

International Workshop of the Oswaldo Cruz  
Institute/FIOCRUZ for Leptospirosis Research  
Based on Country Needs  
&  
**5<sup>th</sup> Global Leptospirosis Environmental  
Action Network (GLEAN) meeting**

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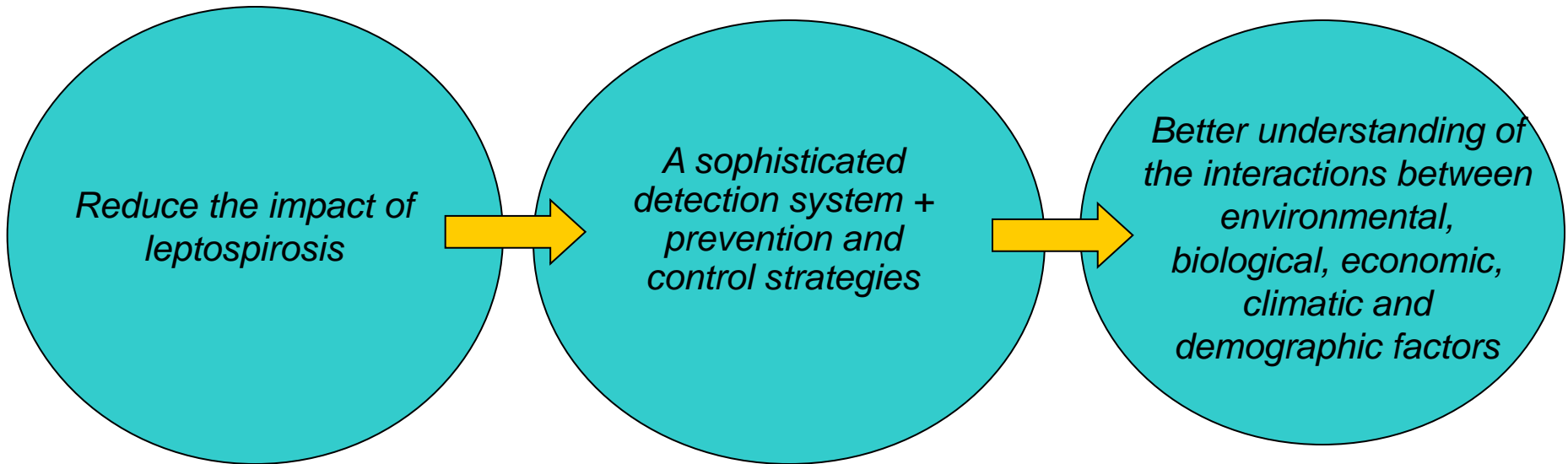
Presentation conducted during the *International Workshop of the Oswaldo Cruz Institute/FIOCRUZ for Leptospirosis Research Based on Country Needs & the 5<sup>th</sup> Global Leptospirosis Environmental Action Network (GLEAN) Meeting* on November 10-12, 2015, in Rio de Janeiro, Brazil .

# GLEAN

**Global  
Leptospirosis  
Environmental  
Action  
Network**



# The Global Leptospirosis Environmental Action Network: a strategic response



## **GLEAN 2010:**

multidisciplinary and intersectoral challenge that brings together:  
clinicians, public health specialists, veterinarians, climatologists, statisticians,  
rodent specialists, biologists, anthropologists, ecologists, water and sanitation  
specialists, economists

# GLEAN Institutional Members



# Structure of the GLEAN network

- One Steering Committee
- 4 strategic pillars:
  - I. Predict
  - II. Detect
  - III. Prevent
  - IV. Respond

# I. Predict

## **Objectives:**

- Informing decision making
- Risk awareness
- Anticipation: alerts and emergency measures
- Planning

## **Activities:**

- to define the incidence and baseline prevalence
- to identify the transmission factors and their predictive value
- to validate prediction tools (models) eg: NIMBioS
- to develop information technologies and communication

# II. Detect

## Objectives:

- Early diagnostic (clinical; laboratory; epidemiological context)
- Incidence monitoring, alert threshold of the epidemics
- Understanding of the transmission dynamics

## Activities:

- To develop algorithms of acute undifferentiated fevers
- To analysis epidemiological trends
- To improve rapid diagnostic technologies and to develop laboratory systems

# III. Prevent

## Objectives:

- Risks anticipated
- At-risk groups protected

## Activities:

- to identify the vectors of the disease sero-variants
- to measure the effectiveness of preventive interventions
  - hygiene and health education (La Réunion-Brazil)
  - rodent control (Brazil)
  - raising awareness of farmers (New Zealand)
- to understand the interaction between animal vaccination (cattle-dogs) and disease on humans (New Zealand)
- to promote research and development on human vaccination
- to refine the indications of chemoprophylaxis



# IV. Respond

## Objectives:

- Response guidelines developed in cooperation with countries
- Validation of operational research

## Activities:

- To develop and update guidelines, with different approaches according to context (islands, slums, nomads)
- To support outbreak control (under WHO request) or to provide with targeted technical assistance to countries

# GLEAN annual meetings

2011 - Marseille, France

2012 – Ispra, Italy

2013 – Brasilia, Brazil

2014 – Colombo, Sri Lanka

2015 – Rio de Janeiro, Brazil

