

## On-job training EcoFilter

**Venue :** Houay Pano MSEC environmental observatory from 16 to 20 june 2014

### Objectives of the training

- to provide new scientific knowledge on the filtration of overland flow ("grey water") by soil and the vegetation along hill slopes and the riparian zone in tropical agro-ecosystems.

The research will be conducted in three converging scientific fields: **(1)** comparative study of the hydrological behaviour of studied catchments (i.e. overland flow genesis, groundwater inflows...) during storm and inter-storm periods; **(2)** Estimate the exports of carbon in dissolved, particulate and gaseous forms at the outlet of the catchments, and quantification of the amounts trapped in the riparian zone depending on the vegetation cover types; **(3)** Study the dissemination during floods of free and particle-bound faecal contaminants (i.e. *E coli*).

- to train national colleagues from Thailand, Laos and Vietnam on the research methodologies implemented during the project and their interpretation (i.e. water flows and water quality measurements)

### Agenda

#### 16/06: Introduction

*Morning:* arrival of trainees

*Afternoon:* General introduction and lectures about the techniques used during the 3 workshops

#### 17/06: Workshop « run-off versus infiltration at plot scale along hill slope »

*Morning: Field work* 1m<sup>2</sup> plots and Gerlach plots run-off measurements and surface description

*Afternoon: Office work* Calculations and interpretations

#### 18/06: Workshop « Water quality »

*Morning: Field and Lab work* Physico-chemical measurements and E coli analysis

*Afternoon: Lab work* Alkalinity measurement by GRAN titration. Calculations and interpretations

#### 19/06: Workshop « run-off versus infiltration at sub-catchment scale »

*Morning:* Field work Discharge measurements, Pumping tests

*Afternoon:* Office work Hydrogram separation methods. Calculations and interpretations.

#### 20/06: Conclusion

*Morning :* Discussions about the implementation of the measurements in the other MSEC watersheds (Thailand, Vietnam) ; Collective publication project

*Afternoon :* Departure