How new healthy food habits, like eating more quinoa, can increase social-economic and nature care responsibility in new agro-biodiversity scenarios.

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Abstract

Eating quinoa is becoming an important diet change for humans of developed countries that do care about nature and about food quality. This opens the question on where this resource will come from in the future and what it could mean for biodiversity conservation issues. This change will surely imply social-ecological consequences and opportunities for changing farming systems towards ecological agricultural intensification. I analyze sustainable use of quinoa for not disturbing agro-biodiversity, ensuring food security and economical equilibrium from producers to consumers. I suggest governance issues that could ensure these goals. This would require top-down decisions in developed countries in agreement with similar decisions to be taken in underdeveloped countries, from where quinoa is a major source. Behavioural changes in humans are needed to consolidate sustainability and sense of responsibility for nature. For this we need technical understanding of risks under no-change (business as usual) scenarios. Increasing the knowledge of functional foods like quinoa might be of great help but also increasing the knowledge of risks in ecosystems under scenarios like high-inputs agriculture or at high CO2-emissions. Strong science-policy interfaces are suggested, including all major stakeholders from farmers (quinoa producers) to consumers of all social-economic levels.