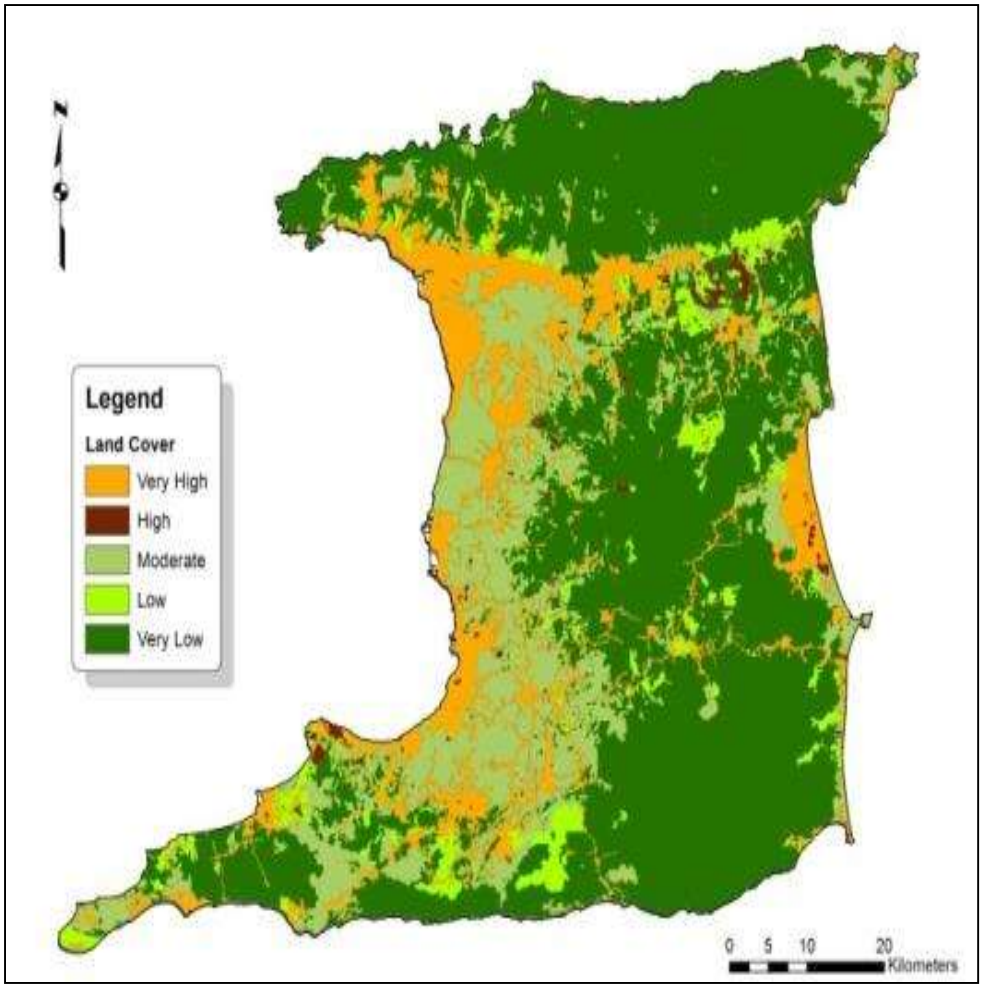
SOIL RESOURCES, DEGRADATION, CONSERVATION AND MANAGEMENT IN TRINIDAD AND TOBAGO

Gaius Eudoxie

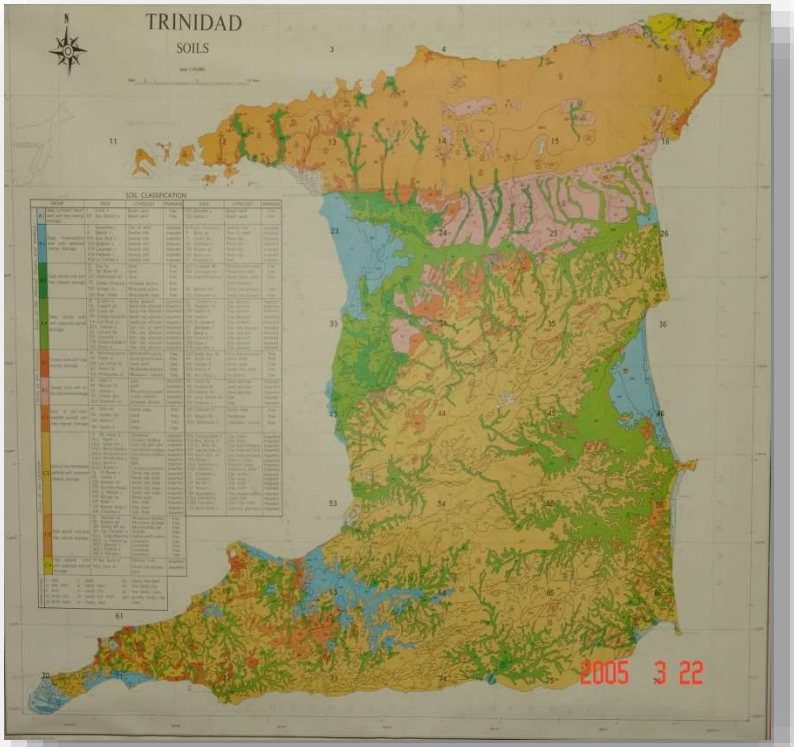
Soil Scientist
Department of Food Production,
UWI, St. Augustine
Trinidad and Tobago

Trinidad

- Most southern island
- Population: 1.4 M
- Economy: Oil and gas driven
  - Agriculture: < 2% GDP
- Mixed population
- Rich culture



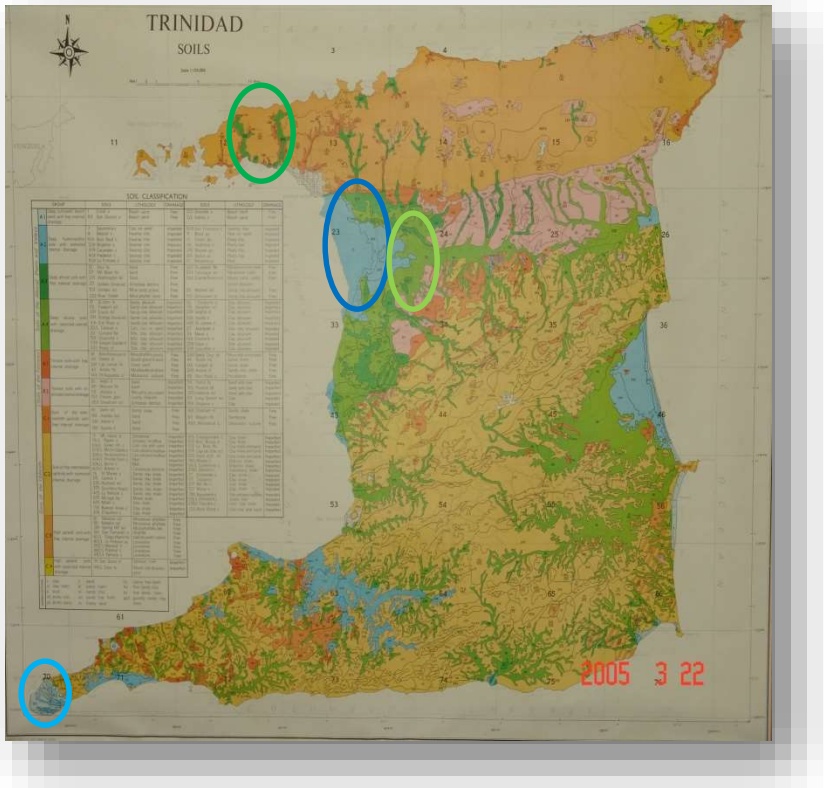
Soil Resources



- Survey 1960-70s
- Scale 1:150,000 and 1:25,000
- Soil categorization
  - A1-A4: soils of the alluvial plains and valleys
  - B1-B2: soils of the terraces
  - C1-C4: soils of the uplands
- Soil orders
  - All major 12 orders
- Digitized

Profile Description and Properties

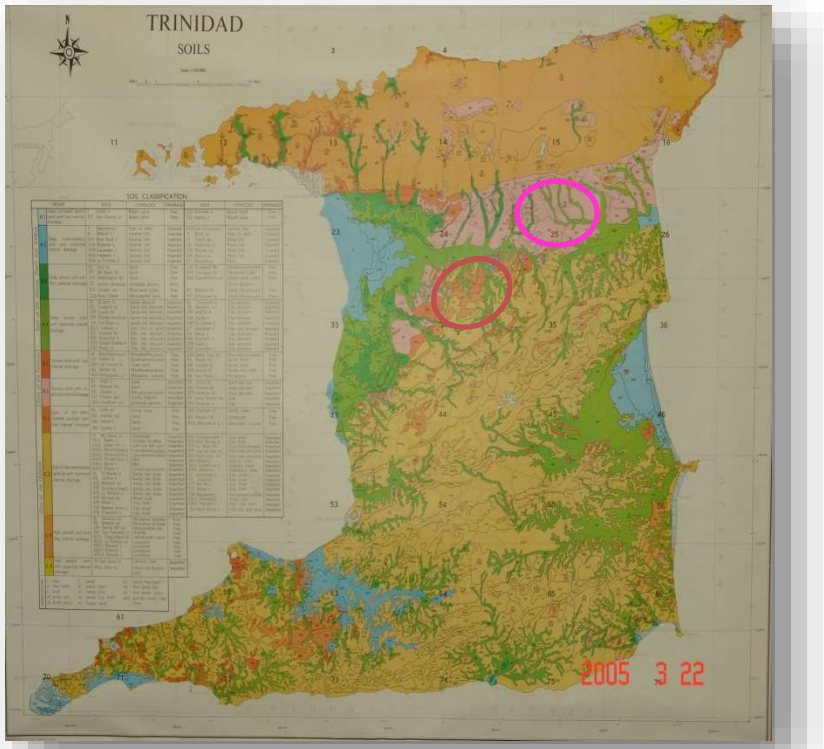
A1-A4



- A1 - Deep cultivated beach sand with free internal drainage
- A2 - Deep hydromorphic soils with restricted internal drainage
- A3 - Deep alluvial soils with free internal drainage
- A4 - Deep alluvial soils with restricted internal drainage

Profile Description and Properties

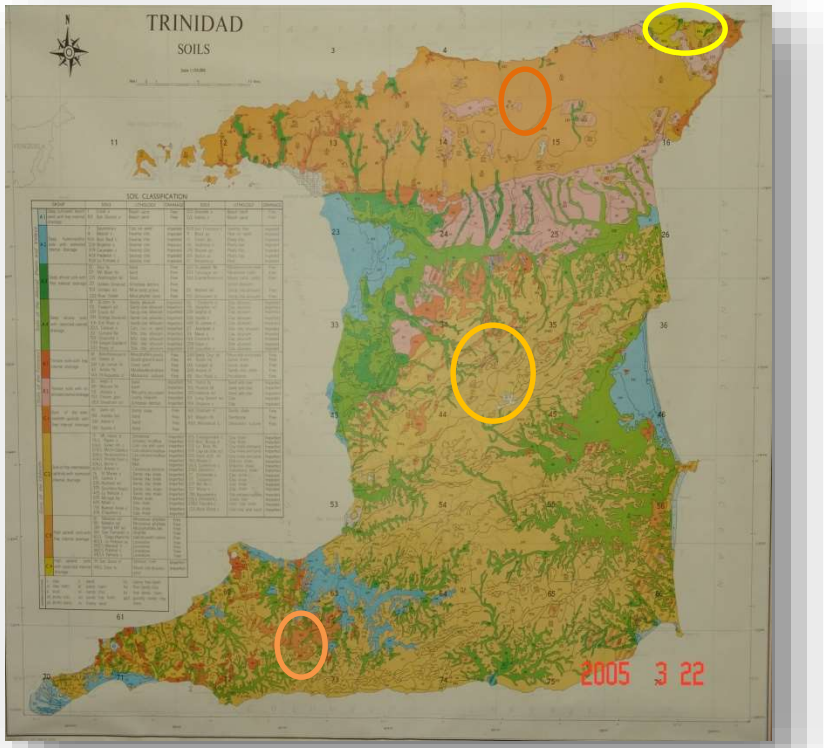
B1-B2



- B1 - Terrace soils with free internal drainage
- B2 - Terrace soils with restricted internal drainage

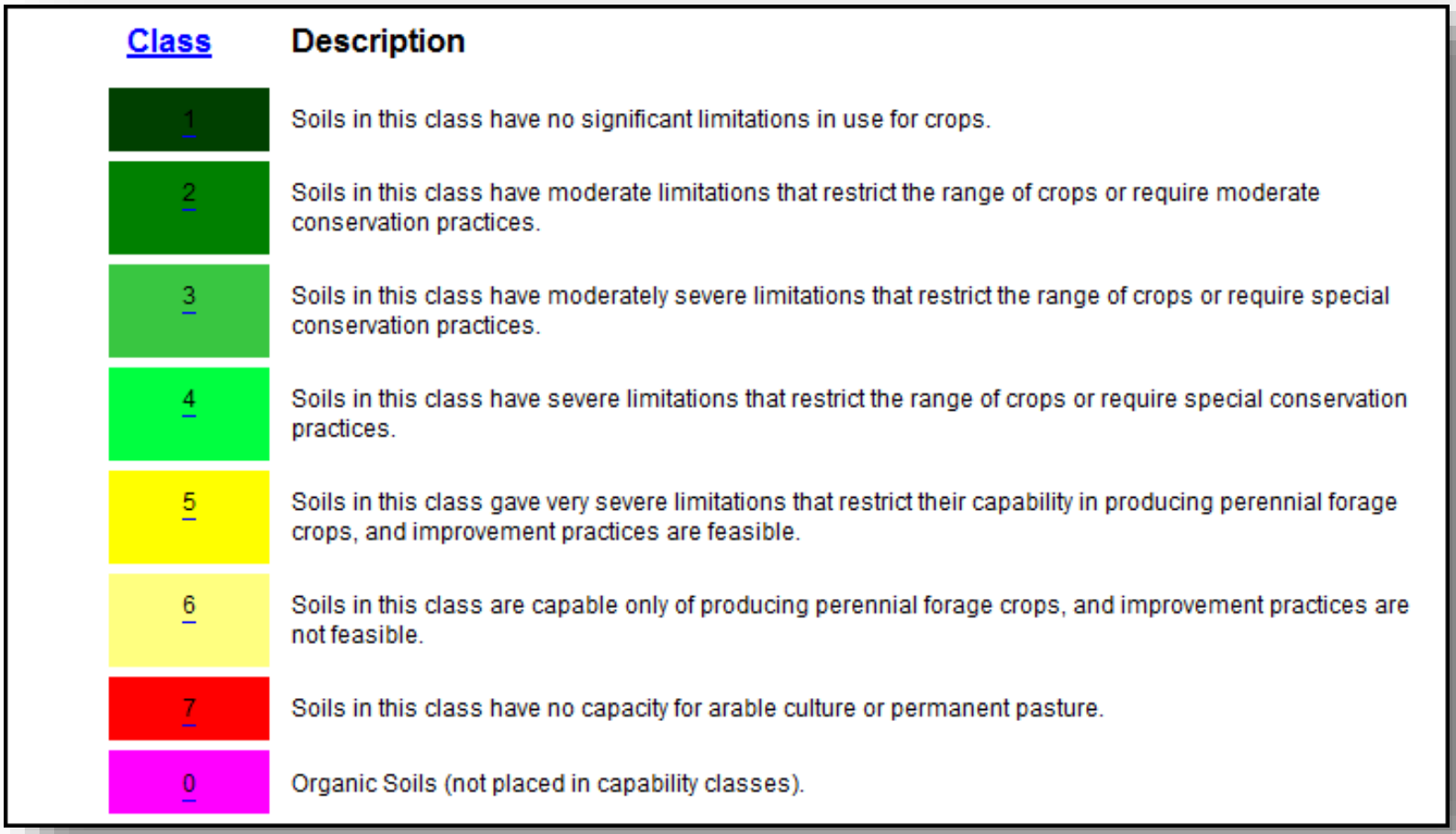
Profile Description and Properties

C1-C4



- C1 - Soils of the intermediate uplands with free internal drainage
- C2 - Soils of the intermediate uplands with restricted internal drainage
- C3 - High upland soils with free internal drainage
- C4 - High upland soils with restricted internal drainage

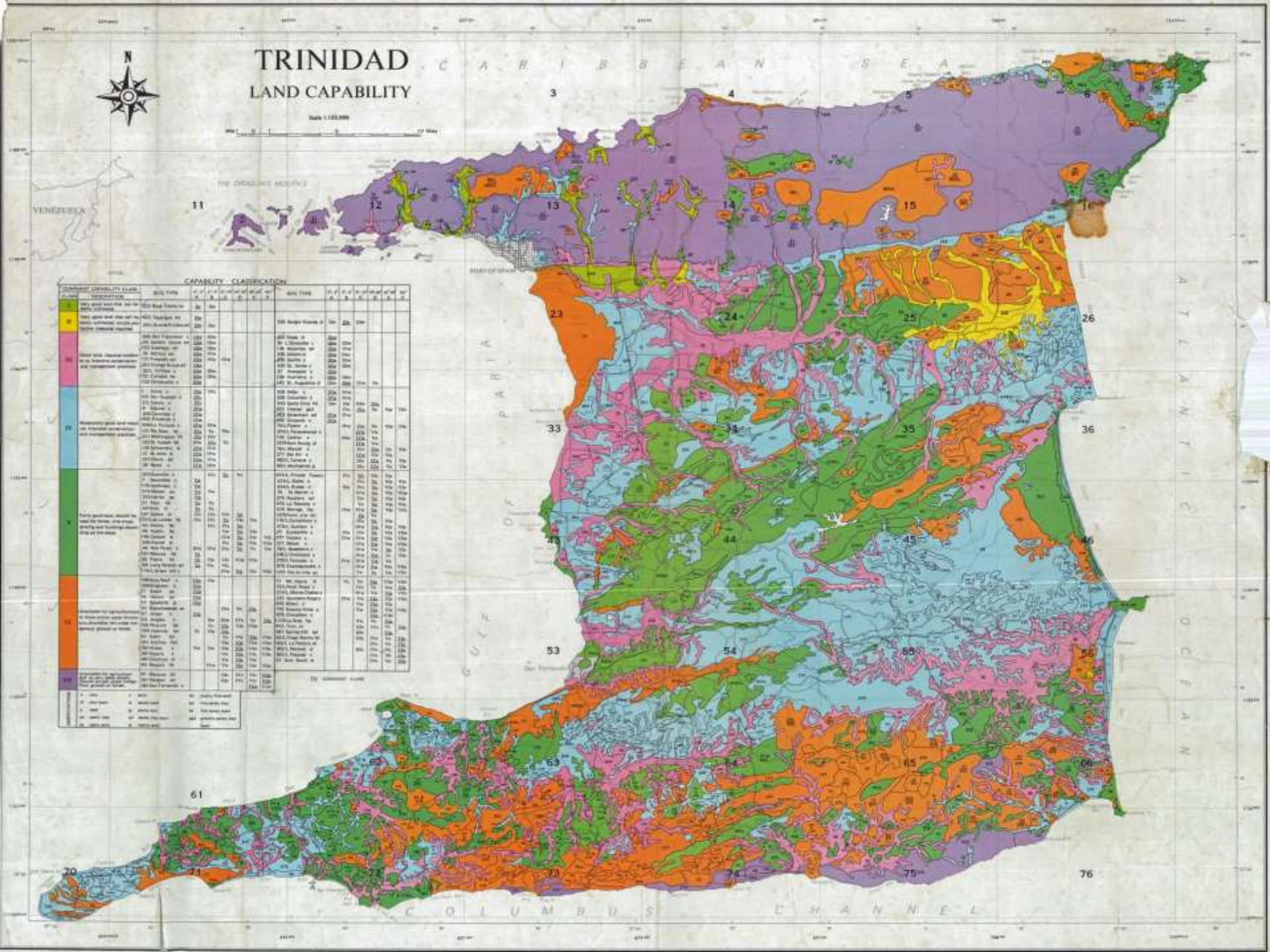
Land Capability



Class	Description
1	Soils in this class have no significant limitations in use for crops.
2	Soils in this class have moderate limitations that restrict the range of crops or require moderate conservation practices.
3	Soils in this class have moderately severe limitations that restrict the range of crops or require special conservation practices.
4	Soils in this class have severe limitations that restrict the range of crops or require special conservation practices.
5	Soils in this class gave very severe limitations that restrict their capability in producing perennial forage crops, and improvement practices are feasible.
6	Soils in this class are capable only of producing perennial forage crops, and improvement practices are not feasible.
7	Soils in this class have no capacity for arable culture or permanent pasture.
0	Organic Soils (not placed in capability classes).

TRINIDAD

LAND CAPABILITY



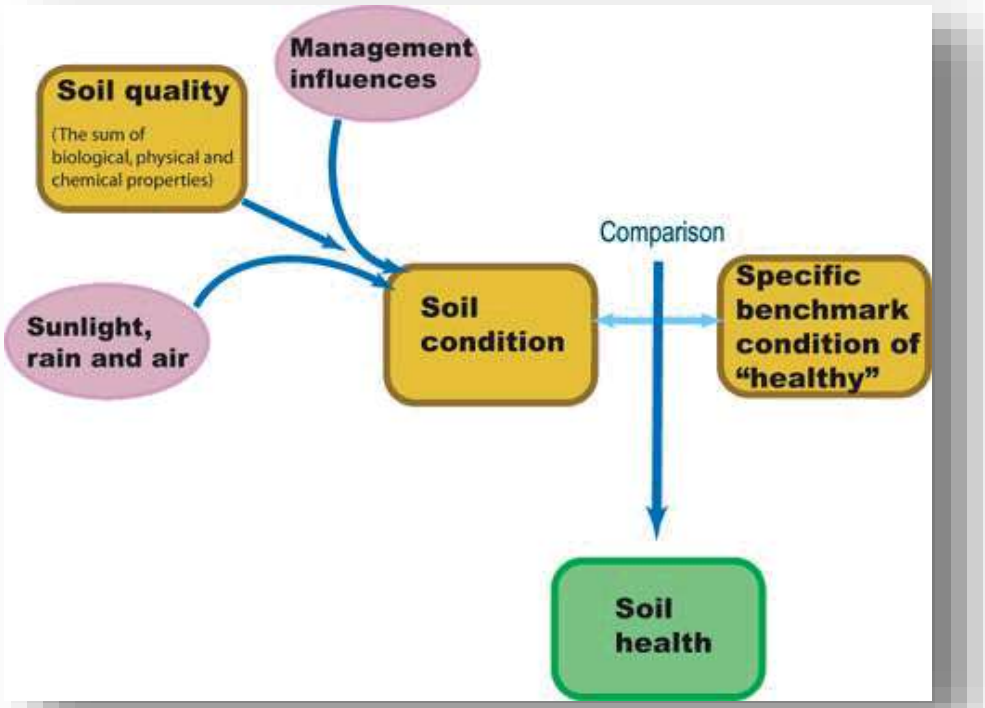
Erosion Influence on Capability

Slope Category	Class	Percent	Angle	Description	Run-off	Degree of Erosion
A	1	0-3	0-2	Level	Very Slow	None
B	1	3-9	2-5	Gently Sloping	Medium	Not Severe
C	2	9-17	5-10	Moderately Sloping	Medium	Moderately Severe
D	3	17-36	10-20	Strongly Sloping	Rapid	Severe
E	4,5	36-58	20-30	Steeply Sloping	Rapid	
F	5	58-	30-	Very Steeply	Very Rapid	

Water Influence on Capability

Degree of Drainage	Degree of Wetness	Depth of Mottling
Permanently Saturated	Excessive	0
Greatly impeded	High	6 inches
Impeded	Moderate	12
Imperfect	Slight	24
Free	Nil	48
Excessive	Nil	–

Soil Issues



- Low organic matter
- Low stability
- Soil sealing and crusting
- **Low Quality**

- Soil loss-**erosion**
- Mass wasting

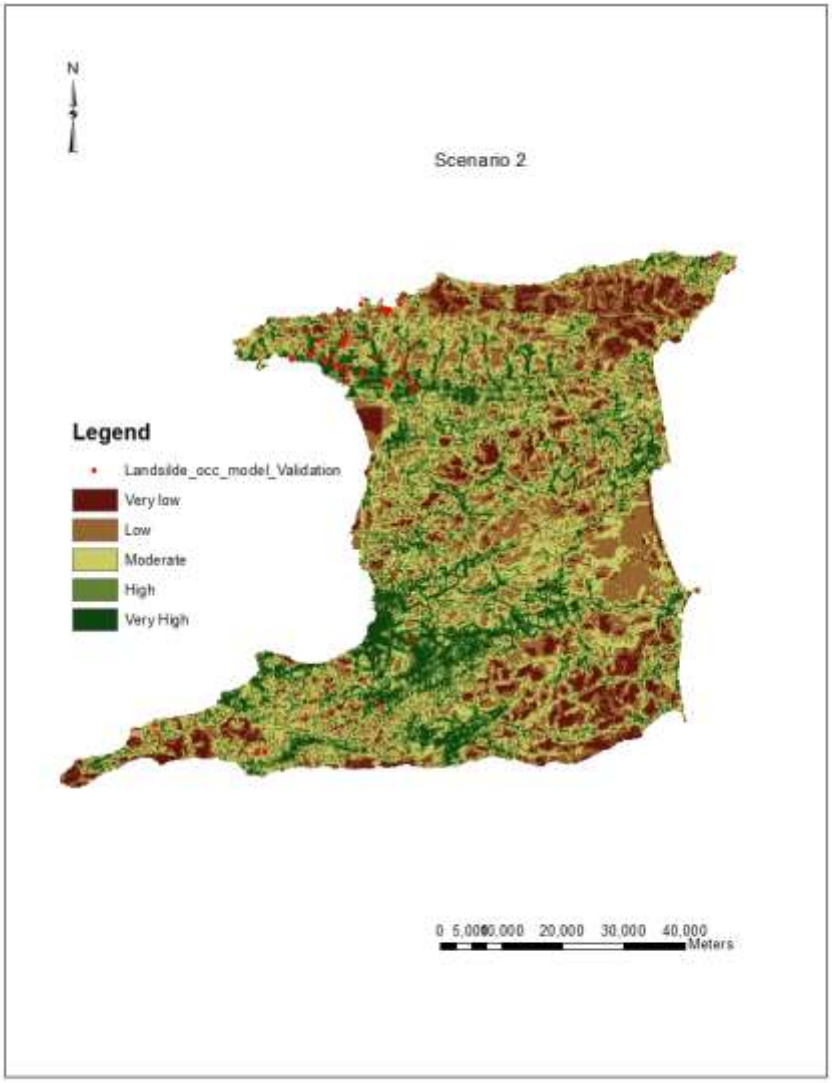
Elements of Degradation

- EROSION
  - Soil physical condition
  - Deforestation
  - Quarrying
  - Inappropriate agricultural practices
- Chemical
  - Acidity due to monoculture
  - Hydrocarbon pollution

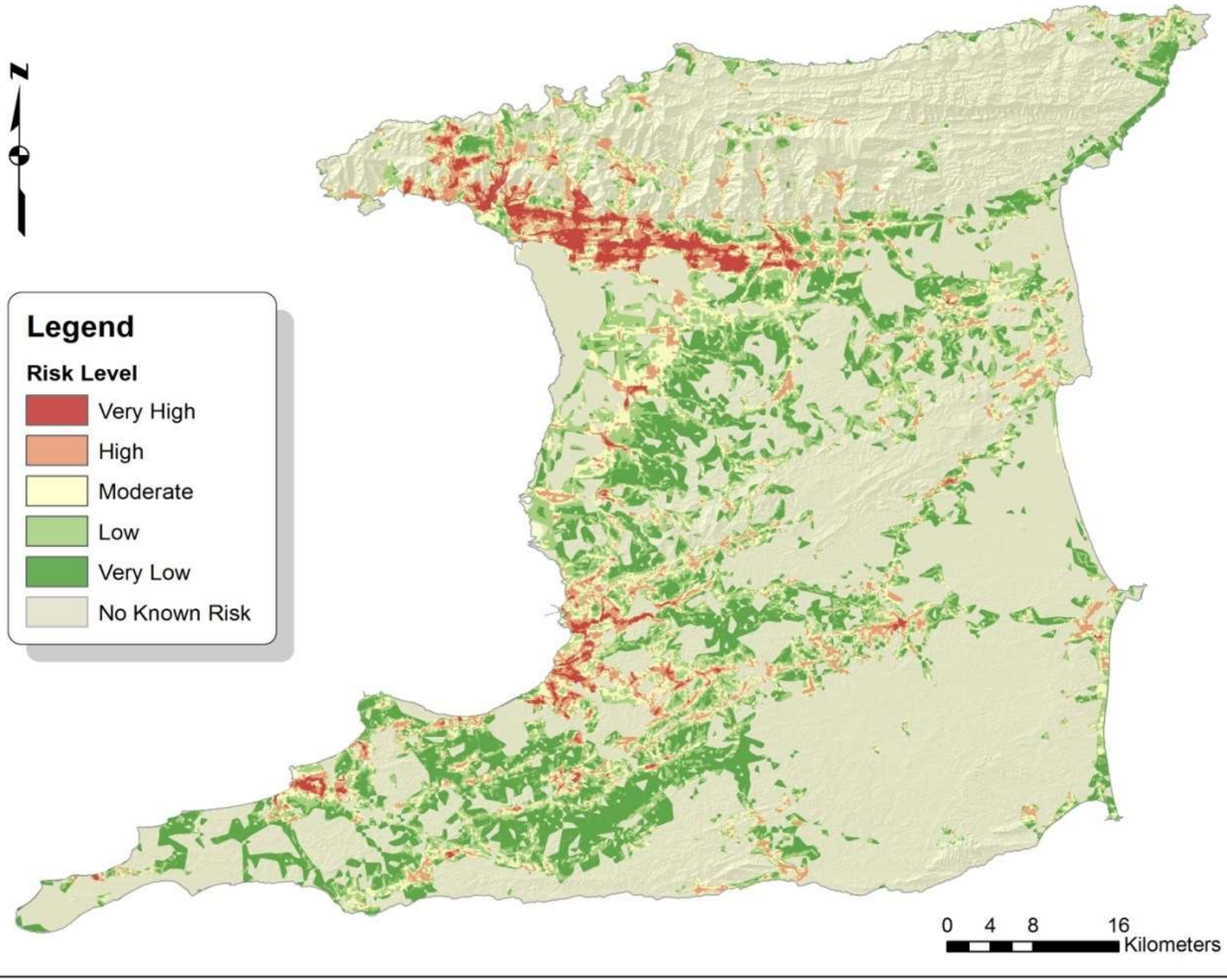
TRINIDAD

SOILS

Actions and Activities



- Focus on social effects
  - Landslides
  - Flooding
- Development of policies and laws
- Signatory to many conventions
- Ministerial focus on erosion


N
Legend
Risk Level
Very High
High
Moderate
Low
Very Low
No Known Risk
0 4 8 16
Kilometers

Opportunities

- Distinction between soil and land
- Soil information system
- Erosion modeling
  - UWI efforts
- Conservation focus, training and implementation
- Regional effort

THANK YOU, LET'S BUILD THE PARTNERSHIP

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