

# Impact of mining on water quality and heavy metal dynamics in southern Lao PDR : A brief report

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Though mining is one of the important industries that contribute to the economic development of country. It sometimes gets worse the environment. By raining a large volume of waste water, it can give a negative impact on the environment, especially water resources. Lao PDR is the developing country and well-endowed with the potential mineral resources. Lao' s mineral sector has been a strong economic driver of the Lao PDR during the last decade and plays an increasingly important role in the country' s economic development. It is rapidly becoming an important source of economic growth, national revenue and a driver for local community development and planning of poverty alleviation. Mining industries range from a small scale made by the local peoples to a large scale made by investors. This is expected to cause impacts the local water quality due to different management in each area. For the sustainable development with a good balance between industry and environment in Laos, it is necessary to understand the water systems and the impact of management on material transport characteristics based on scientific evidence. This study focus on two area: one is the Sepon Gold and Copper Mine (manage by Australia investors with a good mining system) and another is the mining area in Hinboun district (many small scales of mining made by local peoples and investors with not good systematic) to evaluate water quality under different management. Our presentation shows a brief report using chemical concentration and isotope composition.

Keywords: Water pollution, Waste water from mining