

## Sustainable Development, Integrated Resource Management and Social and Economics work at SOPAC



Economic values



Disaster management



Amenities

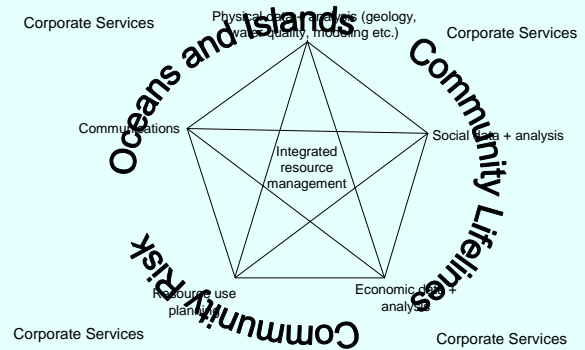


Coastal management

Social and economics work

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## Sustainable Development and Integrated Resource Management



## Social and Economics Team...

- 3 resource economists (4?)
- 1 Sustainable Development Adviser

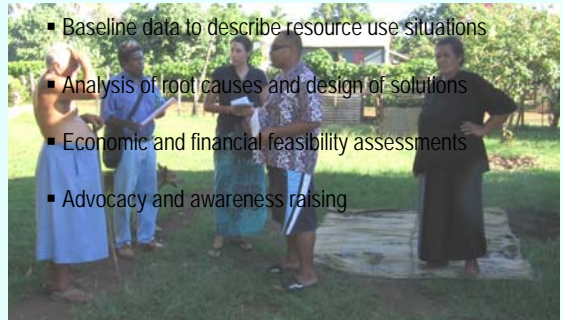


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## Social and Economic Analysis?

- Baseline data to describe resource use situations
- Analysis of root causes and design of solutions
- Economic and financial feasibility assessments
- Advocacy and awareness raising



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## Case Study: Coastal Erosion and Flooding in Kiribati

- Problems underway (erosion/loss of land, flooding)
- Baseline data collection:
  - Mapping of coastal processes around islands (accretion/loss) (remote sensing, bathymetry mapping)
  - Causes of erosion and flood risk (remote sensing, bathymetry mapping) - coastal mining
  - Lack of aggregates needed to support construction boom
  - Assessment of coastal mining of aggregates, including household survey
- Assessment of aggregate resources in lagoon, including quality
- Hydrodynamic modelling, including impacts of lagoon dredging as an alternative source of aggregates
- Economic analysis of extracting aggregates from the lagoon

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## Social Findings/ Outputs

- Scale of household mining
- Reliance of families on mining
- Attitudes to mining



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## Economic Findings/ Outputs

- Economic/ financial feasibility to extract aggregates from the lagoon (16%, \$62k)
- Design issues:
  - social impacts
  - competition from households
- ⇒ Need for strategic communication campaign to change behaviour, prevent clashes with KAC
- ⇒ bans unlikely to be workable, need for reworking of management



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## Outcomes/ Products

- Inform policy change on coastal mining and sustainable sourcing
- Inform design of project to reduce vulnerability: Environmentally Safe Aggregates for Tarawa
- Work with GoK to successfully apply for EDF9 B-Envelope funds to fund project: €2.2 million
- Media attention
  - documentary
  - regional press articles
  - regional radio interviews
  - national press



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## Social and Economic Analysis

- ✓ Baseline data to describe resource use situations
- ✓ Analysis of root causes and design of solutions
- ✓ Economic and financial feasibility assessments
- ✓ Advocacy and awareness raising

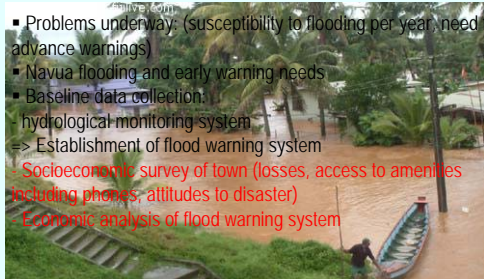
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## Case Study:

### Disaster Management Planning in Fiji

- Problems underway: (susceptibility to flooding per year, need for advance warnings)
- Navua flooding and early warning needs
- Baseline data collection: hydrological monitoring system
- ⇒ Establishment of flood warning system
- Socioeconomic survey of town (losses, access to amenities including phones, attitudes to disaster)
- Economic analysis of flood warning system



Navua high street, April 2004

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## Social Findings/ Outputs

- Attitudes to risk and flood warnings
- Access to amenities to receive/ pass on warnings (phones, media, community groups, etc.)
- Impacts from previous floods (how suffered)



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## Economic Findings/ Outputs

- Economically feasible to operate flood warning system
  - Fiji government
  - International community
- Social information used to design warning dissemination at community level



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## Outcomes/ Products

- To be presented with Fiji NDMO to argue the case for continued future funding
- Basis for other flood warning systems to be developed in Fiji
- Media attention
  - documentary
  - regional press articles
  - regional radio interviews
  - national press

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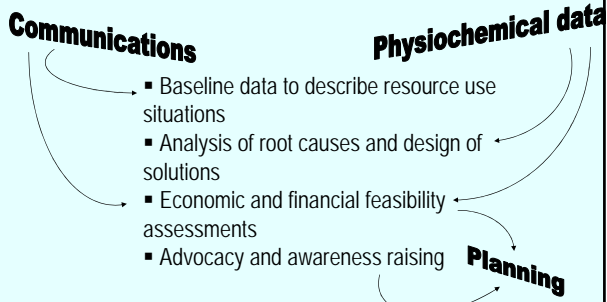
## Social and Economic Analysis

- ✓ Baseline data to describe resource use situations
- ✗ Analysis of root causes and design of solutions
- ✓ Economic and financial feasibility assessments
- ✓ Advocacy and awareness raising

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## Integrated Social and Economic Analysis



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## Sustainable Development and Integrated Resource Management

