1ST MedECC Assessment Report outline

1. Introduction

2. Drivers of change

2.1   Introduction

2.2   Climate Change

       2.2.1   Change in the dynamics

       2.2.2   Change in surface radiation in relation with cloud and aerosol

       2.2.3   Change in the temperature, associated variables and temperature-related extremes

       2.2.4   Change in the precipitations, water cycle and precipitation-related extremes

       2.2.5   Change in the cryosphere (snow, glaciers)

       2.2.6   Change in the physical sea state and physics (sea level, SST and circulation)

       2.2.7   Change in the biogeochemical cycle of the Mediterranean Sea (including acidification)

       2.2.8   Priorities in research needs

2.3   Pollution

       2.3.1   Air pollution

       2.3.2   Land/Soil pollution

       2.3.3   Water pollution

       2.3.4   Priorities in research needs

2.4   Changes in use of natural resources

       2.4.1   Land use changes

       2.4.2   Change in the land hydrology, incl. rivers and water resources

       2.4.3   Marine resources

       2.4.4   Priorities in research needs

2.5   Non indigenous species

       2.5.1   NIS in the Mediterranean Sea

       2.5.2   Terrestrial NIS and Pests

       2.5.3   Priorities in research needs

2.6   Interaction among drivers

       2.6.1   Climate and Pollution

       2.6.2   Description of the feedback between climate change and air pollution

       2.6.3   Feedback between fresh water pollution and hydrological cycle

       2.6.4   Links between climate change and NIS trends

2.7   Indirect drivers

       2.7.1   Policies

       2.7.2   New technologies

       2.7.3   New business models

       2.7.4   Citizen's behavior

       2.7.5   Level of education

       2.7.6   Scientific knowledge of environmental dynamics

2.7.7   Social and economic inequalities

2.7.8   Conflicts for use of resources

2.7.9   Priorities in research needs

3. Challenges

3.1. Resources

3.1.1 Water

3.1.1.1 Past trends and current situation

3.1.1.2 Projections, vulnerabilities and risks

3.1.1.3 Adaptation

3.1.1.4 Knowledge gaps

3.1.2 Food

3.1.2.1 Past trends and current situation

3.1.2.2 Projections, vulnerabilities and risks

3.1.2.3 Adaptation

3.1.2.4 Knowledge gaps

3.1.3 Energy

3.1.3.1 Past trends and current situation

3.1.3.2 Projections, vulnerabilities and risks

3.1.3.3 Adaptation

3.1.3.4 Knowledge gaps

3.2. Ecosystems

3.2.1. Marine ecosystems

3.2.1.1 Past trends and current situation

3.2.1.2 Projections, vulnerabilities and risks

3.2.1.3 Adaptation

3.2.1.4 Knowledge gaps

3.2.2. Coastal ecosystems

3.2.2.1 Past trends and current situation

3.2.2.2 Projections, vulnerabilities and risks

3.2.2.3 Adaptation

3.2.2.4 Knowledge gaps

3.2.3. Terrestrial ecosystems

3.2.3.1 Past trends and current situation

3.2.3.2 Projections, vulnerabilities and risks

3.2.3.3 Adaptation

3.2.3.4 Knowledge gaps

3.3. Society

3.3.1. Development

3.3.1.1 Past trends and current situation

3.3.1.2 Projections, vulnerabilities and risks

3.3.1.3 Adaptation

3.3.1.4 Knowledge gaps

3.3.2. Health

3.3.2.1 Past trends and current situation

3.3.2.2 Projections, vulnerabilities and risks

3.3.2.3 Adaptation

3.3.2.4 Knowledge gaps

3.3.3. Human security

3.3.3.1 Past trends and current situation

3.3.3.2 Projections, vulnerabilities and risks

3.3.3.3 Adaptation

3.3.3.4 Knowledge gaps

4. Managing future risks and building resilience

4.0 Introduction: Framing and Approach of the Chapter and Policy Domains / Concerns

4.1. Human Health Impacts

4.2. Water Security

4.3 Agricultural drought

4.4 Wildfires

4.5 Hail storms

4.6 Soil: Erosion, Degradation, and Desertification

4.7 River and Pluvial Flooding

4.8 Heat Waves

4.9 Sea-level rise: Coastal Erosion and Flooding, Saltwater intrusion

4.10. Seawater temperature anomalies and extremes

4.11. Ocean Acidification

4.12 Invasive Species: Marine, Freshwater and Terrestrial

4.13 Hazardous Pollutants

4.14 Climate Driven Migration

4.15. Socio-economic Scenarios