

## **Conserving Great Green Macaws and Empowering Disadvantaged Communities in Colombia**

### **Background:**

The Great Green Macaw (*Ara ambiguus*), critically endangered according to IUCN, faces rapid population decline primarily due to habitat loss, poaching for the pet trade, and deforestation. The bird's survival is closely linked to the almond tree (*Dipteryx panamensis*), a key nesting and food source, which is also heavily logged. Additionally, in Colombia, there is limited knowledge about the species, with conflicting reports on its population and threats. Conservation actions in Costa Rica and Ecuador have made strides in protecting the species, but such efforts are lacking in Colombia.

### **Project Purpose:**

To establish baseline information about the Great Green Macaw in Colombia and raise awareness within local communities about the species to promote its conservation.

### **Objectives and Activities:**

**Objective 1:** Determine the distribution of the species in Colombia.

- Activity 1.1: Identify natural history museums in Colombia.
- Activity 1.2: Collect historical records of the species in museums, literature review, NGO records, and online repositories.
- Activity 1.3: Model the distribution of the species in Colombia.
- Activity 1.4: Confirm the species' presence through network (ground-truthing).
- Activity 1.5: Update distribution model for Colombia.

**Objective 2:** Determine the seasonality of the species in Utría National Park.

- Activity 2.1: Carry out a recognition and introductory visit to the study area.
- Activity 2.2: Train local people to conduct the monitoring program.
- Activity 2.3: Conduct the monitoring program.
- Activity 2.4: Follow up on the monitoring program.

**Objective 3:** Identify Great Green Macaw calls from other bird species through vocalization recognition AI.

- Activity 3.1: Install audiomoths at the Parque de la Conservación to record macaw calls.
- Activity 3.2: Install audiomoths at monitoring points.
- Activity 3.3: Develop AI vocalization recognition model for the species.

**Objective 4:** Study the nesting behavior inside Utría National Park.

- Activity 4.1: Identify the most suitable season to sample nests.
- Activity 4.2: Map the nests inside Utría National Park.
- Activity 4.3: Study the species' nesting behavior.

**Objective 5:** Assess the threat status in Utría National Park.

- Activity 5.1: Survey the indigenous community to understand their needs related to resource extraction.
- Activity 5.2: Conduct a health assessment of the Great Green Macaw population in Utría.
- Activity 5.3: Assess the national and international illegal wildlife trade of the species.

**Objective 6:** Understand the community's perception of the species and collect basic ecological information.

- Activity 6.1: Carry out a recognition and introductory visit with indigenous communities.
- Activity 6.2: Conduct surveys with indigenous communities to understand their views and knowledge about the species.