings.
- Employment creation: demand management increases employment prospects (500 plus person years for 2309 upstream and installation) - more for maintenance.
- Prices and risk: use of renewable energy stabilises future fuel price and availability uncertainties.
- Spill over: large-scale procurement can drive economies-of-scale in price of technologies.





- Building on good practice: The poor are efficient managers of energy services within the constraints of the fuel and appliances they have access to. The projects builds on this.
- Replicability: more than 1 million new low-cost houses since 1994 in SA – most built without insulated ceilings or water heaters.



Bellville South Reduced landfill gas to industry replacing LSO/HFO



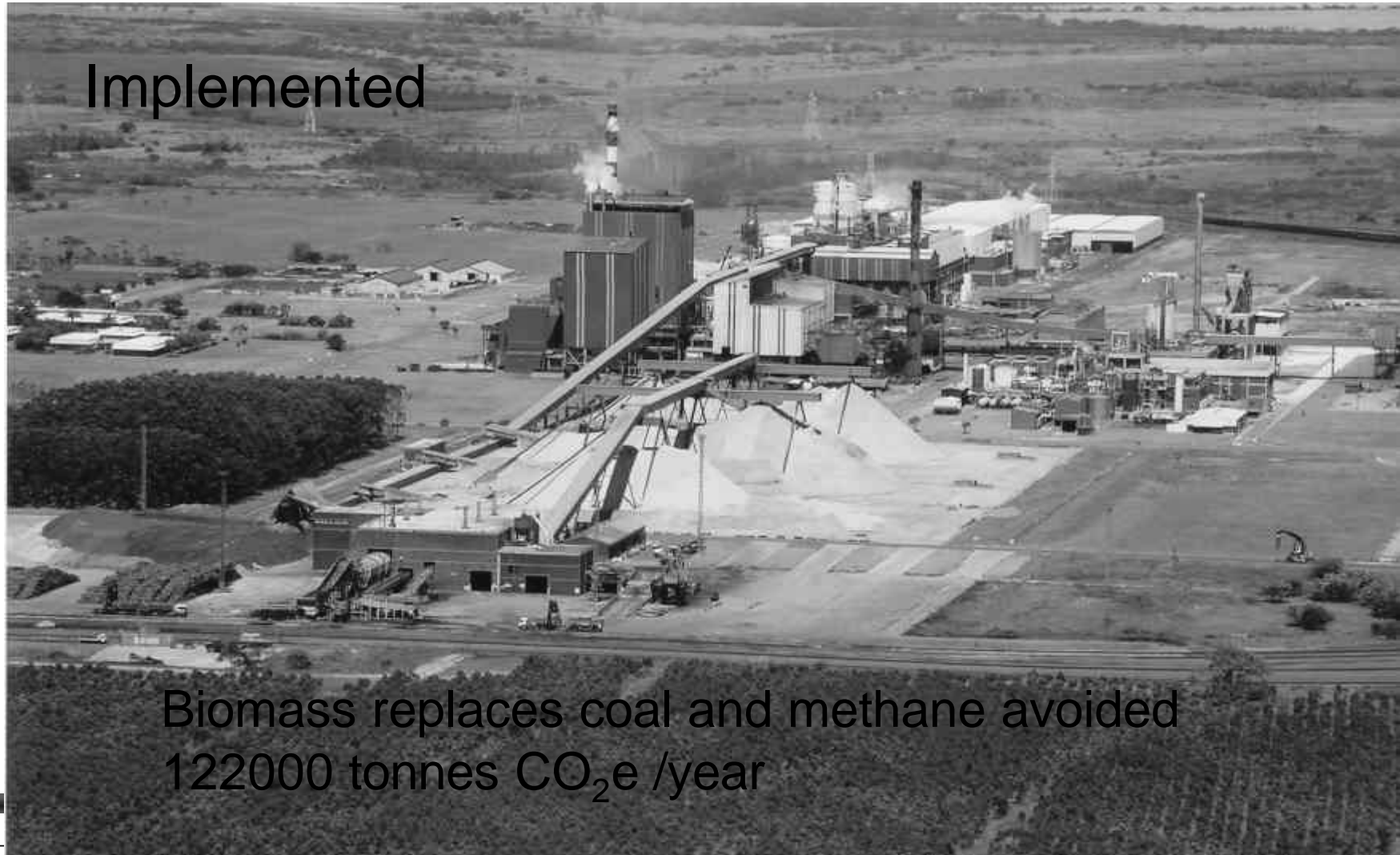
124000 CO₂ e
tonnes/year

To open tender





Implemented



Biomass replaces coal and methane avoided
122000 tonnes CO₂e /year



SSN1: CDM for Sustainable Development – the case of USINAVERDE Project (RJ,Brazil)



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CEMPRE

Lixão - Forma inadequada de disposição
 final de resíduos sólidos
 foto: André Vilhena

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USIN AVERDE pilot-plant



30 tons/day
of RDF

Power
generation
potential :
0.8 MW



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- Pilot-plant capacity: 30 tons of residues per day
- 8 kg LPG per ton of residues
- 750 kW power generation potential
- 440 kW current installed capacity
- 220 kW own consumption
- 220 kW current energy surplus
- 530 kW potential energy surplus



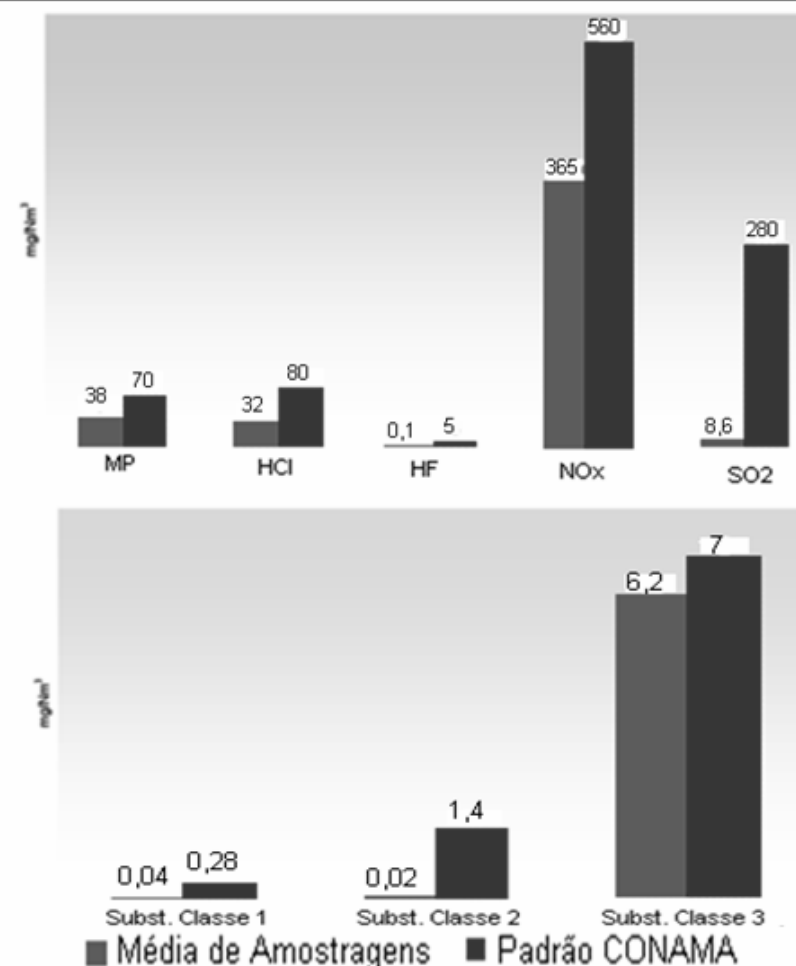


USINAVERDE

compromisso com o meio ambiente

Emissões Gasosas

Parâmetro	USINAVERDE	CONAMA Res. 316/2002
	mg/Nm ³	mg/Nm ³
Material Particulado	38,42	70,0
Cl ₂	53,48	
HCl	32,16	80
HF	0,12	5
SO _x - SO ₂	8,61	280,0
NO _x	365,44	560,0
Hidrocarbonetos Voláteis	1.031,49	39.290,0
Metais Pesados Classe I	0,04	0,28
Metais Pesados Classe II	0,02	1,4
Metais Pesados Classe III	6,2	7
Dioxinas e Furanos	0,32 ng/Nm ³	0,5 ng/Nm ³



Obs.: Resultados de testes realizados entre set./dez. 2004



Assessing project activity against the matrix of sustainable development indicators of the WWF Gold Standard
(Indicators: - 2 = major negative impact to + 2 = major positive impact)

A – Local and Global Environmental Sustainability	Note	Justification
Water quality and quantity	2	Water will be consumed, but in small amounts and in a closed loop. No leachate will be generated since the urban solid wastes will no longer be disposed of in the sanitary landfill.
Air quality	-1	NO _x , SO _x , HF, HCl and particulate matter emissions below standard allowances established by air quality legislation and reduced methane emissions released.
Other pollutants	-1	Small emission of dioxins and furans below standard allowances established by air quality legislation.
Soil condition	2	Much less soil use and degradation since urban solid wastes will be taken to the incineration plant. Only a small amount of ashes will be disposed of in sanitary landfills but they are inert.
Contribution to biodiversity	0	No impact.
Subtotal	2	



B – Social Sustainability and Development	Note	Justification
Quality of generated jobs	2	People who will work in the selection of recyclable materials and preparation of incinerated load will have garanty of a salary of one and a half minimum salary per month. All of them will have much better working conditions than in the baseline scenario.
Access to essential services (water, health, education, etc.)	0	For the cooperativated workers, the conditions of access to essential services will remain the same as in the baseline scenario.
Access to clean energy sources	0	Increased supply of local electricity due to the presence of the incineration plant with energy recovery. It contributes to increased quality and reliability of power generation, but this impact may be conservatively considered as negligible.
Human and institutional capacity building	1	All the workers will receive a specific training. An agreement was signed with the local community association that participates in the project.
Subtotal	3	





C - Economic and technological development	Note	Justification
Number of jobs created	1	Increase in number of formal jobs since cooperatives of unqualified manual labor (50 people in two teams) will be created to separate recyclables. Displacement of the unqualified labor (25 jobs for low-income people), who pick garbage in the landfill to the cooperative that undertake separated collection. The number of people required for specialized labor to operate the plant is eighteen (18).
Sustainability of the balance of payments	0	Since the technology is Brazilian (USINAVERDE has the patent) and all the equipment for this process is produced in Brazil, there will be no payment of royalties or transfer of profits abroad, contrarily to the case of gas turbines, but this impact may be conservatively considered as negligible.
Major expenditures in technology, replicability and contribution to technological self-reliance.	2	Energy generation from urban solid wastes may encourage the production and commercialization of domestic equipment. High potential for replication in large but also in medium-sized cities (through modules addition), and lower potential for small towns. The patents for the organic wastes mineralization process and for the washing of incineration gases belong to USINAVERDE, as a result of domestic R,D&D efforts.
Subtotal	3	
Total	8	



Doing CDM in the South



- CDM is not easy – it requires specialists...
- It results in no net emissions reductions.
- There are few points of leverage for the South: choosing projects, choosing partners, timing transactions.
- CDM has very little to do with SD – sadly... unless...
- Attracting FDI appears to be higher priority than SD.





- CDM can leverage technology leapfrogging.
- CDM can address poverty: by improving affordability of energy services and creating employment on the demand side.
- The uncertain lifespan already slowing interest, but is a good stick for speeding project development.
- Possibilities exist for combined mitigation-adaptation projects in future.



Conclusions of experiences



- CDM and GEF GHG mitigation gives value to GHG mitigation.
- TRECs monetize the value of renewables.
- Until SD given value in the market, benefits will remain incidental rather than sought after.
- SD benefits could be monetized through instruments like the Gold Standard if the premium is paid.





- CO₂ projects may increase SD benefits in general – perhaps argument for a premium for CO₂ or decreased GWP of other GHGs.
- SD remains merely a gate that may be shut if undesirable projects are promoted under CDM.
- So can socio-economic benefits really be driven in the CDM? Yes, but there is a need for a mechanism that enables a sustainable development dividend...

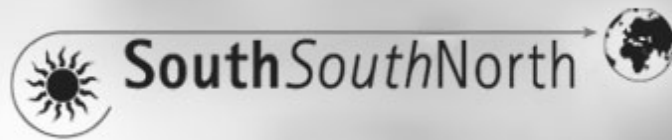




SSN 2

Mitigation, Adaptation and Poverty Reduction





SSN 2 – the current phase



- From 2005 to 2008
- Known as SSN 2
- SSN directly pursues structural poverty reduction
- Builds Southern capacity
- Delivers projects
 - to mitigate global greenhouse gas emissions and
 - to assist communities to adapt to the adverse effects of climate change





SSN programmes are:



- the Mitigation Programme,
- the Adaptation Programme,
- the Capacity Building Programme,
- the Technology Receptivity Programme,
- the Policy Intervention Programme.





SSN programme outputs



- Each Programme
 - headed by a director with
 - a team
 - spread over Brazil, Southern Africa, Indonesia and Bangladesh.
- Between 2005 and 2008, SSN will develop and implement:
 - seven adaptation projects in six countries, and
 - five mitigation projects in five countries.





SSN 2 projects



- Projects to ensure adequate and appropriate receipt and transfer of technologies
- Projects will be the basis for making positive contributions to the international policy environment
- SSN operates under five dedicated programmes, each supporting each other from its core focus





Capacity building and communities

Thais Corral
REDEH, Brazil







- Southern focus
- Building capacity
- Learning by doing
- Mitigation project activities
- Delivery of clean technologies
- Building capacity to help “leapfrog” developing countries to a cleaner path of development.





Throughout our journey



- Supporting the local teams in building their leadership and capacity to carry on the mandate of SSN2
 - Keeping clear focus on the project objectives and outcomes defined on the agreed framework/criteria
 - Helping teams to assess the skills required to deliver optimal outcomes in each phase of the project
 - Building capacity whenever this is needed and possible





- Contribution to needs assessment of the local partner organization
 - Identifying the missing ingredients for the implementation of specific activities
 - Human resources
 - Economic infrastructures
 - Technological support
 - Environmental conditions
 - Enabling the mobilization of resources and partnerships
 - Assessing previous experiences of community engagement and acceptance to innovation





Assuming that all projects will be using some kind of Technology...

- ...SSN Cap Dev will help teams to set the adequate process for local partner organizations to be trained, to own, maintain and generate income from the technology.





Dissemination and replication

- Create a clearinghouse for SSN projects
 - Identifying the parameters that lead to success and promoting learning on failure
- Interacting with networks that use alternative media strategies
- Networking with possible donors/funding agencies
- Creating toolkits
- Presence at key events related to climate change
- Consolidating replicable models through fostering local, regional and global partnerships





ADAPTATION

Saleemul Huq
IIED





- SSN2 Adaptation Programme
 - Community Based Adaptation (CBA)
 - Project based approach
 - Combination of Top-Down and Bottom-up approach
 - Learning-by-doing
 - SSNAPP Methodology (work in progress)
 - “Copy-left” approach (everyone is encouraged to use and modify but no one can “copy-right”)





SSN's new Adaptation Methodology

SSNAPP for CBA

South**S**outh**N**orth **A**daptation **P**roject
Protocol
for
Community **B**ased **A**daptation





- Impacts of climate change
- Vulnerability to Climate Change
- Poverty mapping
- Poor and vulnerable communities
- Project level interventions





Vulnerability and Adaptation to Climate Change



- **Vulnerability to Climate (variability and shocks)**
 - Erratic behaviour of climate (rainfall and temperature), and shocks (flood, drought, cyclone and storm surges, heat stress) etc.
 - Climate Change Vulnerability if available
- **Adaptation to current and past climate variability and shocks**
 - Existing including indigenous and endogenous coping strategies and mechanism





- **Direct**

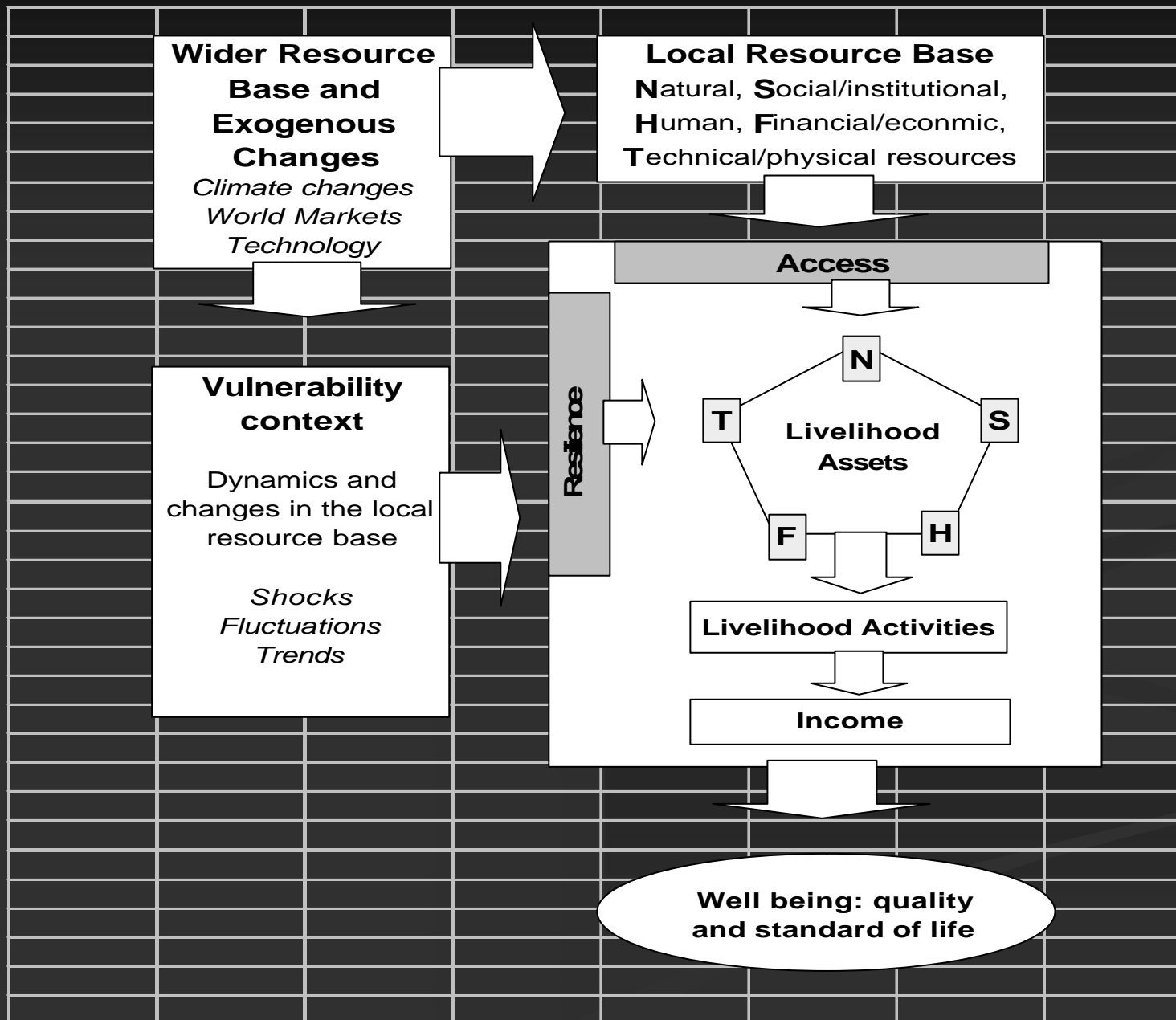
- Giving Money (e.g. unemployment benefits etc.)
- Giving Food (e.g. food for work, rations, etc,)
- Giving technology (e.g. water pumps for irrigation, nets for fishing etc)

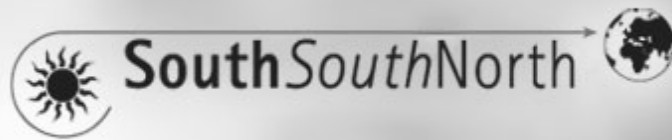
- **Indirect**

- Building infrastructure (e.g. roads, water etc.)
- Providing School and Education (e.g. free education,
- Providing Knowledge and Advice (e.g. agriculture extension for farmers,
- Providing health services (e.g. free for poor)
- Reducing vulnerability (e.g. embankment to protect from floods, etc)



Climate Change and Livelihood Framework





PROJECT



- Community Based
 - Works with groups
- Community
 - Household
 - Individual
 - Does not aim only at the policy level
- Project Boundary
- Project Baseline





Project Baseline



- Allows for comparison of before and after situation
- Within the Project Boundary
- Describes project Activities
 - Organizational structure of partner and communities
 - New information coming available on CC vulnerability
 - Other institutional activities within the boundary
 - Tests the resilience of the project, etc
- Tests Project Additionality
 - Is the same project happening in the area already
- Measurable data required
 - Allows for a true comparison
 - Includes all project elements: Poverty, Sustainable Development, and Adaptation





- **Project Identification Phase**
 - Year 1 – 2005
- **Project Design Phase**
 - Year 2 – 2006
- **Project Implementation Phase**
 - Year 3 + 4 – 2007 to 2008
- **Project Monitoring Phase**
 - Year 4 – 2008

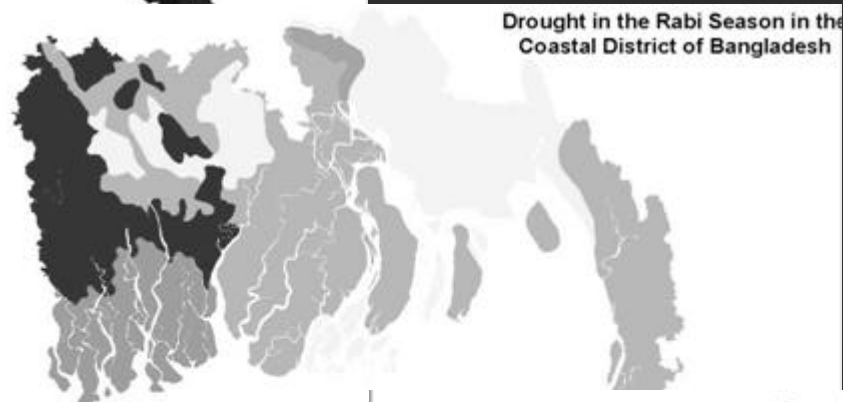
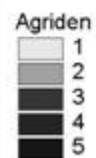
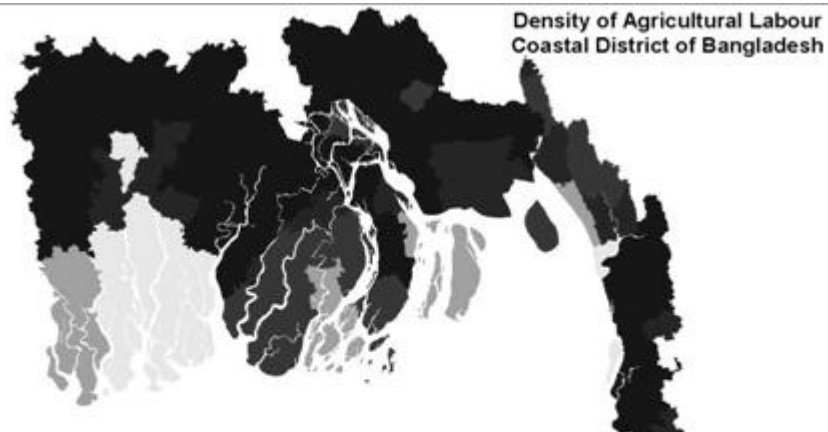




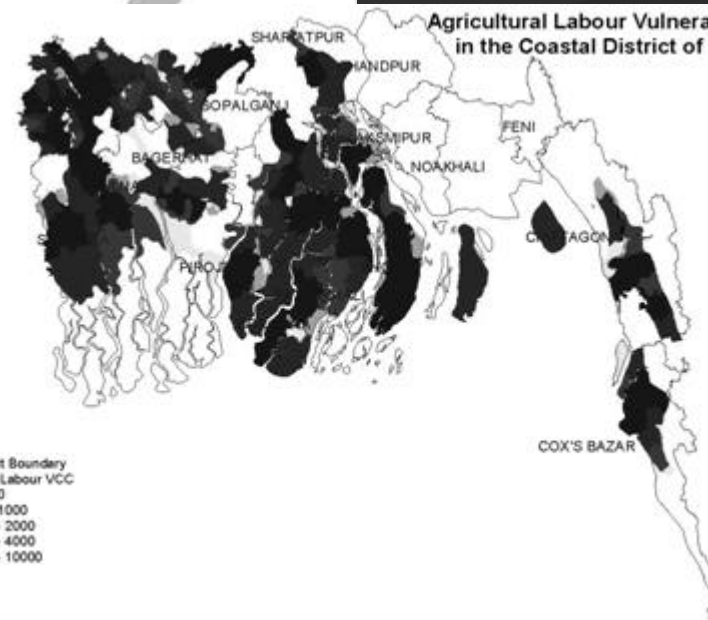
Top-down Approach

- **Step I:** Mapping the Climate Change Vulnerable Region/Area and Sector (UNFCCC, IPCC, National Communication, Climate Change Scenarios, etc.)
- **Step II:** Mapping Poverty at national, sub-national, socio-economic and occupational group (existing country level data set, census etc.)
- **Step III:** Overlaying Climate Change and Poverty (locate poverty hot-spot in relation with CC)





Agricultural Labour Vulnerable to Droug
in the Coastal District of Bangladesh



Example: Bangladesh



Bottom-up Approach

- ***Step IV: Reconnaissance survey and information gathering***
 - Who is doing what?
 - Who knows what?
 - What information is available?
 - Validating/cross-checking with community
- ***Step V: Analysis of Data and Information Gathered***
 - Conceptualization of Possible Projects
 - Opportunities for adaptation projects
 - Long list of “eligible” or “potential” projects
- ***Step VI: Select Project Partners***
 - Partners Credibility and willingness
 - Partner Capability to Deliver
 - Partner Relationship with Community
 - Partner Relationship with Funding Agency and Capability to Raise Fund





- ***Step VII: Signing MoU with Partners***
 - After feasibility study undertaken
 - Builds Trust and Mutual Understanding
 - SSN looks for partners with project experience
 - MoU includes:
 - Institutional roles – SSN and partner organisation
 - Contribution from each organisation
 - End point of the relationship
 - Can allow for a lot of flexibility
 - The community beneficiary would *not* normally be included as a party to MoU
 - MoU is only usually legally binding in relation to preliminary steps and confidentiality
 - It is important that the MoU avoids expectations on the part of parties





Step VIII: Design Project for Target Group – Poor Community (key component)

- Enhance Understanding of the Partner Organization
- Interaction with target community and individual household
- Need based activities (capacity building through livelihood promotion and coping to climate vulnerability)
- Technological need assessment





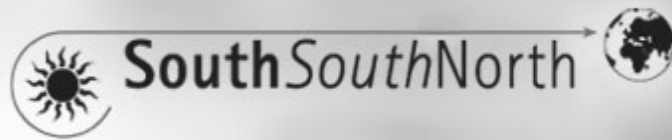
- ***Step IX: Fund Raising***
 - Global Level
 - Country Level
- ***Step X: Implementation of Project Activities***
 - Different activities including capacity building, improving livelihood etc.





- ***Step XI: Monitoring Project Activities and Benefit***
 - [Resilience Indicator (income, training, etc.)]
 - [Poverty indicator]
 - Health





Some Adaptation Options



- Flood Proofing (hydroponics, raising houses)
- Changes in cropping pattern (irrigated crop rice vs Maize cultivation)
- Salt tolerant crop in coastal zone
- Improvement of irrigation technologies
- Effective early warning system
- Training on new practices
- Mitigation and adaptation together
- Coastal Aforestation (cyclone and storm surges and carbon sequestration)
- Linking with income generation, livelihood opportunities
- Conservation agriculture
- Removal of alien species in water ways



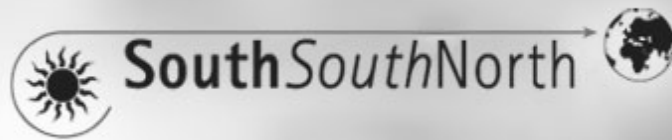


Some candidate projects



- Helping farmers in drought-prone north-east Brazil
- Preventing mud slides in Slums of Rio, Brazil
- Drinking water supply for coastal population in Bangladesh
- Helping farmers in drought-prone north-west Bangladesh
- Helping coastal fishermen in Islands in eastern Indonesia
- Improving water supply for sum dwellers in Cape Town, South Africa
- Helping Rooibos tea farmers in Eastern Cape in South Africa
- Helping coastal communities in Dar-e-Salaam, Tanzania
- Helping flood-prone communities in north Mozambique





Project Outputs



- Building capacity of the community (risk reduction) e.g. learning from the other community, degree of mobilization, (cc focused), Improve access to the Market
- Lesson for Policy Development
- Methodology
- Replicability
- Demonstration of best practices
- Sustainable activities
- Improvement of health
- Potential poverty reduction
- Diversity of livelihood options
- information for tec rec.





CONCLUSION and QUESTIONS

Thank you





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