ECONOMIC USE OF UNDERUTILIZED PLANT SPECIES IN ADDRESSING CLIMATIC STRESS AND FOREST HEALTH

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Abstract - Invasive alien plant species (IAPS) is known as the underutilized species and have detrimental impact on the forest condition, livelihood and to the native ecosystem. However, its study in utilization and management, benefits and economic aspects has been undermined. Utilization and proper adaptation of invasive plants supports the local livelihood of forest-based communities and helps to minimize the spread of invasions through management in near future. So, we conducted a review to identify the gaps, pattern of studies, focusing in the invasive plant species around the world. A systematic review of literature published between 2000 and 2020 was undertaken to study the trend of invasion, climate change scenario and economic use of the invasive plant species. Out of the 500 identified articles, only 39 met our predefined criteria. One of the studies covered the global theme while six of the publications were focused on regional scale. Nearly 36% of the studies were focused in studying the management and use of IAPS while majority of the studies i.e. 54% had discussed the climate change and other parameters as a supporting factor to increase the distribution of IAPS in near future. There is a high level of disparity in the studies conducted among the developed and developing nations. Economic use of invasive plant such as in the making of IAPS craft and bio briquette will not only help to generate economy to the forest-based communities of developing nations but also proves to be key adaptation strategy in mitigating the effect of climate change impacts.

Keywords - Underutilized, Invasive Plant Species, Economic Use, Forest Health, Climate Change, NEPAL