The Kafue Flats is a 6,500km² floodplain located in the southern region of Zambia, between two dams; Itezhi-tezhi upstream and Kafue Gorge downstream, on the lower Kafue River. The Kafue Gorge dam was constructed in 1972, and is located at the lower end of the Kafue Flats and regulates the release of water flowing from the Flats. The Itezhi Tezhi Dam was built in 1977, and regulates flow of water into the Kafue Flats wetland from the upper Kafue system. Both dams are hydroelectric power schemes and regulate the flow of water through the Flats by managing incoming and out-flowing releases. It hosts two national parks - Lochinvar on the south bank and Blue Lagoon on the north bank, and the Kafue Flats Game Management Area that surrounds both parks.
Importance of the Kafue Flats

The Kafue Flats are of major, industrial, ecological and socio-economic significance for Zambia. The Kafue Flats generate 50% of Zambia's national hydroelectricity supply through the Kafue Gorge Dam and Itezhi-Tezhi Dam, and 44% of water used in Lusaka is drawn from the Kafue River. The region is home to the highest concentration of cattle in the country, with an estimated 20% of the national herd (290,000 cattle) grazing on the flats in the dry season. An extensive sugar irrigation sector, supplying both domestic and export markets, also exists. The fisheries of the Kafue Flats are one of Zambia's most productive wild fisheries, supplying both urban and rural markets with an annual estimated value of US $30 million.

The Kafue Flats are densely populated and census data suggest that almost one million people reside in the area (CSO, 2003). Many people rely on the wetland for their livelihoods: cattle farmers graze their cattle on the floodplain when the floods recede; numerous fishers rely on the fish resources for protein and income; and many subsistence and small-scale farmers cultivate the land surrounding the floodplain. In all, the Kafue Flats wetland is estimated to directly support the livelihoods of more than 2 million people. In addition to the social and economic provisions gained from the river, it also supports and sustains vital environmental systems like wetlands, national parks and bird sanctuaries.
Historically, about 20 species of large mammals existed on the Kafue Flats. Over 40% of these species are now locally extinct. These include predators such as lion, leopard and wild dog that were hunted out in the 1950s and 1960s by cattle farmers who owned the land before some of it was gazetted as a national park in 1973. The Kafue Lechwe numbered in the hundreds of thousands and extended across the entire Kafue Flats with the first documented count in 1931 estimating a total of 250,000 to be resident on the Flats. In the early 1970s, the total population of Kafue Lechwe was estimated to be about 93,000-95,000 animals. Over time there has been a sharp decline, and the animals are restricted to the areas protected by Lochinvar and Blue Lagoon National Parks, and the surrounding Game Management Area. Recent surveys indicate that the Kafue Lechwe population is now less than 25,000.

Many other large mammals, including zebra, Cape buffalo, wildebeest, and hippopotamus have also declined on the flats. Wildebeest is now locally extinct while zebra and buffalo are in serious decline. This decline of large herbivores is a result of high levels of poaching, and human and agricultural encroachment including permanent fishing camps established on the scarce high-ground of the Flats that is needed by lechwe for breeding (lekking) and dispersal during flooding.

**Threats to the Kafue Flats**

The situation on the Kafue Flats has reached a crisis. Urgent action is needed to secure the habitat and remaining populations of wildlife on the Flats and enhance capacity for the management of the two national parks and Game Management Area. The main threats facing the Kafue Flats are:

- Degradation, destruction and fragmentation of natural habitats
- Decrease in the capacity of areas to host wildlife
- Water pollution
- Invasive alien plants and animals eg *Mimosa pigra* and crayfish
- Climate change
- Poaching
- Mining (legal and illegal) in protected areas
- Overfishing
- Over abstraction of water
- Unnatural flows and inconsistent flooding of the plains
In June 2017, the Department of National Parks and Wildlife (DNPW), in collaboration with the International Crane Foundation/Endangered Wildlife Trust (ICF/EWT) Partnership and the World Wide Fund for Nature in Zambia (WWF Zambia) embarked on a three-year project titled “Restoring the Kafue Flats: An Integrated Management of the Invasive Shrub *Mimosa pigra*. The project aims at controlling the continued spread of *Mimosa pigra*, whilst creating jobs in the local community. *Mimosa pigra*, which is spreading rapidly across the floodplain grasslands of the Kafue Flats, is being removed by using an integrated approach that combines physical, chemical and biological control options. 150 workers from surrounding local communities were employed to undertake community based restoration work, through large-scale physical removal and chemical spraying of *Mimosa pigra* in Lochinvar National Park. Biological control trials through the importation and direct release of the control agent – *Carmenta mimosa*, commenced in May 2019.

Since the start of the project, large infestations of up to 1,800 ha of *Mimosa pigra* in Lochinvar National Park have been cleared. This represents 60% of the total area (approx. 3,000 ha – baseline) covered by *M. pigra*, at the start of the project in June 2017.

Those members of the community employed by the project have been able to use their income to invest in livestock and improved housing while others have used it to further their education.

The Kafue Flats Restoration Programme, led by the Government and supported by the International Crane Foundation/Endangered Wildlife Trust (ICF/EWT) Partnership and the World Wide Fund for Nature in Zambia (WWF Zambia) is intended to address the most urgent challenges facing the Kafue Flats. A co-management agreement is being negotiated with Government, the ICF/EWT Partnership and WWF Zambia for the sustainable management of the Kafue Flats.

Three key priorities of the co-management agreement are to enhance capacity for law enforcement, develop management plans and effective community engagement.

**Call to Action**

1. Increase Government investment in the sustainable development of the Kafue Flats through a partnership approach that supports community based ecosystem restoration through *Mimosa* clearing, with job creation and positive conservation outcomes.

2. Support the creation of the Kafue Flats Area Management Unit and the Kafue Flats Restoration Programme to provide a structure for an integrated landscape approach that will support continued socio economic development.

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