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Invasive Alien Plant Species in Ethiopia: Impacts, Challenges and Responses

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Abstract

Invasive Alien Species (IAS) are of a great concern in Ethiopia, posing particular problems on biodiversity of the country, agricultural lands, range lands, national parks, water ways, lakes, rivers, power dams, roadsides and urban green spaces with great economic and ecological consequences. Foremost among these are *parthenium* weed (*Parthenium hysterophorus*), prosopis (*Prosopis juliflora*), water hyacinth (*Eichhornia crassipes*), cactus (*Euphorbia stricta*) and lantana weed (*Lantana camara*). They have been identified by the Environmental Policy and the National Biodiversity Strategy and Action Plan as a major threat to biodiversity of the country and economic well being of its people. However, little attempt has been made in terms of research and management of IAS. Their high seed production capacity and spread, adaptation to wide climatic and soil conditions, spread by animal movement and their association with pastoralists way of life and overgrazing are challenges to their management in Ethiopia. Manual control of *parthenium* by farmers resulted in some of them developing skin allergies, itching, fever, and asthma. Prosopis form impenetrable thicket that prohibits free movement of people and animals and its thorns damage eyes and hooves of animals. The social cost of *parthenium* in Ethiopia was measured by Disability Adjusted Life Years and its equivalence in terms of monetary value was estimated at 2,535,887–4,365,057 USD. More resources have to be invested to tackle the IAS problem as the estimated loss is disproportionate to the cost of investment on IAS research and development activities. This paper attempts to document the available research information on IAS, i.e, distribution and spread, impacts, control measures and suggest the future prospects on research and management.

Keywords: Invasive alien species, *Parthenium*, *Prosopis*, water hyacinth