Invasive Alien Species and Climate Change

August 1, 2020 What are Invasive Alien species?

Invasive alien species (IAS) are animals, plants or other organisms that are introduced into places outside their natural range, negatively impacting native biodiversity, ecosystem services or human wellbeing.

Invasive Alien Species(IAS) and Climate Change

- IAS are one of the **biggest causes of biodiversity loss** and species extinctions, and are also a global threat to food security and livelihoods.
- IAS are compounded by climate change. Climate change facilitates the spread and establishment of many alien species and creates new opportunities for them to become invasive.
- Extreme climatic events resulting from climate change, such as hurricanes, floods and droughts can transport IAS to new areas and decrease the resistance of habitats to invasions. Climate change is also opening up new pathways of introduction of IAS.
- IAS can reduce the resilience of natural habitats, agricultural systems and urban areas to climate change. Conversely, climate change reduces the resilience of habitats to biological invasions.

Examples of invasive species

• The Water hyacinth (Eichhornia crassipes), originally from South America, is now a major invasive species occurring worldwide. It forms a dense cover on the surface of freshwater bodies. Its populations are known to double in as little as 12 days, blocking waterways,

limiting boat traffic, and affecting fishing and trade. In Lake Victoria in eastern Africa, it can grow to such densities that ships are unable to leave docks.

• Ship Rats (Rattus rattus) Native to the Indian subcontinent, ship rats (Rattus rattus) are an invasive species occurring throughout the world. They are frequently identified with catastrophic declines of birds on islands, and transmit the plague bacterium via fleas in certain areas of the world.

What can be done?

- As the impacts of IAS are increasingly compounded by a changing climate, policy responses addressing these issues need to take into account the links between the two issues.
- Climate change policies can incorporate IAS, by including IAS prevention and control, and by ensuring that measures to address climate change do not increase the threat of IAS