



EWA-BELT

Linking East and West African farming systems experience
into a BELT of sustainable intensification

Promoting remote real time crop health services to rural communities in West and East Africa: Remote PLANT HEALTH Diagnostic platform–Planthead

Practice Abstract n.3

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Several partners of the EWA BELT project are contributing to the implementation of a PLANT HEAlth Diagnostic (PLANTHEAD) network in Africa, to promote real time diagnosis and environment–friendly crop protection approaches in resource–constrained environments lacking the organizational and/or the sociotechnical system resources to cope with crop health diseases. The network is based on the World Food and Health Security e–Center (HFSeC), and is based on Internet of Things, wearable technologies and mobile devices. The proposed approach conjugates the adoption of low cost, high throughput technologies with a web–based service for farmers, extension, and local research personnel to enable and facilitate: 1) social networking, 2) participation, 3) apo mediation, 4) openness, and 5) collaboration, within and between user groups. Valorization of traditional knowledge, involvement of local actors, and technology appropriation will increase the likelihood of success of the PLANTHEAD network. The shared database represents an extremely valuable tool for epidemiological studies, as it generates interactive georeferenced maps, thereby allowing real–time monitoring, modelling, and forecasting the progression of a pathogen or any pest that may raise serious food security/safety concern in the area. An artificial intelligence is being trained to recognize and identify the most common foliar diseases on groundnut, a crop that has been unanimously listed as the most grown by the partners in the involved sub–Saharan countries.



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