The National Climate Change and Variability Response System (NCCRS)

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National Director of Environment
President of the Coordination Group of the NCCRS
Topics for the presentation:

-The National Climate Change and Variability Response System
  -Objectives
  -Institutional arrangements
  -Institutional development and main achievements

-Examples of science-policy
  -Coastal Adaptation
  -Climate variability and Social Vulnerability Indicators
- The National Climate Change and Variability Response System
- Objectives
  - Institutional arrangements
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- Examples of science-policy
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  - Climate variability and Social Vulnerability Indicators
The National Climate Change and Variability Response System – NCCRS- was created by the Executive Branch Decree Number 238/09 of May 20th, 2009.

*It is an horizontal coordination framework between every institution, public and private, that work in climate change issues, or that are affected by climate change.*

The Ministry of Housing, Land Planning and Environment is in charge of the system.
The Ministry of Housing, Land Planning and Environment is the Focal Point to the UNFCCC and in this matter represent the country in the internacional negotiations.
The NCCRS coordinates and plans the actions needed for the prevention of risks, the mitigation and adaptation of climate change.
-The National Climate Change and Variability Response System
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-Examples of science-policy
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The NCCRS has two bodys:

- the coordination group
- the advisory commission (organized in ad hoc working groups)
Advisory Commission

GdT Indicadores de Vulnerabilidad y Variabilidad
GdT Adaptación Costera
GdT Mitigación y NAMAs
GdT Negociación internacional
GdT Comunicación y Educación
GdT Recursos Hídricos (Planagua)
-The Coordination Group is presided by the Ministry of Housing, Land Planning and Environment, the Ministry of Livestock, Agriculture and Fisheries and the Office of Planning and Budget of the Presidency.

-Other ministries that are involved by Decree: Ministry of Industry, Energy and Mining, Ministry of External Relations, Ministry of Tourism and Sports, Ministry of Public Health, Ministry of National Defense

-Other ministries that are invited: Ministry of Social Development, Ministry of Economy and Finance, Ministry of Education and Culture, Ministry of Transportation and Public Works.
-In the Coordination Group there is also the Uruguayan Institute of Meteorology, the National Emergency System and the Congress of Mayors (by where all 19 Departmental Goverments are represented).

-The Coordination Group has its ordinary meeting on the first Thursdays of each month and follows a yearly meeting calendar.
- The Coordination Group agrees by consensus an Strategical Agenda at the beginning of each year and a Year Workplan.

- The Strategical Agenda includes all major topics the NCCRS wants to deal in each year, it creates Working Groups with a mandate, and it prioritizes which topics are most relevant.

- The Strategical Agenda is then wrapped in the Yearly Meeting Calendar were all topics are developed in the first Thursdays Ordinary Meeting and potential third Thursdays Extraordinary Meetings.
- The NCCRS has an interim Technical Executive Secretariat, that is implemented by the Spanish Agency for International Development Project “Institutional Strengthening for the NCCRS” which is carried out by the Ministry of Housing, Land Planning and Environment.
The Advisory Commission is currently organized in six ad hoc working groups, mandated by the Coordination Group:

- Climate Variability and Social Vulnerability Indicators
- Coastal Adaptation
- Mitigation and NAMAs
- International negotiations
- Communication, Sensibilization and Education
- Water resources
The Advisory Commission is integrated by technical experts that represent academic, technical and research institutions, within which the following institutions are:

- Ministries
- University of the Republic
- National Public Education Administration
- Research and Innovation National Agency
- National Development Corporation
- Uruguayan Antarctic Institute
- Environmental NGOs
- Production organizations
- International cooperation consultants
- IPCC Uruguayan members
The Working Groups of the Advising Commission are organized with two co-chairs selected by the Coordination Group, and meet regularly regarding their mandate and work needs.

The Working Groups reports to the Coordination Group two or three times a year.
The National Climate Change and Variability Response System

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  - Climate variability and Social Vulnerability Indicators
NCCRS 2009-2014


2010. Presentation of the National Climate Change Response Plan Advisory Commission meeting to address prioritization Third National Communication for the UNFCCC Participation of the NCCRS in the UNFCCC – COP Cancún

2011. National Projects Portfolio (planning structure for the National Plan Interdepartmental Workshops across the country for local needs. First High Level Meeting

2012 First Year WorkPlan approved Metropolitan Region Climate Change Plan Participation of the NCCRS in the UNFCCC – COP Doha
NCCRS 2009-2014

2013  First Strategic Agenda of the NCCRS  
Second Year Work Plan  
Advisory Commission in working groups  
Second High Level Meeting  
Subnational planning training for departmental governments.

2014  Second Strategic Agenda of the NCCRS  
Third Year Work Plan  
Advisory Commission in working groups  
Third High Level Meeting (5 years of the NCCRS)  
Agreement with the Metropolitan Region  
Participation of the NCCRS in UNFCCC – COP Lima
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Coastal Adaptation Example

- Agreement between the University of the Republic and the Ministry of Housing, Land Planning and Environment
- Several products including Coastal Vulnerability Mapping Methodology and Coastal Vulnerability Mapping
- The Agreement included the participation of the Interdisciplinary Coastal Management Research Center and the Coastal Adaptation Working Group of the NCCRS.
- Both the Working Group and the Research Center established an agreed agenda during 2013-2014 to develop the products.
Coastal Adaptation Example

- Coastal Vulnerability Mapping

Technical Vulnerability Index + Technical Extreme Events Resilience Index + Deparmental Governments and Ministry´s expert judgement
- The National Climate Change and Variability Response System
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Climate Variability and Social Vulnerability Indicators

• In 2013 the Advisory Commission Working Group for Climate Variability and Social Vulnerability Indicators was created.

• The WG is integrated with more than 25 technical experts and has met more than 30 times over the last year to come up with 28 climate change and variability indicators and 18 Social Vulnerability indicators related to climate.

• The indicators may assist in the national overall monitoring of climate conditions in relationship with general decision making at the NCCRS Coordination Group (for example how certain flood or storm surge or drought behaved in relation to previous ones in the same place or between places).
Climate Variability and Social Vulnerability Indicators

List of climate indicators:

<table>
<thead>
<tr>
<th>Description</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperatura media anual TMA *</td>
<td></td>
</tr>
<tr>
<td>Olas de calor OC</td>
<td></td>
</tr>
<tr>
<td>Olas de frio OF</td>
<td></td>
</tr>
<tr>
<td>Helada meteorológica HM</td>
<td></td>
</tr>
<tr>
<td>Helada agro-meteorológica (sobre césped) HA</td>
<td></td>
</tr>
<tr>
<td>Déficit pluviométrico DP</td>
<td></td>
</tr>
<tr>
<td>Déficit hidrológico DH</td>
<td></td>
</tr>
<tr>
<td>Sequia agropecuaria 1 SA1</td>
<td></td>
</tr>
<tr>
<td>Sequia agropecuaria 2 SA2</td>
<td></td>
</tr>
<tr>
<td>Déficit fuentes de agua potable DFA</td>
<td></td>
</tr>
<tr>
<td>Precipitación acumulada media anual PAMA *</td>
<td></td>
</tr>
<tr>
<td>Precipitación intensa diaria 1 PID **</td>
<td></td>
</tr>
<tr>
<td>Precipitación intensa diaria 2 PDD</td>
<td></td>
</tr>
<tr>
<td>Máxima anual de precipitación horaria MPH</td>
<td></td>
</tr>
<tr>
<td>Máxima anual de precipitación diaria MPD</td>
<td></td>
</tr>
<tr>
<td>Máxima anual de precipitación en diez días MPZ</td>
<td></td>
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<tr>
<td>Umbral de precipitación frecuente UPF</td>
<td></td>
</tr>
<tr>
<td>Umbral de precipitación poco frecuente UPP</td>
<td></td>
</tr>
<tr>
<td>Umbral de precipitación muy poco frecuente UPM</td>
<td></td>
</tr>
<tr>
<td>Umbral de precipitación extrema UPX</td>
<td></td>
</tr>
<tr>
<td>Exceso hidrológico inundaciones EHI</td>
<td></td>
</tr>
<tr>
<td>Tormentas TT *</td>
<td></td>
</tr>
<tr>
<td>Vientos fuertes 1 VF1 *</td>
<td></td>
</tr>
<tr>
<td>Vientos fuertes 2 VF2</td>
<td></td>
</tr>
<tr>
<td>Marejada fuerte MF</td>
<td></td>
</tr>
<tr>
<td>Nivel medio del Mar NMM *</td>
<td></td>
</tr>
<tr>
<td>Incendios forestales y en campos IFC **</td>
<td></td>
</tr>
<tr>
<td>Tornados TO **</td>
<td></td>
</tr>
</tbody>
</table>
Climate Variability and Social Vulnerability Indicators

**INFORMACIÓN GENERAL**

<table>
<thead>
<tr>
<th>INDICADOR</th>
<th>Temperatura Media Anual</th>
</tr>
</thead>
<tbody>
<tr>
<td>OBJETIVO</td>
<td>Informar sobre la evolución anual de la temperatura media de Uruguay, pudiendo eventualmente evidenciar variaciones anuales e interanuales de las temperaturas promedio para evaluar tendencias de cambio climático (calentamiento global).</td>
</tr>
<tr>
<td>AREA TEMATICA</td>
<td>CC</td>
</tr>
<tr>
<td>DESCRIPCIÓN</td>
<td>Promedio anual (del 1° de enero al 31 de diciembre) de la temperatura del aire en grados Celsius (°C) en estaciones convencionales.</td>
</tr>
<tr>
<td>RELEVANCIA</td>
<td>Sensibilización pública, negociaciones internacionales, argumentación para la mitigación. Adaptación de largo plazo.</td>
</tr>
<tr>
<td>FORMULA DE CÁLCULO</td>
<td></td>
</tr>
<tr>
<td>DEFINICIÓN DE VARIABLES</td>
<td>Fuente: Observaciones diarias.</td>
</tr>
<tr>
<td>UNIDAD</td>
<td>Grados Celsius (°C) 16.7 °C (1999) – 18.7 °C (2001)</td>
</tr>
<tr>
<td>ALCANCE GEOGRÁFICO</td>
<td>Todo el país INUMET – 21 estaciones meteorológicas convencionales. + INIA 5 estaciones meteorológicas</td>
</tr>
<tr>
<td>SERIE DE TIEMPO</td>
<td>1980-presente</td>
</tr>
<tr>
<td>FUENTE DE DATOS</td>
<td>INUMET e INIA</td>
</tr>
<tr>
<td>AUTOR</td>
<td>MVOTMA-DINAMA</td>
</tr>
</tbody>
</table>

**INFORMACION OPERATIVA**

<table>
<thead>
<tr>
<th>CODIGO</th>
<th>TMA</th>
</tr>
</thead>
<tbody>
<tr>
<td>PERIODICIDAD</td>
<td>Anual – Junio</td>
</tr>
<tr>
<td>ESTADO DE IMPLEMENTACIÓN</td>
<td>Concepto Desarrollo Operativo X (INUMET e Indicadores Ambientales DINAMA)</td>
</tr>
<tr>
<td>PRIORIDAD</td>
<td>Alta X Media</td>
</tr>
</tbody>
</table>
Thank you!

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