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Sustainable Land Management and Resilience to Climate Change in Tajikistan

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Abstract

In Tajikistan, the increasing pressure on available land combined with inappropriate land use practices has led to widespread unsustainable land management. As a consequence, rural livelihoods that support the majority of the population are being negatively affected by land degradation such as fertility decline due to soil nutrient mining, soil erosion due to bad vegetation cover management, and inadequate forest management due to demands for fuel and timber. For the coming years, it is expected that Tajik agriculture faces varying climate change impacts which, on the whole, will further deteriorate production conditions and thus adversely affect the economy and rural livelihoods. With the existing land degradation impacts noted above, sustainable land management (SLM) strategies and practices become even more critical for Tajikistan. SLM can enable land users to adapt, as well as become more resilient, to climate change by conserving soil and water, restoring productive natural resources, enhancing food security and increasing food production. In order to develop strategies for climate resilient adaptation of land management, knowledge is needed on the state of land resources in Tajikistan today and on SLM opportunities for climate change adaptation. Therefore, an inventory of relevant past and current projects/initiatives in SLM was prepared using the WOCAT (World Overview of Conservation Approaches and Technologies) framework. Case studies on SLM technologies as well as SLM approaches covering all major land use types in Tajikistan were documented through interviews with land users and SLM specialists. The case studies were then assessed for their climate resilience applying the newly developed WOCAT climate change module. In order to test the documented SLM technologies and approaches for their applicability, workshops were organised with rural communities in the different agricultural zones of Tajikistan. Experienced and anticipated climate change impacts on the communities were discussed and land users selected and assessed those SLM practices they regarded the most suitable ones for climate change adaptation in their context. The goal of this study was to identify best SLM technologies and approaches to improve rural livelihoods and resilience to climate change and to make recommendations for their up-scaling.

Keywords: Adaptation, climate change, land degradation, resilience, rural livelihoods, sustainable land management

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