Group: Land Management in India

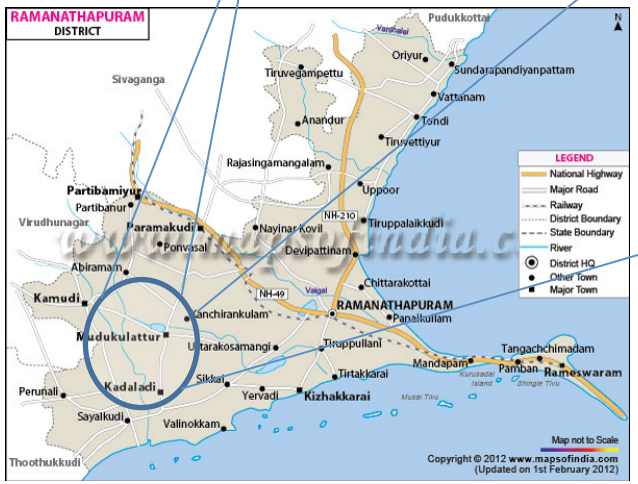
Final Project Presentation

on

Cost-Benefit Analysis of Dry lands of Ramanathapuram District ,

Tamilnadu, India

Location of Project



Study Area - Drylands of Ramanathapuram District – 2 highly degraded blocks due to Prosopis invasion selected for the project purpose.

Context of Project Area - Current Scenario

- **Majority of the cultivable Land is left fallow & Invasion by** *Prosopis Juliflora*

- **Continuous degradation of Fertile land**

- **Poor Water Resources and Poor Management of existing Water Resources & related structures**

- **Less Non-Farm Sector activities / Industrial activities**

- **Migration to nearby town in search of decent living as real alternative livelihood option not available in the villages**

Future Scenario & Interventions proposed

Multipronged approach to Reversing, Controlling degradation due to Prosopis invasion and creation of alternate livelihood systems

- Use Part of Cultivable Land for Production Purpose
- Promotion of Livestock Management
- Preservation, Restoration, Renovation and Maintenance of Water Resources & Structures
- Installation of Mini-Desalination Plants at village level
- Promotion of Solar Farms
- Pricing the Brick kiln and Charcoal Industries
- Promotion of Biomass Power Plants

Basic Financial Factors for CBA …..

1. Discount Rate : 15% (as followed by Rural Infrastructure projects /PPP projects in India)
2. Project Period – 9 years, Major Investment spread over 2 years
3. Shadow factors for working out Shadow price/ Economical price is not available for all activities proposed in the project Scenario. Hence standard factor of 1 (means market price is equivalent to economical price – though not a realistic situation)
4. Sensitivity Analysis carried out for Investment cost & Agricultural Production area (reduction of area under Prosopis)

Cost Benefit Analysis - Results

Calculation of NPV, ERR and BCR (Amount in INR)

Financial Results	INR Lakhs
Present Value of Costs @ DF 15 %	32.66
Present Value of Benefits @ DF 15 %	53.15
Net Present Value	20.49
ERR	33%
BCR	1.63 : 1

The project economics is sensitive to (1) Investment cost (cost required to recover areas from prosopis & water resource area recovery) and (2) future area under prosopis. Increase of investment cost beyond 14% (@15%) and area under prosopis reduction more than half (66%) makes project unviable…Net present value become negative