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## Community-based Early Warning and Adaptive Response System (EWARS) for mosquito borne diseases: An open source/open community approach

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**Abstract.** A variety of studies around the world have evaluated the use of remote sensing with and without GIS in communicable diseases. The ongoing Ebola epidemic has highlighted the risks that can arise for the global community from rapidly spreading diseases which may outpace attempts at control and eradication. This paper presents an approach to the development, deployment, validation and wide-spread adoption of a GIS-based temporo-spatial decision support system which is being collaboratively developed in open source/open community mode by an international group that came together under UN auspices. The group believes in an open source/open community approach to make the fruits of knowledge as widely accessible as possible. A core initiative of the groups is the EWARS project. It proposes to strengthen existing public health systems by the development and validation a model for a community based surveillance and response system which will initially address mosquito borne diseases in the developing world. At present mathematical modeling to support EWARS is at an advanced state, and it planned to embark on a pilot project

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