

EEPSEA impacts on WREA

WREA Training and Library Centre is under Cabinet of WREA.

Duties of WREA Training and Library Centre

1. Conduct training in the areas of water resources and environment, including office management and planning
2. Undertake studies in the areas of environment economics
3. Provide library services; and
4. Others as requested by WREA's Minister

Capacity Building Programs: Since 2006 EEPSEA has been actively supported WREA (split from the Science, Technology and Environment Agency-STE) building the capacity of concerned Lao staff in the areas of environment economics: (i) policy makers (50); and (ii) researchers (150). Around 200 staff (central and provincial levels) have been trained.



Lao participants attending in EEPSEA's annual workshop and other training workshops



Main resource persons:
Dr. Herminia FRANCISCO
Dr. Orapan NABANGCHANG
Dr. Adis Israngkura
Dr. Benoit LAPLANTE



Dissemination Workshop on Small Research Grants Program in environmental economics on July 25th, 2008, Vientiane Capital, Laos

WREA The Science, Technology and Environment Agency, created in 1993, was split in June 2007 into two different institution, namely: (i) National Science and Technology Agency-NSTA; and (ii) Water Resources and Environment Administration -WREA. WREA's main duties are to manage, monitor and assess water resources and environment management at the national level. The National Environment Committee and the National Mekong River Committee, serving at the national Apex Body were established. A Vice Prime Minister is chairing these committee, having Ministers and Vice Ministers as members, and WREA serves as Secretariat.

Web site: www.wrea.gov.la

Four Small Research Grants Programs

(A). Valuing Environmental Services Using Contingent Valuation

The Sustainable Development and Maintenance of Urban Parks: A Case Study on Saysetha Park

The study investigated the WTP of residents for the sustainable development and maintenance of urban parks in the city using Saysetha Park. Vientiane residents recognized the importance of the Park. Residents' mean WTP is 10,741 Kip/month/household. Proposed vehicle of payment will be the monthly water bill for the future sustained maintenance of urban park in the capital. The study has contributed to the Park renovation as well as others' maintenance in the Capital City.



Old Park



Preparing Land at park field



Current View of Saysetha Park

Using CVM for In-Situ Biodiversity Conservation and Sustainability: A Case Study of the Houay Nhang Protected Area

The study assessed the WTP for biodiversity conservation and sustainability in the Houay Nhang Protected Area. The sole remained PA in Vientiane Capital and is under threats: illegal littering and logging. Using CVM, the WTP responses showed that the monthly contribution that would be accepted to the people is 5,000 Kip. The logit regression shows that this WTP value is influenced by bid prices, gender, and educational levels. The respondents recognized the importance of the protected area for environmental and biodiversity protection. There is discussion with appropriate development partners and private sectors to support the Project on the Conservation of Houay Nhang PA and services.



Face to face interview



Jatropha's seeds garden in the area of HNPA



Illegal Littering in HNPA

(B). Cost Effectiveness Analysis

An Assessment of Paper Mill Wastewater Impacts and Treatment Option in Vientiane Capital City, Lao P.D.R

There were six pulp and paper mills operating throughout the country. Five were located in Vientiane Capital and one in Vientiane Province. These were small-scale pulp and paper mills with less than 200 tones of output per day.

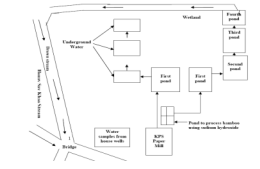
The KPS Paper Mill is located in Ban Illai, Nasaythong District, Vientiane Capital. The factory operates 24 hours a day, 6 days a week. There were about 150 workers at the factory, 45 of which are female.

The objective was to analyze the cost of environmental damage caused by the KPS Paper Mill and perform a cost analysis of possible waste treatment options for the mill. The study found that A USD 1.00 investment in wastewater treatment can reduce 0.06 and 0.09 kilogram of BOD using activated sludge and stabilization ponds as treatment options.

In implementing an effective wastewater management system, the following are recommended to apply cleaner technologies to minimize water consumption and reduce generation of wastewater at the source. Set up monitoring plans for the management of the system and to keep track of water quality.

The government should also strengthen its capacity to regulate and monitor industries in order to ensure that they perform the necessary wastewater treatment.

The study has contributed to the approval of the National Environment Quality Standards Regulations and the Environment Impacts Assessment Decree in November 2009, as well as the finalization of the National Strategy on Hazardous Chemicals and Substance up to the year 2020.



The pollution of the Houay Say Khao Stream by the KPS Paper Mill



Deepen the yellow color of paper



Workers at KPS Paper Mill Factory

(C). A Cost-Benefit Analysis

A Cost-Benefit Analysis of Hydrogen Energy Production by Hydropower Dams in Saravan Province, Lao PDR



FGD with Saravance PWREO



Visit Xeset 1 Dam site

This report studies the potential of Hydrogen Energy Production from hydro powers in Lao PDR, especially water release from the run-off river hydro power plant, with the aim to minimize bank erosion from water release, to add value and to optimum use the country's water resources.

Xeset 1 Hydro power plant, a run-off river dam, with a high level of water overflow out, located in Saravan Province, Southern part of Laos was chosen as our case study due to availability of data and information.

The Water Electrolysis Method using electricity from Hydro power plant would be one of the most suitable ways for hydrogen production in our country. As Laos has great potential of water resources and hydro power plant development, production of hydrogen as energy could be realized in the country.

Ratios of NPV and B/C were quite high, indicating good feasibility of the investment or project. However, it should be noted that the marketing costs were not included, and there is assumption that all hydrogen production will be sold.

The study contributes to the Prime Minister Decision on the needs of National Renewable Energy up to the year 2020, including further deep study on the realization of Hydrogen Energy Production Plant in the country.

EEPSEA is an international secretariat administered by Canada's International Development Research Centre (IDRC) on behalf of EEPSEA's sponsors:



Canadian International Development Agency



SWEDISH INTERNATIONAL DEVELOPMENT CO-OPERATION AGENCY



Centre de recherches pour le développement international



What is EEPSEA? The Economy and Environment Program for Southeast Asia was established in May 1993 to support training and research in environmental and resource economics. It uses a networking approach to provide financial and technical support to researchers in its ten member countries: Cambodia, China, Indonesia, Laos, Malaysia, Papua New Guinea, Sri Lanka, The Philippines, Thailand, and Vietnam



Web site: www.eepsea.org