Rapid Eye XS

Over the last 10 years HiView, together with FutureWater, has been deploying a range of drones boarding various sensors, both in the visible and non-visible parts of the electromagnetic spectrum. Information from drone data is transferred to usable knowledge by our highly qualified scientific staff, using state-of-the-art software packages. Clients include professionals ranging from the science community, decision makers, natural resources managers, and farmers. They deliver our services world-wide with a particular focus on Europe, Asia and Africa. Typical examples of clients are: universities, research centres, farmers, NGOs, World Bank, governments, river basin organizations and water boards.

At present FutureWater and HiView developed a revolutionary new camera module , the Rapid Eye XS, which is an affordable lightweight camera (appr. EUR 600) designed to revolutionize small-scale agriculture. The RExs model that is designed for use in agriculture disposes of a near-infrared (NIR) camera and an on-board processing unit providing real-time NDVI maps that offer valuable insights into crop health and canopy coverage, enabling immediate identification of problematic areas. Farmers in remote regions can now receive direct advisory from pilot-extensionists, referred to as AgPilots, who can share the NDVI maps directly with them via mobile phones or tablets. Real-time advisory empowers farmers with actionable insights, enhancing farming practices. In summary, the Rapid Eye XS leads to improved productivity, optimized resource utilization, and reduced environmental impact. A video of the Rapid Eye XS can be found here.

Its affordability enables access for resource-constrained farmers, while its user-friendly design ensures easy operation without extensive training. Last month, FutureWater and HiView successfully completed a comprehensive training program for the Agency for Development of the Zambeze Valley (ADVZ) in Mozambique. The intensive training program spanned six full days, combining both practical in-field exercises and focused sessions on image processing at the ADVZ office. During the in-field training, participants honed their piloting skills and gained valuable experience in image interpretation, while the image processing sessions equipped them with the necessary skills to analyse and derive insights from collected aerial data. To further enhance their processing capabilities, online follow-up sessions will be conducted over the coming weeks. More information can be found here.

By providing farmers with essential data generated by the low-cost drones they can tailor their inputs according to the needs identified by the NIR camera. In this way, irrigation water can be applied in a precise matter, saving water, and pests and diseases and nutrient deficiencies can be detected. By solving these issues, in consultation with the farmer, a significant yield increase can be accomplished, leading to more crop per drop of water. Several previous projects of FutureWater and HiView have demonstrated this already.