IMPACT OF ILLEGAL GOLD MINING ON SMALLHOLDER RICE FARMING IN THE ASHANTI REGION: THE CASE OF THE ANUM VALLEY IRRIGATION PROJECT AND RAIN-FED LOWLAND RICE PRODUCTION FIELDS.

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Abstract - The paper examines the impact of gold mining activities on rice production in the Ashanti region of Ghana. It focuses on the Ashanti Akim North and the Ejisu Dwaben Districts where illegal gold mining has been rampant in the last 10 years. The farmers downstream are losing farmlands to illegal mining by encroachment, seizure, land degradation and pollution. My research aimed to improve the production of the smallholder rice farmers by identifying specific impacts of illegal gold mining affecting rice production in the affected districts. This supports the promotion of sustainable land and water management while contributing to Ghana's goal of becoming rice self-sufficient by 2018. Semi-structured questionnaires and random sampling techniques were used to obtain the data from 80 respondents from 4 communities in the Ashanti Region. Focus group discussions among affected rice farmers and key informants were conducted in 2017. The views of the stakeholders in the rice value chain in the districts were considered. From the study, rice farmers have suffered yield loss from 30 bags per acre to 21 bags per acre after substantial illegal mining activities were first observed in 2007. Ninety-two percent of the respondents claimed that their fields suffered from pollution in their irrigation water, farmland encroachment (75%), farmland degradation (68%) and farmland seizure (22%). The responses indicated that illegal mining has affected farmers' health with malaria (94%), cough (91%), irritation of ear, nose, and throat (ENT) (95%). Farmers contracted malaria within every 2 months, due to the abundant mosquito breeding sites created by the abandoned uncovered trenches and dugouts by illegal mining. A cost-benefit analysis shows that the external cost to individual farmer's production alone is $700 per year ($350 per planting season) while the relative health costs to a farmer are $108. The perceived total cost of flushing out on illegal gold miners in the District is $7500 an amount that could have been used to promote food security in the districts. The study revealed that the sustainable rainfed low land rice development project field which is located at Konongo has been severely degraded so much that the project was discontinued this year. Smallholder rice farmers and their farmlands need to be protected from the impact of illegal gold mining if Ghana is to attain the goal of rice self-sufficiency.

Index Terms - Environmental Pollution and Degradation, Farmland Encroachment. Impact of Illegal Gold Mining,Smallholder Rice Farming.