15.3.4

Does your university as a body have a policy to reduce the impact of alien species on Campus?

TO REDUCE THE IMPACT OF ALIEN SPECIES ON CAMPUS

POLICY

INTRODUCTION

This Policy provides the exclusive mechanism for Samarkand State University and focuses on the policy reducing the impact of alien species on Campus.

Alien or non-native species are animals, plants or other organisms introduced by humans, either intentionally or accidentally, into areas outside their natural range. Some of these species become established and negatively impact native biodiversity. These species are classified as invasive alien species (IAS). Due to the increase in the movement of people and goods around the world, and with new trade routes opening and enhanced transportation, the number of species being introduced into new areas is rising. A 2017 study in the journal Nature Communications found that over one third of all introductions in the past 200 years occurred after 1970. According to The IUCN Red List of Threatened SpeciesTM, IAS are one of the top causes of biodiversity loss and the second most common cause of species extinctions. The brown tree snake (*Boiga irregularis*), for example, is responsible for the extinction of 10 bird species on the island of Guam where it was introduced in the 1940s. IAS also constitute the most significant threat to natural World Heritage sites, affecting 68 out of 241 sites, according to the IUCN World Heritage Outlook. IAS impacts go beyond biodiversity and also seriously affect economic activities, livelihoods, food security, and human health and well-being. Overall, IAS risk undermining progress towards achieving 10 of the 17 UN Sustainable Development Goals (SDGs).

DEFINITIONS

What are Invasive Alien Species? – Invasive Alien Species (IAS) are any species that are not native to an area but which are able to establish themselves and often spread quickly, causing

environmental or economic damage. In its native range, a species will be kept in check by environmental factors and predators. In a new territory, without those same controls, it can thrive and take over. When IAS are successful, they use up resources quickly, outcompeting other native species and altering the ecosystem.

Many people believe that the spread of IAS is a natural occurrence and that we should allow nature to take its course. For the IAs issue, we are only concerned with harmful species that are spread by human activity, either intentionally or unintentionally and become invasive. There are many pathways by which species can spread, but some of the most common ones are the trade of goods and materials, the shipping industry, and recreational activities.

Why are Invasive Alien Species a problem? – IAS are one of the biggest threats to biodiversity worldwide, and we need biodiversity! Native species evolve and adapt to form their own unique niche, and a delicate balance is required to keep all elements of the environment functioning in a healthy way. IAS alter that delicate balance. In many cases invasive species can displace a similar native species by competition or can carry a disease that can kill the native.

The crayfish plague, carried by invasive crayfish, has resulted in the extinction of the white clawed crayfish in many European countries. Impacts can also be economical; e.g. invasive alien crop pests can reduce agricultural yields. Biofouling shellfish, e.g. zebra mussel, can block water abstraction pipes. Growing global trade and transport creates ever increased risks of spread. Once an IAS is established, it is usually impossible, or economically prohibitive, to eradicate. Management then becomes an ongoing issue, with a high cost. The estimated associated cost of IAS management in the EU is €12 billion per annum.

POLICIES

Invasive Species Reduction- By creating a sustainable global network of all stakeholders to develop and effectively share open high-quality knowledge and open data on invasive species, biological invasions can be better understood and managed.

Facilitation of the development and delivery of high quality open knowledge and open data on biological invasions and invasive alien species to all stakeholders globally is the priority objective of the Association. This primarily objective is achieved by:

- Enabling enhanced accessibility to open sources of knowledge including thematic open access journals and to existing open databases on IAS;
- Encouraging and facilitating free access to results of scientific research of biological invasions and invasive species globally, specifically by encouraging open access publications of scientists and other data holders;
- Developing relevant funding infra-structure to support open access publications on IAS;
- Working with commercial publishers to encourage free access of all IAS-related research and data published in their journals and books.

Overall the university aims to uphold the following standards:

• It is necessary to maintain protection and protected areas,

• Study and monitor invasive species and develop measures to reduce invasive species;

• It is necessary to prevent damage to ecosystems by invasive species, to protect nature, to investigate and conserve biological diversity.