ECOMORE II

***ECO**nomic Development, **ECO**system **MO**difications and Emerging Infectious Diseases **R**isk **E**valuation*

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Institut Pasteur

international network Institut Pasteur

The second stage of the project **ECOMORE** will have to take into account strong concerns at international and regional level particularly raised by the COP21 which has a leading role in the thinking and action to be taken to limit the effects of climate change.
In this context it is critical to acknowledge that flooding accounts for 40% of all natural disasters worldwide and eight of the 10 large countries most at risk are in Asia.

The most significant risks are then represented by waterborne and vector-borne diseases: contamination of waters that are submerged by water contaminated by human and animal, which increases the risk of zoonotic diseases, environmental pathogens spread by runoff water, role of stagnant water after the water recedes for mosquito breeding… Now there is a cascade of interactions as urbanization, deforestation and agricultural intensification, resulting from economic development, amplify the impact of climate deregulations.

ECOMORE II in few words:

- 5 partner countries
- Public Health oriented
- Regional and transversal
- Knowledge Translation and sustainability
- Networking and scientific collaborations
- Common topic
- Climate change

CAMBODIA

Schools, especially those in peri-urban areas with high density of population are certainly hot spots for transmission of dengue among children

Can the integrated vector control in schools mitigate the epidemic peaks and absenteeism and help to reduce overcrowding in hospitals during the epidemic season of dengue?

MYANMAR

While the extreme weather events are a priori increasingly frequent in Myanmar, yet little is known about their health impacts and little research has been done to examine short-term and deferred health implications (e.g. leptospirosis).

Can laboratory and hospital capacity building improve post-disaster management of emerging diseases?

VIETNAM

The ECOMORE study in Vietnam showed an unexpected stream of leptospirosis and hepatitis E among rural people caring for livestock or agriculture.

Identifying the role of climatic factors in combination with agricultural practices can mitigate the incidence of water borne diseases (such as Leptospirosis)?

LAO PDR

The urbanization rate observed in Laos is one of the highest in the ASEAN; The development of peri-urban areas, where high population density is combined with traditional rural activities, offers ideal ecosystem for the proliferation of Aedes.,

Can an innovative program for the control of vectors borne diseases to reduce the risk of dengue, Chikungunya and Zika in urban and peri-urban areas?

PHILIPPINES

Over 1 million nine-year old children enrolled in public schools would be the first to be vaccinated against dengue. This is the world's first public dengue immunisation programme.

Can the vaccination campaign have a significant impact on dengue cases when it is combined with innovative vector-control strategy?

TRANSVERSAL STUDY

Geo-computational models will be used to design operative tools allowing Health Authorities to plan scenario correlated with meteorological variations and extreme weather events to anticipate emergence of vector-borne and water-borne diseases and so to develop strategies and to raise appropriate awareness.

Is it possible to model the risk of re-emergence of infectious diseases such as leptospirosis and dengue in this context?