



# **A3.5 a Successful cases of cross-border cooperation on IAS management**

Project **INVALIS**  
Protecting European Biodiversity from Invasive  
Alien Species



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## Summary

This document highlights successful actions of cross-border cooperation on IAS management. This deliverable thus corresponds to Task A3.5 a Input paper on successful cases of cross-border cooperation on IAS management, led by ICETA (Portugal). The present document has been drafted based on the EU policy learning event, organized by ICETA, on may 31<sup>st</sup> of 2021. Three projects have been highlighted as especially successful cases of cross-border cooperation on IAS management, namely projects LIFE INVASEP, INVASAQUA and Sava TIES. and Edia's experience with IAS.

## 1. Introduction

Invasive Alien Species (IAS) are a major threat to biodiversity and natural ecosystems, representing the second biggest menace for biodiversity after habitat destruction. Their environmental impact can range from single-species interactions and reduction in individual fitness of native species to population declines or extinctions, changes in community composition and effects on entire ecosystem processes. Invasion also has economic and human health implications. Evidence shows that invasive species cause damage worth of billions of Euros to the EU economy every year. There is an upward trend in the establishment of new species in Europe's ecosystems, which indicates that the problem is far from under control. This is due to a) the increased international transport of foods and goods, including tourism, b) the intentional introduction of foreign species for economic reasons (e.g. aquaculture, farming), and c) the increasing vulnerability of ecosystems, resulting from pressures such as degradation and climate change.

Non indigenous species, which have been introduced through different pathways and vectors in natural ecosystems, can easily move across the European territory (incl. marine environments); making thus IAS management a transnational issue. Taking into account the different pace and conditions among the INVALIS territories concerning the protection of natural ecosystems from invasive alien species (Environmental Review – 2017), interregional cooperation will allow exchange of experiences on determining efficient eradication/control methods, managing emerging conflicts of interests and engaging local communities in the management process, based on regional specificities and challenges.

Territorial authorities play an essential role in shaping and implementing environmental policies to deal with the problem of invasive alien species (IAS) that threaten biodiversity and ecosystem services. They have direct responsibilities associated with managing current and preventing new biological invasions (as prescribed in the EU Regulation 1143/2014), such as maintaining a surveillance system for detecting, reporting and monitoring IAS presence/distribution, raising public awareness about the associated environmental and

socioeconomic risks, implementing appropriate response actions, and taking measures to increase regional ecosystems' resilience. The INVALIS project has thus been developed to address the common territorial challenges associated with biological invasions; a phenomenon not limited to specified geographical borders. Going for an interregional approach will help benefitting from more efficient share of scientific knowledge (incl. the exchange of good practices), better coordination of policies and interdisciplinary collaborative approaches.

The project is fully aligned with the EU Regulation 1143/2014, which sets out rules to prevent, minimize and mitigate the adverse effects of IAS on biodiversity and ecosystem services, and supports the implementation of the Marine Strategy Framework Directive (2008) that provides a robust framework for the protection of marine environments from non-indigenous species.

The EU policy learning event was organized by ICETA on May 31<sup>st</sup> 2021 within the scope of INVALIS. This event had the objective of providing an opportunity for academics, technicians, managers and enforcement agencies to exchange and discuss the main successful cases of cross-border cooperation on IAS management. At the end of the meeting, three main cases were highlighted: projects Life INVASAQUA, INVASEP and Sava TIES.

## **2. Life INVASAQUA**

LIFE INVASAQUA is a knowledge transfer project implemented jointly by Spain and Portugal. It is coordinated by the University of Murcia and benefits from the participation of 8 additional partners: EFEverde (Agencia EFE), International Union for Conservation of Nature-Centre for Mediterranean Cooperation, National Museum of Natural Sciences-Higher Center for Scientific Research (MNCN-CSIC), Iberian Society of Ichthyology (SIBIC), University of Navarra, University of Santiago de Compostela, University of Évora and the Associação Portuguesa de Educação Ambiental (ASPEA).

The main objective of LIFE INVASAQUA (2018-2023) project is to raise awareness of the Iberian public and stakeholders involved with the problem of IAS on aquatic ecosystems. In addition, the project aims to develop tools that improve an efficient early warning and rapid response framework in the management of new IAS that may appear in freshwater habitats and estuarine habitats.

This project will increase the communication and dissemination of information on IAS and facilitate the knowledge exchange on successful environmental solutions and practices through the development of cooperation between interested parties. The specific objectives are:

- Support and facilitate the implementation of the EU Regulation on IAS by creating synergies between knowledge creation and management. LIFE INVASAQUA will develop courses and training days, create priority management lists (Black List of Iberian IAS, Alarm List, etc.) and facilitate the implementation of a trans-Iberian strategy for the management of aquatic IAS.
- Increase and improve Iberian capacity for early detection and rapid response in the management of IAS (EWRR) through awareness and training of key groups (surveillance agents, rivers and estuary users, educators and knowledge multipliers, etc.). LIFE INVASAQUA will develop codes of conduct on aquatic IAS, training and information campaigns, etc.

- Raise awareness on the general public about the threats caused by aquatic IAS through a mass media communication campaign. Involve the public and relevant stakeholders in monitoring activities with specific training and information materials.

Examples of implementation actions are:

- Trans-iberian communication and information campaign addressed to managers & decision-makers, ngos and scientific community.
- Trans-iberian communication, information and training campaign addressed to key groups.
- Trans-iberian information and communication campaign addressed to the general public (citizens)
- Awareness and engagement for the collection of IAS data.

Overall, despite ongoing and still with few results, Life INVASAQUA is an example of a successful cross-border cooperation between Spain and Portugal, aimed at preventing, early detecting, managing and raising awareness. Furthermore, the fact that the project involved several institutions, from academic to disseminating entities, is another indicator of its potential, and should serve as an example for other international cooperation in IAS actions.

### **3. Life INVASEP (2012-2016)**

Administrations responsible for environmental management, and the drainage basins in Extremadura and the Alentejo region (Portugal) proposed a project which would help in combating alien invasive species. Particular measures would be adopted in order to carry out that task, such as preventive measures, protocol development, or the establishment of control/eradication strategies, all of them being part of the transboundary collaboration between Spain and Portugal.

The Directorate General for Environment in the Department of Agriculture, Rural Development, Environment, and Energy of the Government of Extremadura is the beneficiary-coordinator of the LIFE/NAT/ES/000582 Project “Combat invasive species in the Tajo and Guadiana drainage basins in the Iberian Peninsula”. This project was approved in 2011 with a total budget of 2,895,267€; and it is cofinanced to 48,55% by the LIFE+ Fund.

The LIFE INVASEP project has served as the basis for the development of a document called “Governance and Strategies for the fight against IAS in the basin of the Guadiana” whose main objective is to be a useful tool for the fight against those IAS present in the Guadiana basin that directly affect the water quality and / or the uses made of it. This mode is intended to establish which are the lines future action and strategies to improve prevention, control and, where appropriate, eradication work, of these species. The document aims to be strategic and therefore it must be modified and updated according to the needs, proposals that may arise or future evolution of the problem that currently it supposes the appearance of invasive species.

The Guadiana Hydrographic Confederation acts as one of the seven collaborating entities of the LIFE 10 / NAT / ES / 000582 project entitled “Fight against species invasives in the basins of the Tagus and Guadiana rivers in the Iberian Peninsula ”(INVASEP)”, being the General Directorate of the Natural Environment of the Junta de Extremadura who coordinates the actions, and the rest of the partners:

- Empresa de Desenvolvimento e Infraestruturas de Alqueva, S. A (EDIA-Portugal).
- Extremadura Scientific and Technological Research Center (CICYTEX).

- Tagus Hydrographic Confederation (CHT).
- Society of Public Management of Extremadura, S. A (GPEX).
- Tecnología y Servicios Agrarios, S. A, S. M. E, M. P (TRAGSATEC).
- Agroforestry Company of Extremadura (AGROFOREX).

It is the first transboundary project focused on the fight against invasive alien species, through which it is intended to combat these species in the basins of the Tagus and Guadiana rivers. The LIFE + Program is a financial instrument of the European Union dedicated, in a way exclusive, to the environment. Its general objective is to contribute to the application, updating and development of Community policy and legislation on the environment, including the integration of the environment into other policies, thereby contributing to the sustainable development. In particular, LIFE + finances measures and projects with European added value in the Member States. Through the LIFE + BIODIVERSITY program, the European Union will support the INVASEP project, an initiative led by the Regional Ministry of Agriculture, Rural Development, Environment and Energy of the Junta de Extremadura and in which also participate Portugal and the Ministry of Agriculture and Fisheries, Food and Environment (former Ministry of the Environment and Rural and Marine Affairs), being its main objective "to stop" the loss of biodiversity caused by exotic species invasive in the Iberian Peninsula.

This project seeks to achieve a series of objectives such as the fact of laying the bases of cooperation between Spain and Portugal in this matter, developing an Iberian strategy, as well as developing specific legislation and identifying the presence current invasive alien species in the Spanish-Portuguese Tajo and Guadiana basins. On this line, it is also intended to achieve the evaluation of future 'invasions', to test pilot methods against certain species such as zebra mussel, Asian clam, the American mink or the Florida turtle, among others; recover endangered species extinction and even some already extinct and increase awareness about this trouble. To achieve these objectives, a wide range of specific actions has been designed. The actions that the Guadiana Hydrographic Confederation has carried out within of the LIFE INVASEP project are the following:

Action A2. Inventory and mapping of invasive exotic riparian plants in the Guadiana river basin and its effect on biodiversity.

Action A3. Determination of the main risk areas for the zebra mussel in the Guadiana basin and practical recommendations to prevent its introduction and its control / elimination

Action C.3.1. Experimental determination of techniques for the control and elimination of Asian clam populations in the Guadiana basin

Action C.3.2. Testing and application of various methods for the elimination of Asian clam populations on the banks of the Lácara.

Action C4. Prevention to avoid the introduction of the zebra mussel (*Dreissena polymorpha*) in the Tagus and Guadiana Basins (Spain-Portugal).

#### **4. Interreg Sava TIES (2018-2021)**

IAS plants are spreading uncontrolled in the Sava River basin, affecting and even excluding other native species, reducing soil fertility and cultivable agricultural surfaces and causing major problems in flood control.

Sava TIES is regionally significant project that will be implemented in all four countries of the Sava River basin: Slovenia, Croatia, Bosnia and Herzegovina and Serbia. The main goals are to:

- Find an effective solution for permanent eradication of IAS
- Reduce habitat fragmentation
- Improve the connectivity of the transnational ecological corridor.

The emphasis is on cross-sectoral cooperation, as the desired results can only be achieved through cooperation of different stakeholders, national/local governments and local inhabitants. As part of the project, different methods of effectively removing or eradication of IAS plants which are already causing serious damage in the Sava River basin will be tested. This was the first attempt to tackle this demanding issue on a transnational corridor level in the region, with lessons learned bringing benefits to the wider Danube region and beyond.

Project partners are the EuroNatur (DE); Public Institution Ljubljansko barje Nature Park (SL); Lonjsko Polje Nature Park Public Institution (HR); Public Institution Green Ring (HR); Public

Company National Park “Una” LLC Bihać (BA); Centre for Environment (BA); Institute for Nature Conservation of Vojvodina Province (RS); Nation Conservation Movement Sremska Mitrovica (RS); Public Enterprise “Vojvodinašume” (RS).

## **5. Final considerations**

Cross-country cooperation in IAS prevention, early detection and management is complicated. Even bordering countries have different realities, resources and challenges, making successful international cooperation especially rare. However, cases studied and discussed share some aspects that might ensure success, and should be transversely implemented, namely i) involving public and private stakeholders; ii) involving broadcasting agencies from every country involved, so awareness is disseminated in multiple languages; and iii) provide ample opportunities for exchanging experience among involved entities.