

Sustainability of rice landscapes in South East Asia threatened

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This shows rice terraces at Batad, Banaue district, Philippines (UNESCO World Heritage Site). Credit: L. Penev

During a meeting in Banaue, The Philippines, scientists from 21 research institutions from Germany, Vietnam, The Philippines, Thailand, UK, Bulgaria and Spain raised several concerns on the future of the rice ecosystems in South East Asia. The meeting was organized within the framework of the international project [LEGATO](#) that deals with the multiple risks for rice ecosystems arising from various aspects of global change.

"Threats to sustainable rice production are diverse and come from different directions. Global change is a very important threat, but certainly not the only one. Human mistakes and political neglect can be even more dangerous", said Dr Joachim Spangenberg from the

Helmholtz Centre for Environmental Research (UFZ), Germany. "For example, the unique rice terraces in Banaue, The Philippines ([UNESCO World Heritage Site](#)), and in Sapa, Vietnam, are endangered because the local farmers are not properly credited for their maintenance. The terraces attract an increasing attention of the touristic industry, which should pay back to the farmers on whom its very existence depends!", added Dr Spangenberg.

"The misuse of pesticides in rice production destroys the natural biocontrol mechanisms. Farmers are used to spray their fields, often under the advice of local pesticide retailers, at a too early stage after planting. These sprays create favorable conditions for pests, such as the brown rice hopper. They insert their eggs into the rice stems and are protected from the pesticides that kill off instead their [natural enemies](#), such as [parasitic wasps](#) and egg [predatory insects](#)." commented Dr KL Heong, a principal scientist at the [International Rice Research Institute \(IRRI\)](#) in Los Banos, The Philippines.



Initiatives have been started in the Banaue Valley to restore abandoned former terrace areas. Credit: J. Settele

"It is not sufficient, and may even be considered as a completely outdated practice, to view the rice production only within the perspective of its quantitative growth. The fundamental idea of the LEGATO project is to advance long-term sustainable development of irrigated rice fields, in a harmony with the surrounding landscapes, biodiversity and cultural heritage of the local communities" concluded the project leader Dr Josef Settele from the Helmholtz Centre for Environmental Research (UFZ), Germany.

Provided by Pensoft Publishers

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