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Economic Impacts of Invasive Weed Species in Developing Countries: the Case of *Parthenium* in Ethiopia

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Abstract

Invasive Weed Species are plants that are non-native (alien) to the ecosystem and whose introduction threatens food security, health or economic development and biodiversity. The highly competitive and allergenic weed *Parthenium hysterophorus* was introduced to Ethiopia in 1970s. The weed has spread to the most parts of the country with high infestation rates in grasslands and even in crop fields. It is growing in different habitats from semi-arid low altitude to high-altitude areas. Interviews with farmers and researchers were conducted in several Ethiopian regions in 2006. Semi-structured question guidelines were used in group interviews among 64 farmers to achieve relevant data. Quantitative and qualitative information was collected about yield decline in fields and grassland, decline in animal production, effects on human and animal health and additional labour input due to *Parthenium*. Results show that the existence of *Parthenium* is a growing danger to small-scale farmers: tef and sorghum grain yields are reduced; milk output from dairy cows is decreasing to one third; the remaining milk is inedible due to its sour taste; animals suffer from skin allergy and reduction in weight; farmers suffer from skin allergy, itching, fever and asthma; intensive labour input has to be made in order to clean the crop fields. Even though exact figures cannot be given at the moment due to ongoing evaluation of the obtained data it can be said that the economic dimension of the problem seems to be tremendous. *Parthenium* is a current threat for further economic development in the rural areas of Ethiopia. Therefore effective methods have to be found in order to combat *Parthenium* and other Invasive Weed Species.

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