

# SERVIR GLOBAL

*CONNECTING SPACE TO VILLAGE*

**International Conference on Climate Services 4**

**Practical Session: Ensuring evaluability of climate-related programs**

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Uruguay, December 11, 2014



Please state your:

- Name and organization
- Position/role
- Interest in evaluation. Project to be evaluated?
- Expectations for this session

**Objective:** to test guidelines for ensuring evaluability of the climate change and variability programs/services.

- Learn from experience of SERVIR
- Develop theory of change for test cases
- Discuss improvements to the approach and usability with other projects
- Suggest a set of recommendations

- Participate fully and actively
- Share discussion time
- Respect views and opinions of others
- Ask questions
- Be flexible
- Turn off electronic devices
- Mind the objectives/product goals and the time available to produce them (in this session)
- Others?

- **Monitoring:** An **ongoing** process to measure the extent to which desired results are occurring. Allows for checking whether implementation is on track
- **Evaluation:** The ***systematic*** collection and analysis of information about the ***characteristics and outcomes of programs and projects***

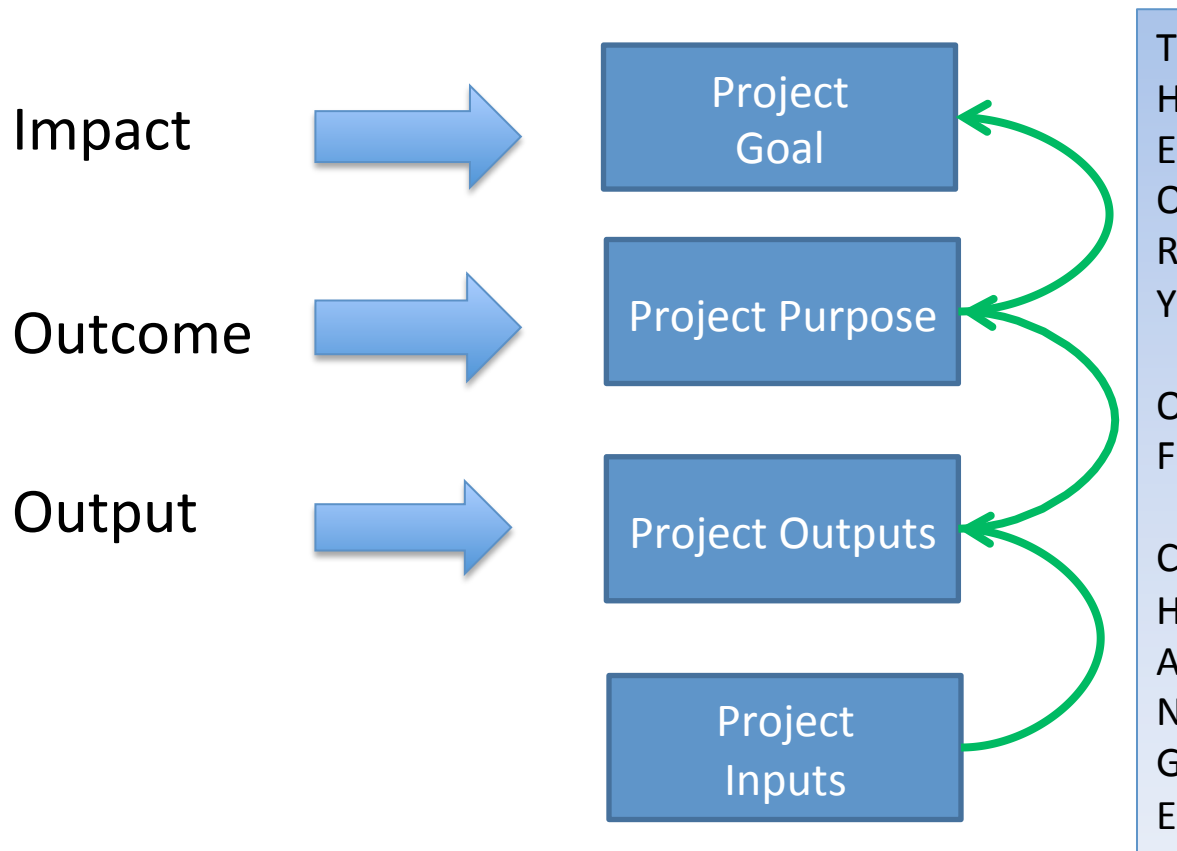
Although evaluation could be done in many different ways, here we address it in terms of the **climate service's theory of change.**

Why?

# How do development agencies view a Project?



At the project level, USAID uses a matrix for displaying the key elements of a project. The first column in a Logical Framework contains the project's **theory of change**



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- **Outputs** are directly attributable to project activities, e.g. the CREST Streamflow Viewer
- **Outcomes** represent results to which a given project contributes but which are beyond its control. Outcomes are referred to as intermediate or sub-intermediate results at the program level (results framework)
- **Impact** refers to higher-level outcomes that are achievable more in the long-term, e.g. reduction of loss of life and property due to flood. Impact is referred to as the goal at the program level



## Global Climate Change and Variability Project

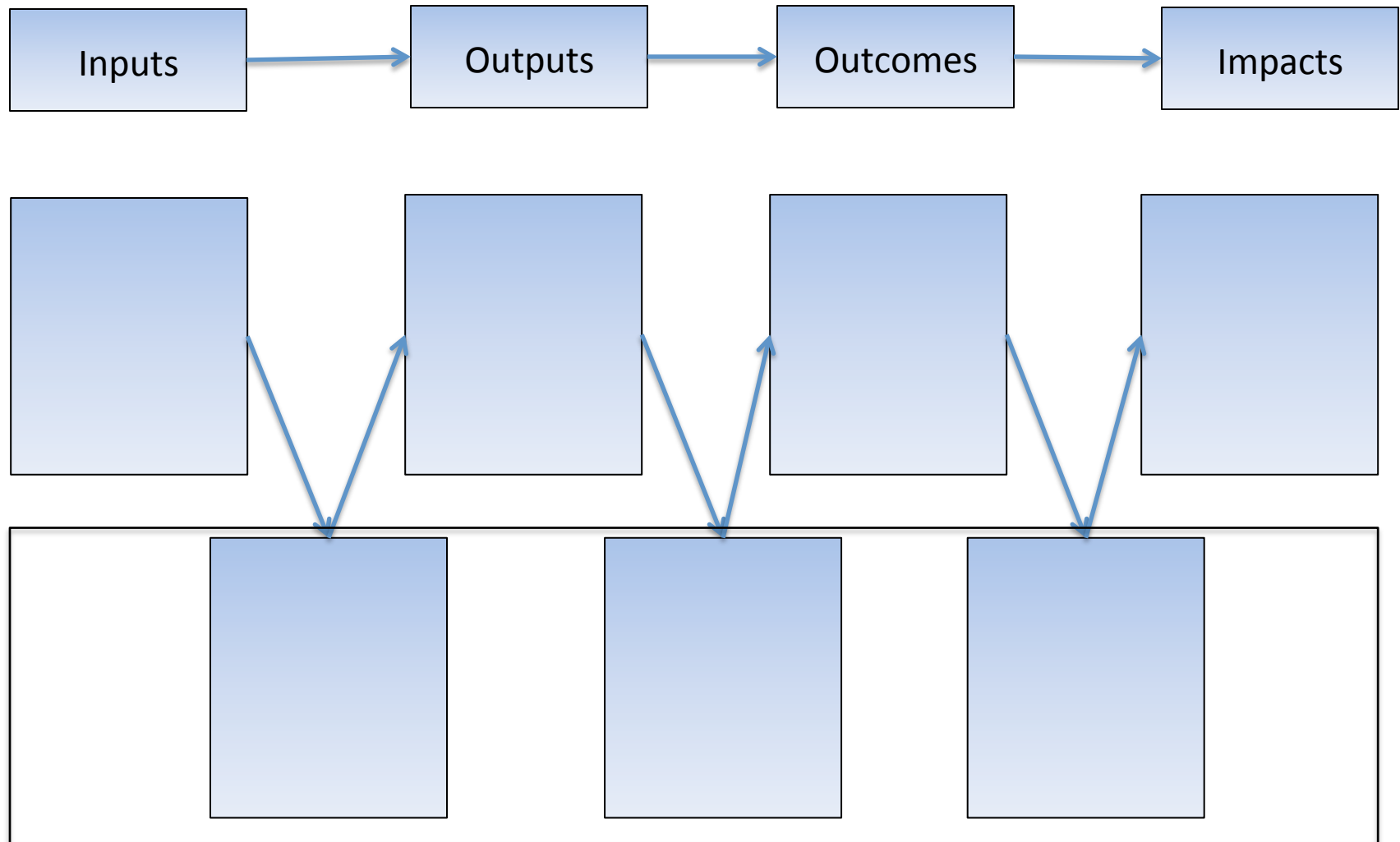
Develop  
tool

Create  
model

Provide  
method  
and  
training

- Long-term horizon for both impacts and outcomes
- Hard to evaluate
- Long-term horizon for both impacts
- more immediate outcomes
- Easier to evaluate

# Exercise: Complete the Logical Framework



- Global joint development initiative of NASA and USAID
- strengthens the capacity of governments and stakeholders to incorporate Earth observations and geospatial technologies
  - respond to natural disasters
  - work to improve food security
  - safeguard human health
  - manage water and natural resources

- Implemented by local HUBs:
  - SERVIR – Himalayan
  - SERVIR – East and South Africa
  - SERVIR – Mekong
- Multiple activities/products
  - More than 40 analytical products & tools
  - Tools integrate information in real-time
  - Alerts & information via Internet & mobile technolog

- Developing a harmonized land cover database at national and regional levels over different time slices and analysis in order to help understanding the change processes and support informed decision-making.
- Outputs where declared by the project documentation:

Land cover classification of 1990, 2000 and 2010

Forest cover density maps

Wetland maps

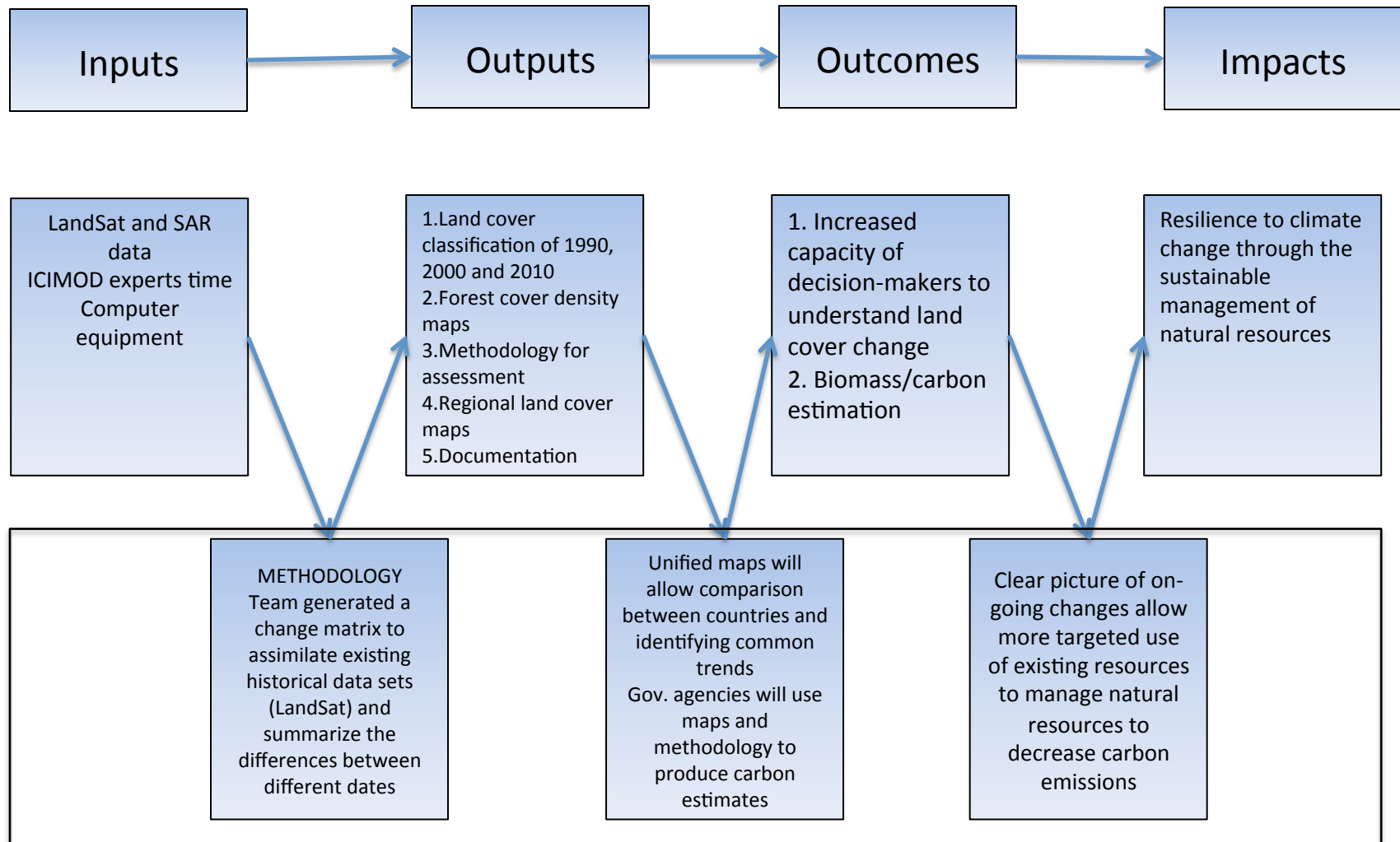
Methodology for assessment of ecosystem services

Regional land cover maps using MODIS land cover composite

Documentation on methods and

products Multiple activities/products

# Logical Framework for Land Cover Mapping



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- Select pilot activity/component
- Develop Theory of Change for the activity
- Present your Theory of Change
- Discuss challenges
- Set of recommendations

- Regional partnership
- Since 2008
- Still growing
- No funding!!
- Use of infrastructure already in existence
- Linkages between providers and users

Observatorio Latinoamericano de  
Eventos Extraordinarios



More info: Muñoz *et al.*, 2010; Muñoz, Núñez and Cova, 2011; Muñoz *et al.*, 2012.;  
García, 2012a; García, 2012b; Recalde-Coronel *et al.*, 2014; Stewart *et al.*, 2014

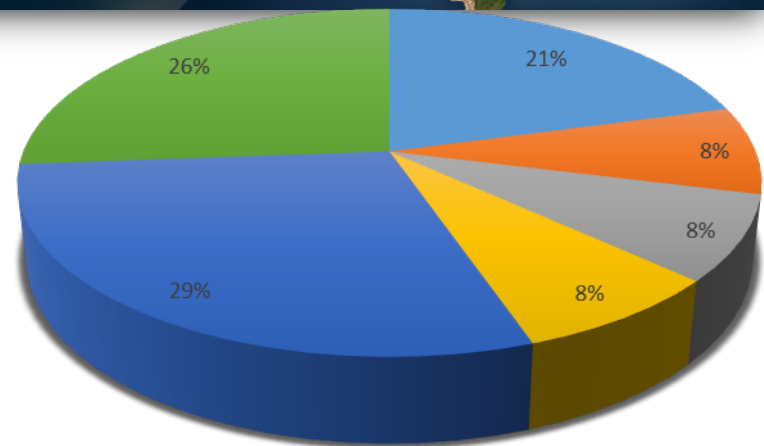


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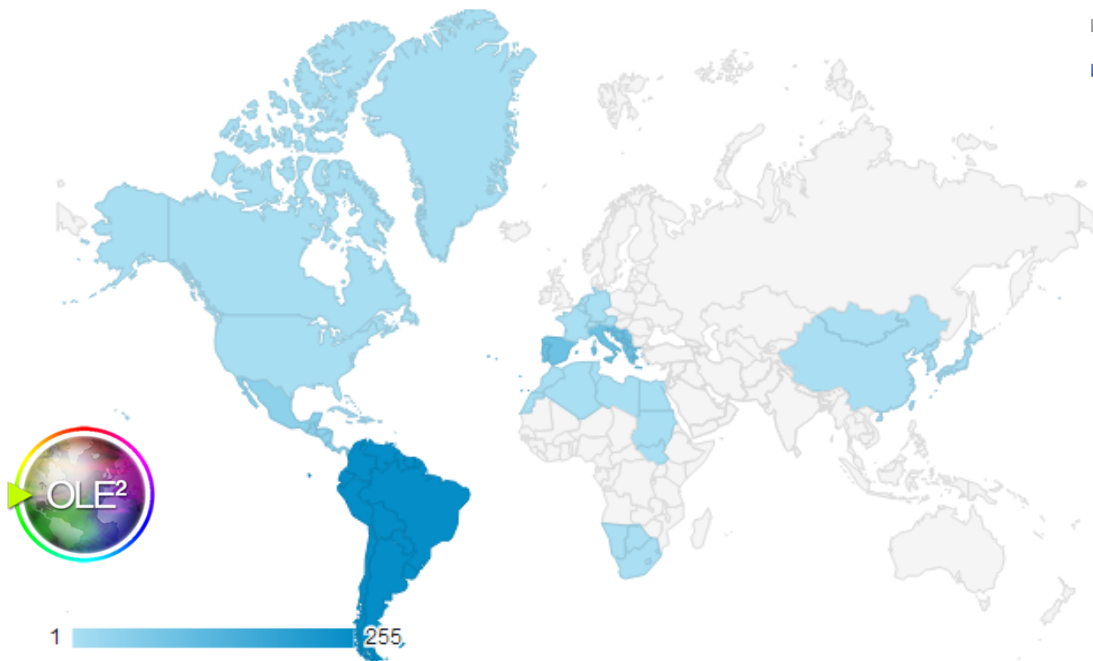


- Strong training component
- Transference of technology and knowledge
- Boundary institutions

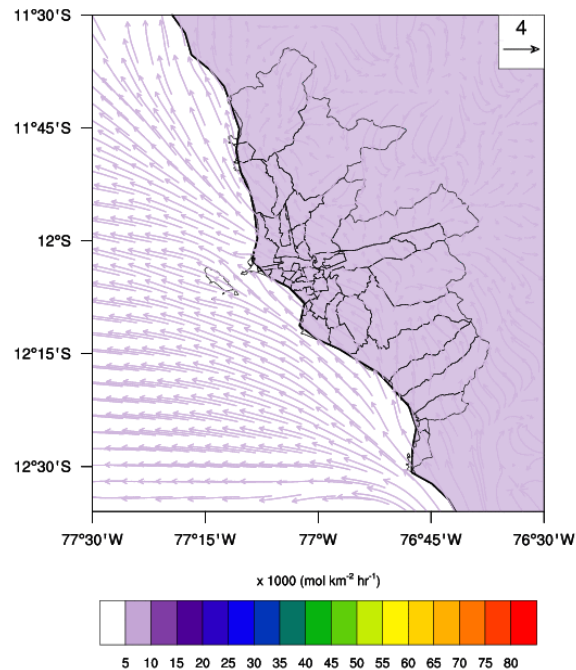


- Data quality, gridding
- Climate Change
- Climatology
- Meteorology
- Climate and Health
- Training and tools

■ Tailored, impact-oriented products: risk maps (hazard and vulnerability)!



## Pronostico NOx para 0hr (SENAMHI - OLE<sup>2</sup>)



## Goal:

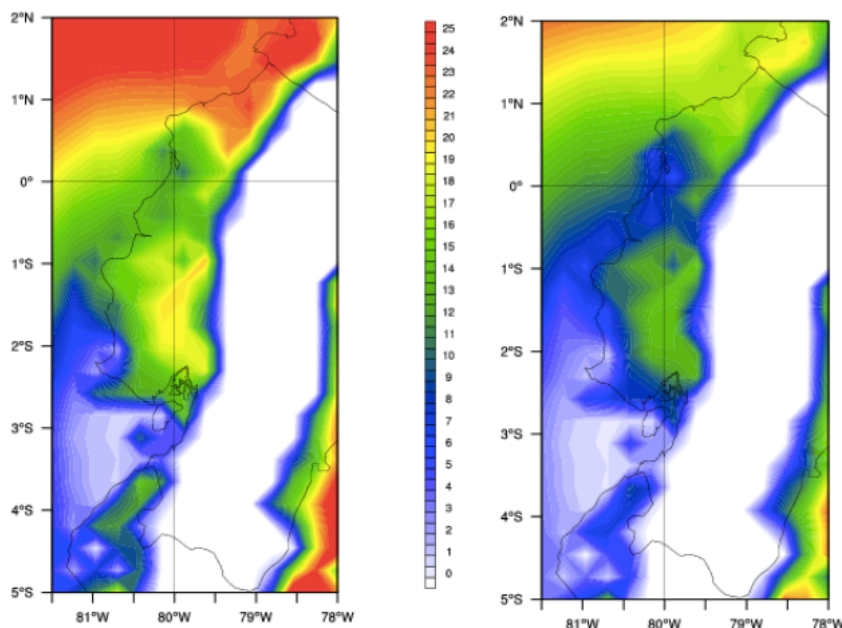
Produce experimental short-term forecasts of air quality for Lima, Peru

## Outputs:

- Training
- Technology installed and running locally
- Air quality hindcasts
- Model validation
- Experimental forecasts (maps)

**Figure 9.** 4-km spatial resolution hindcast WRF-Chem model simulation outputs of NOx concentration fluxes in the geographic domain 12°30'S – 11°30'S and 76°30'W – 77°30'W. Typical NOx concentration fluxes are expressed in thousand mol/km<sup>2</sup>/hr. The reference arrow represents wind speeds of 4 m/s.

# Pilot Project 2: Malaria Risk in Coastal Ecuador



**Figure 8.** January *Plasmodium vivax* (left panel) and *P. falciparum* (right panel) basic reproductive rates on the Ecuadorian coast, simulated for the period 1996-2008 and for *Anopheles albimanus* mosquito species. (After Muñoz and Recalde [24]).

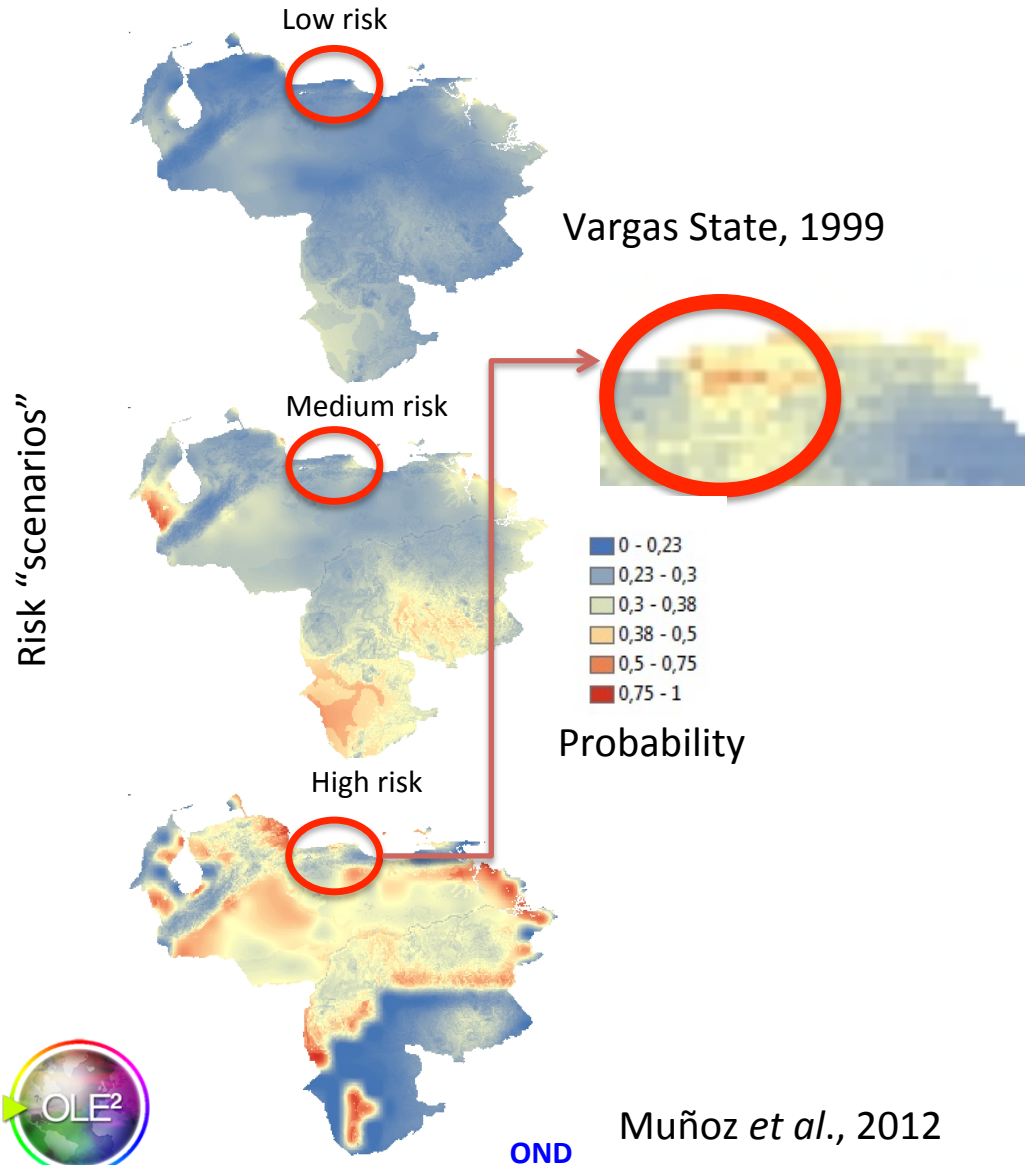
## Goal:

To explore the feasibility of establishing an Early Warning System for Malaria Risk in Coastal Ecuador

## Outputs:

- Predictability study
- Malaria Risk maps (*P. vivax* and *P. falciparum*)
- Analysis of human intervention
- Training
- Climate and Health WG

# Pilot Project 3: Floods Early Warning System for Vargas State, Venezuela



Muñoz *et al.*, 2012

## Goal:

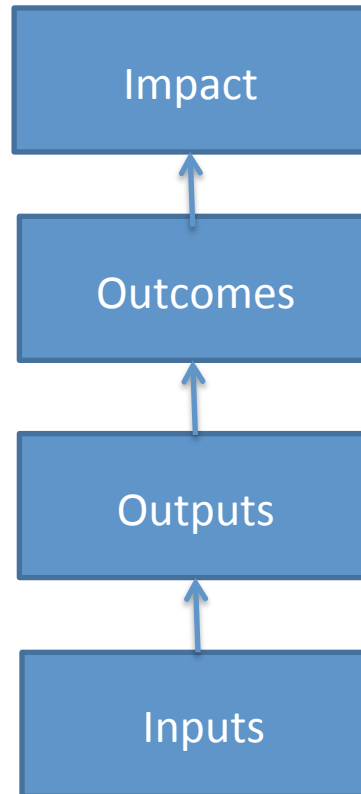
Predictability of Flood Risk in  
Vargas State, Venezuela

## Outputs:

- Predictability study
- Hazard hindcast
- Vulnerability evaluation
- Flood risk maps (3 categories)
- Open source platform



## Team Task 1: Find the Theory of Change Elements for Your Project/Activity



- Find at least 2 elements at each of the 4 levels
- Flipchart your responses. Select the person(s) in your group to report



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- Briefly describe your selected project/activity
- Present your theory of change by specifying the elements identified by your team at each of the 4 levels
- What helped your team develop your theory of change?
- What were some challenges?