

Development, Adaptation and Mitigation to Climate Risks

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ECOCLIMASOL
CLIMATE RISK MANAGEMENT SOLUTIONS



IRD
Institut de recherche
pour le développement

Outline

- Climate Research and Risk Mitigation
- Adaptation to Climate (Change)

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Climate Research and Risk Mitigation

- Perception of Society
- From research to societal needs

Perception

from a forecast user's point of view

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Perception

from a forecast user's point of view

The agnostic

•

Perception

from a forecast user's point of view

The agnostic

The Pragmatic

Perception

from a forecast user's point of view

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The believer

Perception

from a forecast user's point of view

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"I don't believe in forecasts,...they are always wrong"

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"I only look at "www.perfect" forecasts because it works for me"

Perception

from a forecast user's point of view

The agnostic

"I don't believe in forecasts,...they are always wrong"

The Pragmatic

"I consult 5 to 10 forecasts on the web, and I make my mind"

The believer

"I only look at "www.perfect" forecasts because it works for me"

Perception

from a forecast “big” user’s point of view

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Perception

from a forecast “big” user’s point of view

- **We already know all that we need**

Perception

from a forecast “big” user’s point of view

We welcome all that is coming from INTA, CONICET, Universities,...

We already know all that we need

Perception

from a forecast “big” user’s point of view

We have needs, but our different timings and decision-making processes make difficult working operationally with public research

We welcome all that it is coming from INTA, CONICET, Universities,...

We already know all that we need

From Research to Societal Needs

From Research to Societal Needs

**Public
Research**

Climate Research

Climate Modelling

**Where Knowledge
is Created**

From Research to Societal Needs

**Public
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**Where Knowledge
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**Societal
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Formation

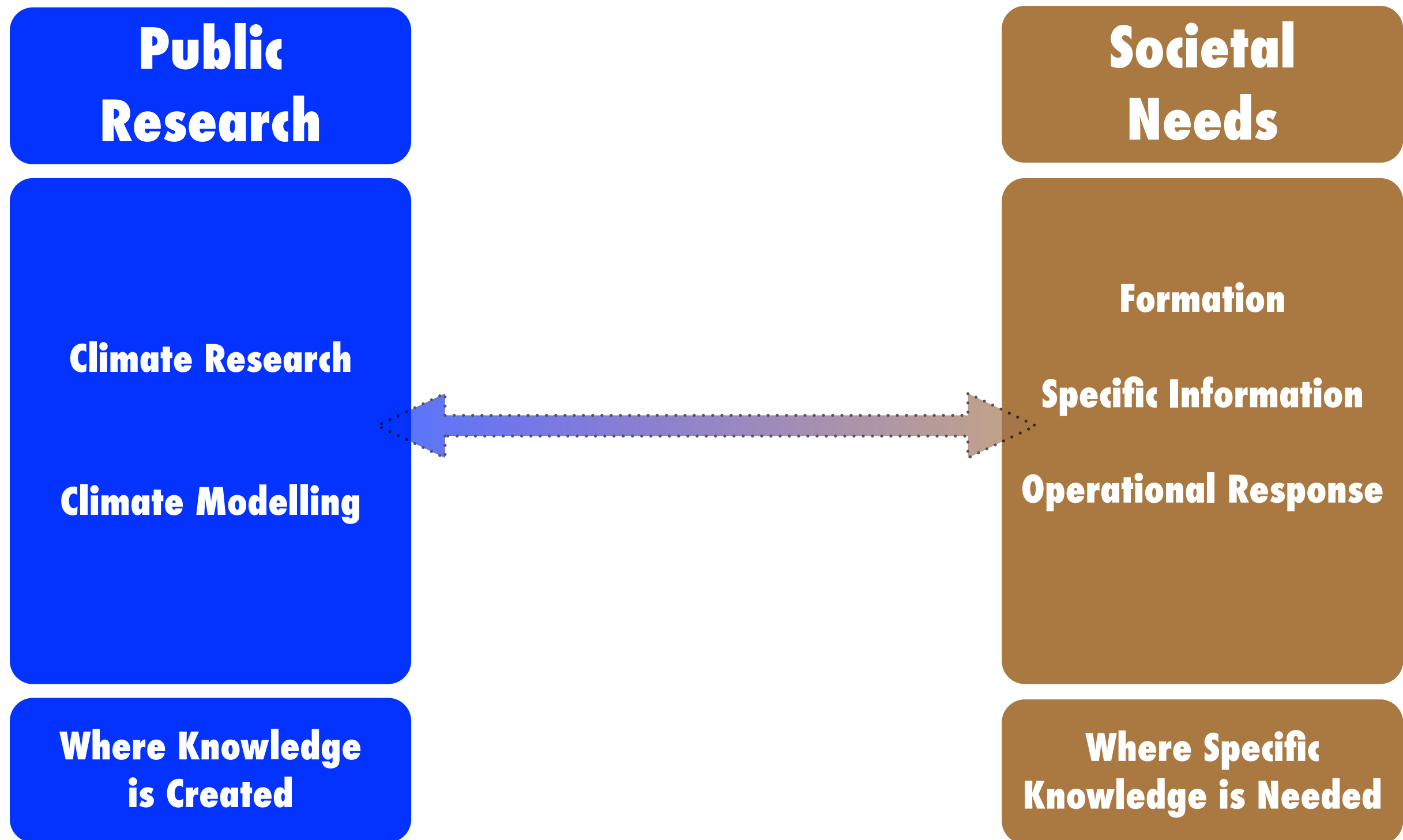
Specific Information

Operational Response

**Where Specific
Knowledge is Needed**

Climate Research and Risk Mitigation

From Research to Societal Needs



Climate Research and Risk Mitigation

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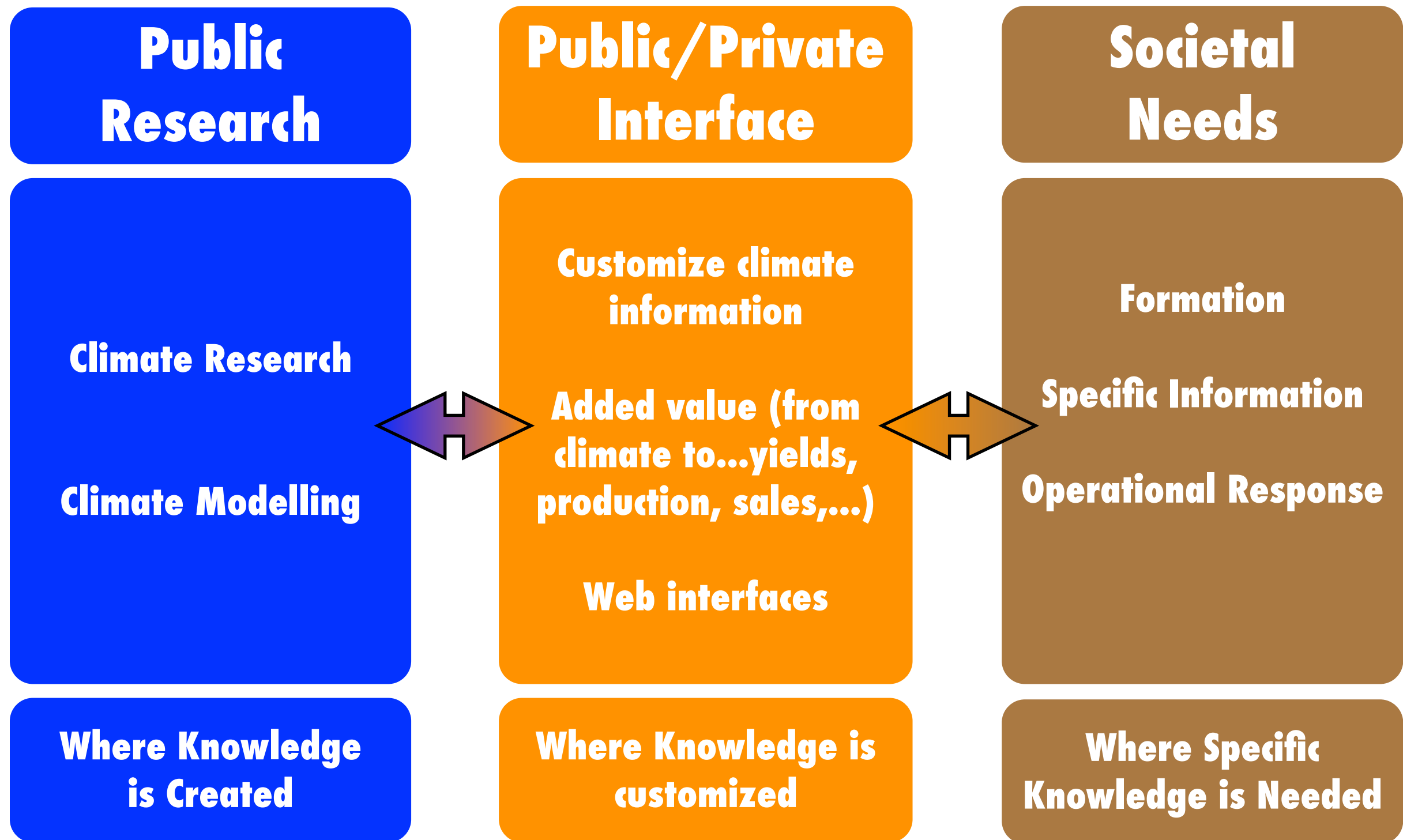
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From Research to Societal Needs



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TO REDUCE THE VULNERABILITY OF SOCIETY TO CLIMATE

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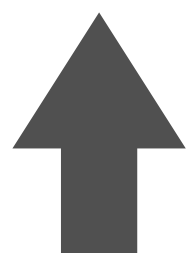
**Integral Vision/Understanding of the sector, local government,
community, company...**

Public/Private Interface Objectives

TO REDUCE THE VULNERABILITY OF SOCIETY TO CLIMATE

Identify the appropriate climate information/service

**Weather forecasts / Climate Forecasts / Specific variable Forecasts / Climate Insurance
Solutions / Risk Mitigation Plans / Adaptation Plans /...**



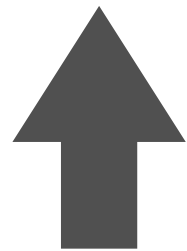
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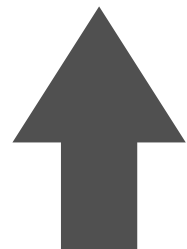
Work with Research Groups

State-of-the-Art, Feasibility, Development, Calibration, Evaluation,....



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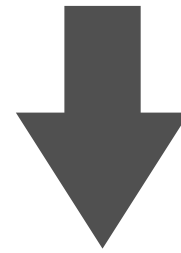
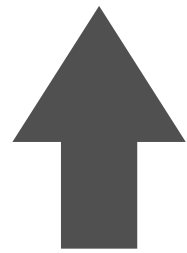
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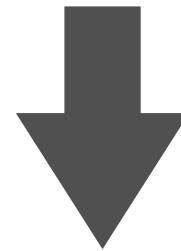
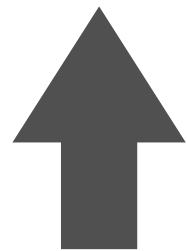
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**Integral Vision/Understanding of the sector, local government,
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Outline

- Climate Research and Risk Mitigation
- Adaptation to Climate (Change)

Adaptation

A multi-disciplinary and multi-sectorial process

- Impact Reports
- Adaptation Process

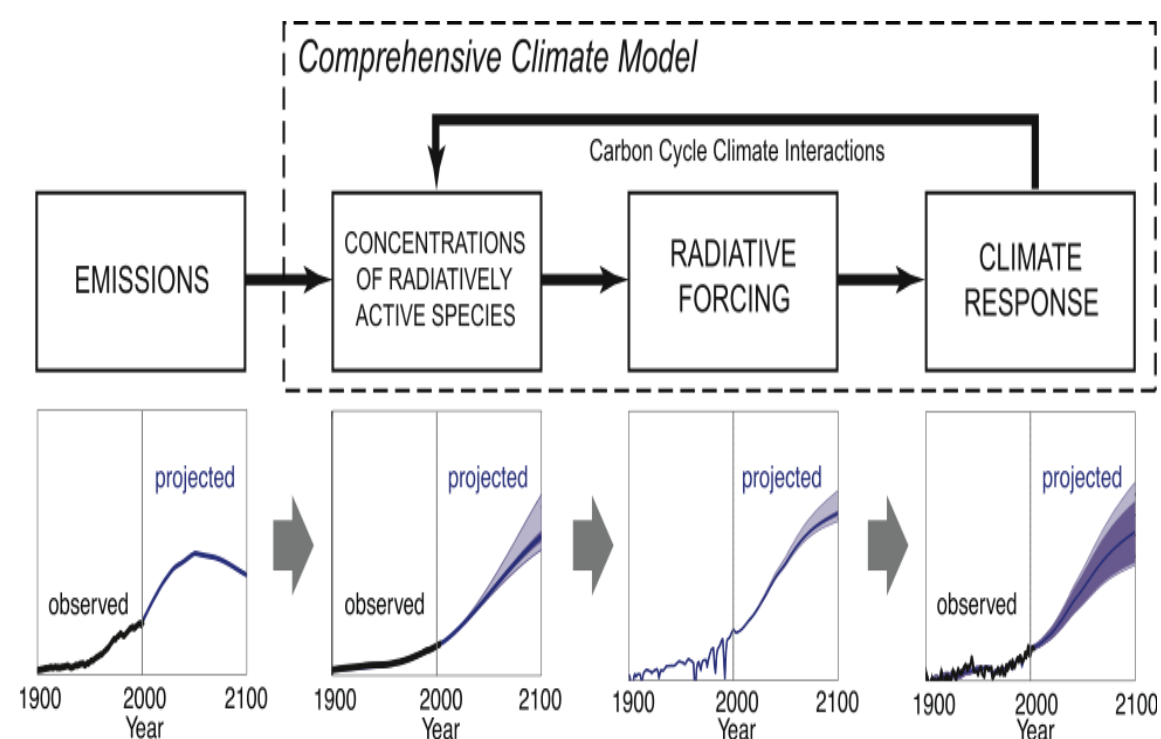
Impact Reports

From Scientific and Technical Knowledge to Impact Risks and Maps

Adaptation: a multi-disciplinary and multi-sectorial process

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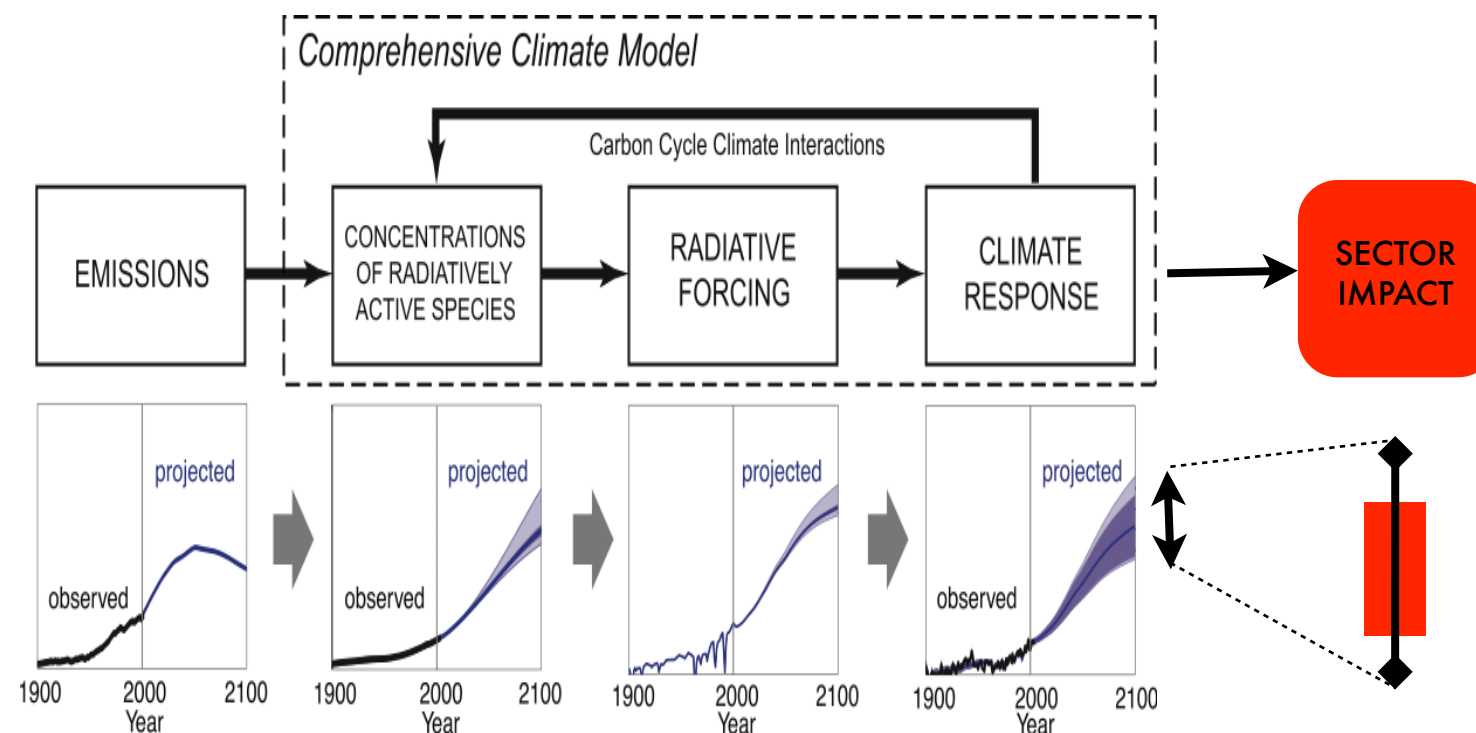
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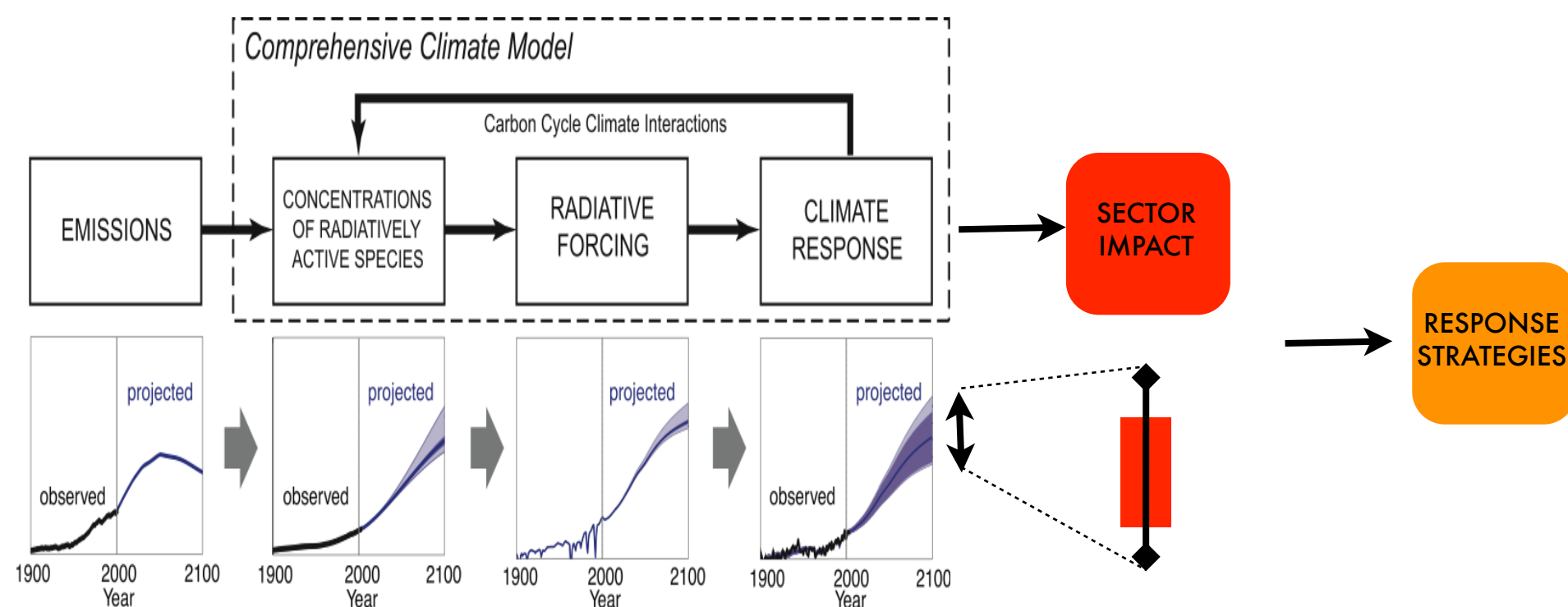
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Adaptation: a multi-disciplinary and multi-sectorial process

The Adaptation Process in Developing Countries

Development and Adaptation

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Development and Adaptation

Fortuitous Adaptation



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**Climate-Proof
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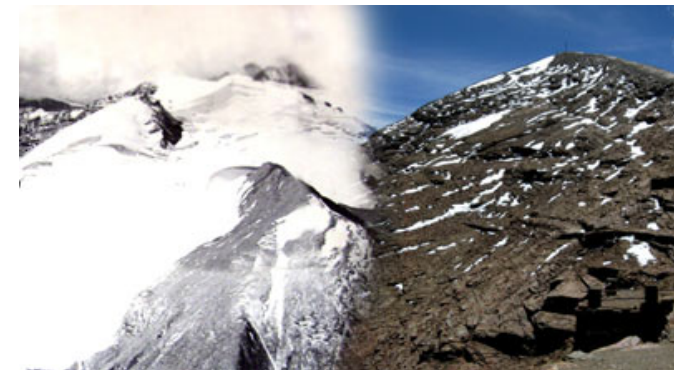
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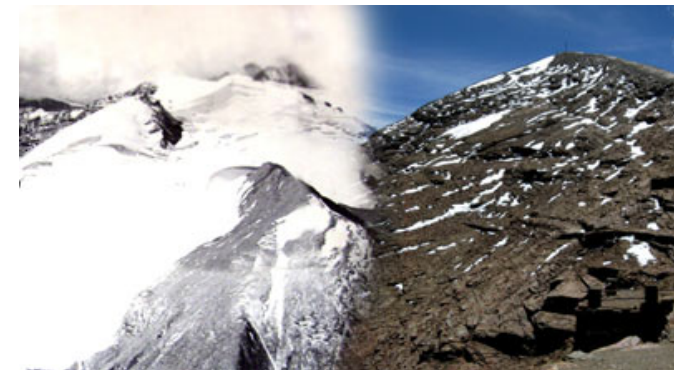
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Climate Information

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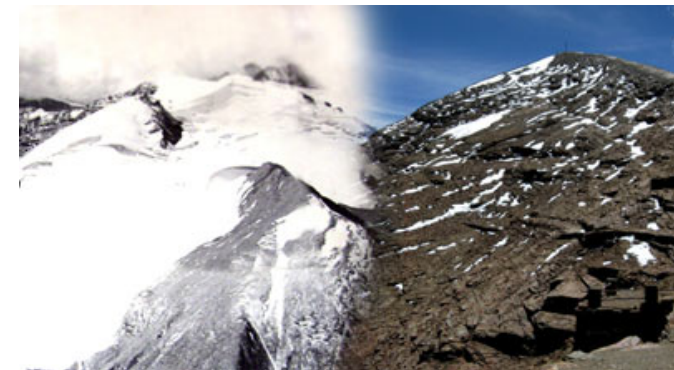
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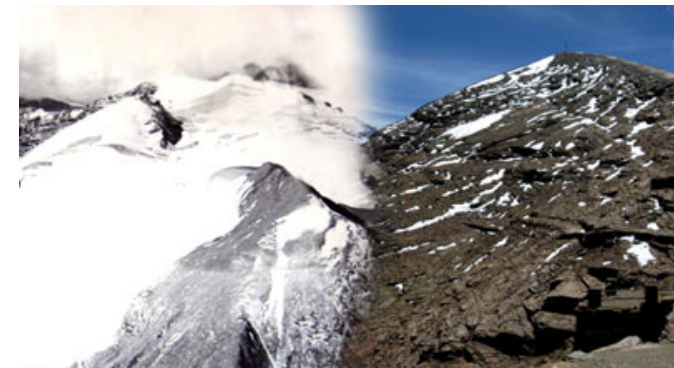
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The Adaptation Process in Developing Countries

Seeking synergies between Development, Adaptation and Mitigation Strategies

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Reduce poverty

**Reduce
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**Improve the life
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Adaptation: a multi-disciplinary and multi-sectorial process

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Adaptation

**Reduce present
and future
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**Public
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Mitigation

Adaptation: a multi-disciplinary and multi-sectorial process

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**Public
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Mitigation

Reduce emissions

**Modify
processes, energy
consumptions,
ways of living,...**

Adaptation: a multi-disciplinary and multi-sectorial process

Adaptation Process

with and for stakeholders

Case Study

- Analyze its vulnerability to present climate
- Identify the socio-economic causes of its vulnerability

Post-Normal Research

Adaptation: a multi-disciplinary and multi-sectorial process

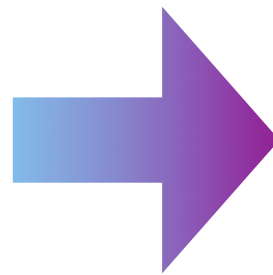
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- Which actions can be implemented to reduce the vulnerability (climate-independent) ?
- Which actions can be implemented to reduce climate-related vulnerability?
- Seek for multiple/complementary strategies
- Are the strategies coherent with development actions?
- Are they consistent with future climate threats?
- Are they contrary to mitigation objectives?

Adaptation: a multi-disciplinary and multi-sectorial process

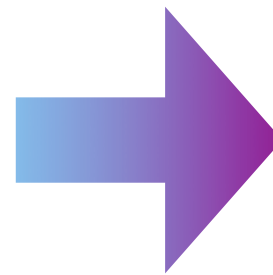
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MODELS

Adaptation: a multi-disciplinary and multi-sectorial process

Development, Adaptation and Mitigation Process

A multidisciplinary and multi sectorial approach

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Phase 1

Descriptive phase (past, impacts, sectors)

Adaptation: a multi-disciplinary and multi-sectorial process

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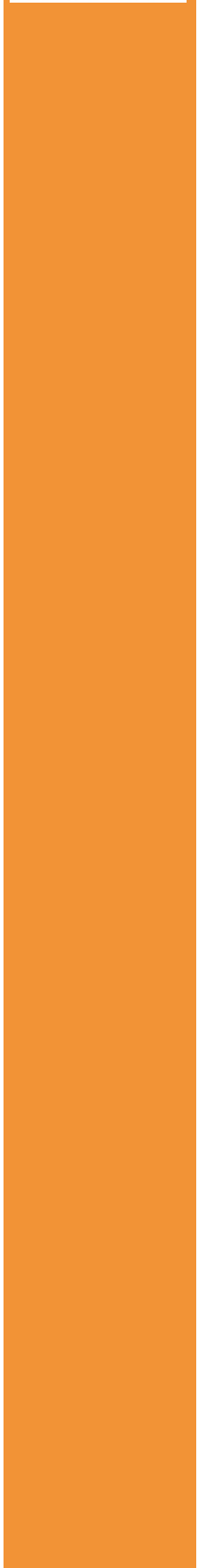
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| Phase 4 | Construction phase (all sectors) |
| Phase 5 | Evaluation phase (sectors, all sectors) |

Adaptation: a multi-disciplinary and multi-sectorial process

Conclusions

- Reducing Society Vulnerability to Climate is a “Seamless” Issue:
 - Weather forecasts to climate change projections
- Need for a multi-disciplinary / multi-sectorial integrated (systemic) approach
 - Bridging climate research to societal needs through an interface combining research skills and operational capabilities

Adaptation: a multi-disciplinary and multi-sectorial process



Two Proposals

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 - Create a “climate” awareness in the society
 - Identify and quantify the weather / climate events / risks affecting the sectors
 - Investigate how climate research can respond to these needs
 - Develop specific interface tools and services to make operational the provision of customized climate information

THANK YOU!

