

CPACC Component 7 – Economic Valuation of Coastal and Marine Resources Data Requirement by Pilot Country

COUNTRY: ST. LUCIA

Resource/Activity : **Residential and Commercial Properties**

Valuation Method : **Defensive Expenditure Method**

Data Requirement :

- (i) Number of defensive structures in the study area
- (ii) Original cost of construction or reasonable engineering estimates
- (iii) Maintenance/repair costs
- (iv) Life span of defensive structures
- (v) Value of the property protected
- (vi) Purpose of the structure
- (vii) Recorded evidence of effectiveness (such as in a hurricane or storm condition)

Resource/Activity : **Fisheries**

Valuation Method : **Change in Productivity Method**

Data Requirement :

- (i) Catch/effort
- (ii) Size of the fishing fleet (including the # of fishermen)
- (iii) Cost of fishing (wages and fuel costs)
- (iv) Prices of fish by species (ex-vessel)
- (v) Species composition of catch
- (vi) Type of fishing gear
- (vii) Boat capacity and type
- (viii) Area of wetlands
- (ix) Water quality

Note: Time series data on above variables as far back as possible would be useful.

Resource/Activity : **Residential Beach Use**

Valuation Method : **Random Utility Model**

Data Requirement : Information necessary of this valuation exercise will be collected through primary data.

Resource/Activity : **Visitor (Stay-over and Cruiseship) Beach Use**

Valuation Method : ?

Data Requirement : For these activities secondary data collected by the St. Lucia Tourism Board will be used.

COUNTRY: DOMINICA

Resource/Activity : **Residential and Commercial Properties**

Valuation Method : **Hedonic Model**

Data Requirement :

- (i) Length of beach front
- (ii) Vulnerability to erosion (historical erosion rates and/or some index of susceptibility to erosion)
- (iii) Distance to the coast
- (iv) Distance to the major road/city
- (v) Market value of plot
- (vi) Assessed value of plot
- (vii) Size of plot
- (viii) Plot orientation (% of plot boarding the coast)

Note: This information will be needed for properties on the sea-side as well as on the land-side of the road from Rosaue to Scotts Head.

Resource/Activity : **Fisheries**

Valuation Method : **Change in Productivity Method**

Data Requirement :

- (i) Catch/effort
- (ii) Size of the fishing fleet (including the # of fishermen)
- (iii) Cost of fishing (wages and fuel costs)
- (iv) Prices of fish by species (ex-vessel)
- (v) Species composition of catch
- (vi) Type of fishing gear
- (vii) Boat capacity and type
- (viii) Area of wetlands
- (ix) Water quality
- (x) Any other information relevant specifically for Dominica

Resource/Activity : **Visitor (Stay-over and Cruiseship) Beach Use**

Valuation Method : ?

Data Requirement : **Information collected from Dominica Tourism Board and/or CTO (as in St. Lucia).**

Resource/Activity : **Residential, Commercial and Public Properties**

Valuation Method : **Defensive Expenditure Method**

Data Requirement :

- (i) Number of defensive structures in the study area
- (ii) Original cost of construction or reasonable engineering estimates
- (iii) Maintenance/repair costs
- (iv) Life span of defensive structures
- (v) Value of the property protected
- (vi) Purpose of the structure
- (vii) Recorded evidence of effectiveness (such as in a hurricane or storm condition)

Note: As the new sea-wall is a major defensive structure, it would be very good to have information on that, such as,

- (i) Cost of the wall
- (ii) Expected life span of the wall
- (iii) Expected maintenance expenditure
- (iv) The length of the road protected by the sea-wall
- (v) Extent of the historical damage to the road and the cost of repair
- (vi) Purpose of the sea wall
- (vii) Expected externalities created by the sea-wall (such as disruption of the migration of crabs)
- (viii) Any other information relevant to the seal wall

Resource/Activity : **National Park in Soufriere**

Valuation Method : **Contingent Valuation Method**

Data Requirement : Data necessary for this valuation will be collected through primary data.

COUNTRY: TRINIDAD

Resource/Activity : **Industrial Plants**

Valuation Method : **Preventive/Mitigation Expenditure Methods**

Data Requirement :

- (i) The number of industrial plants under threat in the study site
- (ii) Their profit/loss statements and well as operations information
- (iii) Current or expected expenditure on defensive/mitigation measures
- (iv) Expected incidences of storm damage and expected losses
- (v) Current and expected insurance rates including risk premiums
- (vi) Historical information on sea/storm damage to industrial plants (such as number of days the plant was out of operation, loss of revenue/profits, repair expenditure, etc)

Resource/Activity : **Agriculture**

Valuation Method : **Change in Productivity Method**

Data Requirement :

- (i) Acreage under production by crop
- (ii) Itemized cost of production per acre by crop (fixed and variable costs)
- (iii) Output prices by type of crop (on-stand price and market price)
- (iv) Harvesting costs.
- (v) % sold in export market by crop
- (vi) Time series data on rainfall and production
- (vii) Incidences of crop damage due to adverse weather conditions

Resource/Activity : **Wetlands**

Valuation Method : **Change in Productivity Method**

Data Requirement :

- (i) Type of wetland products
- (ii) Cost of production and price information for these wetlands products (for fisheries, information as for St. Lucia and Dominica will be necessary)
- (iii) Acreage of wetlands (and change in acreage over the years- from aerial photos)
- (iv) Number of individuals depending on wetlands
- (v) Extent of wetland damage due to adverse weather conditions

Resource/Activity : **Religious and Cultural Sites**

Valuation Method : **Defensive Expenditure Method**

Data Requirement :

- (i) Description of the sites and their religious/cultural importance
- (ii) Expected expenditure on protecting the sites from expected sea damage
- (iii) Number of people visiting the site
- (iv) Relocation costs of structures
- (v) Historical damage information and restoration costs and method of financing

