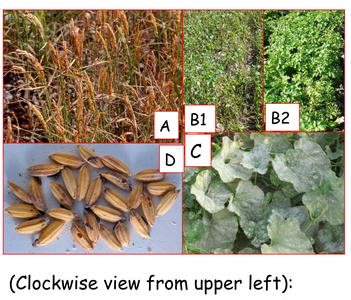
Infopoverty Community of Expertise e-services for development

E-PHYTOPATHOLOGY AND PARASITOLOGY

The Department of Agri-food and Urban Systems Protection (DiPSA) - Milan State University, in partnership with OCCAM is designing and implementing a pilot project for e-Phytopathology and Parasitology for primary diagnosis of plant diseases and parasite causing epidemics and severe crop loss, as a first aid tool to implement Integrated Pest Management in agriculture from remote access-points.

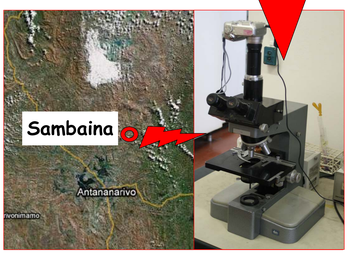
A successful integration of knowledge, technologies and communication, through advanced ICT, will secure minimal appropriate, sustainable and effective technology to reduce crop loss due to uncontrolled epidemics of diseases and pests and to enhance food quality for a sustainable agricultural system.



(Clockwise view from upper left): Serious crop loss due to epidemics of A) rice brown spot and blast, B1) potato blight compared to B2) healthy crop, C) cucurbit powdery mildew and D) rice infested by Lesser grain borer

In Sambaina, DiPSA and OCCAM will create a remote Phytopathology and Parasitology Laboratory equipped to acquire and transfer digitalized images of diseased plants or pests.

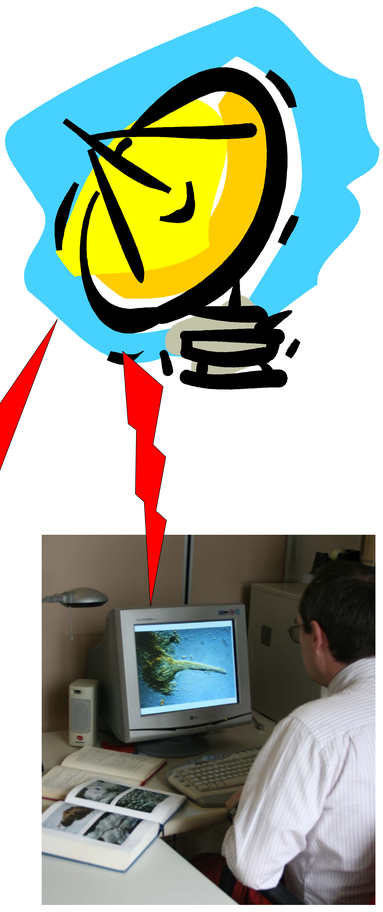
Local personnel, selected within respected leaders of the rural community, will be specifically qualified to run the remote laboratory.



Centre of action at Sambaina: the remote e-laboratory equipped with microscopes and digital camera with satellite-connection

Digitalized images will be satellite-transferred to the Centre of competence e-Phytopathology and Parasitology based at DiPSA, within the Faculty of Agriculture of the Milan State University.

The long term objective of the project is to reduce poverty and isolation, giving isolated rural communities access to a composite network where the needs for a successful crops and produces protection will receive qualified answers.



Centre of competence at DiPSA: digitalized images will be analyzed to provide scientific information and practical advice to manage parasite epidemics

Such pilot projects could become virtuous paradigms to be replied worldwide, with the involvement and the investment of International Institutions and Agencies, in order to secure food and prosperity for all.