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## Session 2A Conservation and Preservation of the African Wild Donkey in Eritrea

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# Conservation and preservation of the African Wild Ass in Eritrea

Carmen Bachofen, Nick Godsey, Natalie McManus, Miranda Rakes

## Background

Eritrea is in the North Eastern part of Africa and relies heavily on aquatic and rain supported agricultural environments. This makes Eritrea vulnerable to climate change because of droughts, land degradation, and deforestation. Native to Eritrea, The African Wild Ass (*Equus africanus*) is a wild member of the horse family and thought to be the earliest ancestor for the donkey. This species has been listed as critically endangered by the IUCN Red List and the population trend is decreasing. There is estimated to be 23-200 mature individuals. The African Wild Ass was chosen as an ecological indicator because it is heavily impacted by climate change and human impacts such as deforestation, desertification and urban sprawl. Humans are also impacted by climate change, deforestation, desertification and urban sprawl, so the population of Wild Ass would be a good indicator to how Eritrea is being impacted. Focusing on the Sustainable Development Goals (SDG), Sustainable Cities and Communities (11), Climate Action (13), and Life on Land (15), would be good goals for the conservation of the African Wild Ass.

## Eritrea's INDC Goals

### Main Goals

#### Mitigation, Adaptation, and Implementation

Eritrea's INDC goals focus on the mitigation of greenhouses gases that are a large contributor to climate change. The country is also working to reduce its vulnerability to other climate change factors such as drought, desertification, and land degradation. There are plans in place for land rehabilitation as well as solar powered water systems, and more sustainable agriculture. Our indicator species, the African Wild Ass, would benefit from all of these goals as would the citizens of Eritrea.

## Sustainable Development Goals



### Sustainable Cities & Communities

As humans and native ecosystems interact, it is important to create sustainable cities and communities to make them inclusive, supportive, and safe for all species. As Eritrea is facing loss of habitat, desertification, and species decline, the increase in sustainable cities will help protect land, its resources, and the species living on it..



### Climate Action

Climate action is important to Eritrea as the impact of climate change will heavily impact the more vulnerable. Working on SDG 13 will increase the action taken to fight the climate crisis. In Eritrea, this will promote and increase the ideas of protecting life on land and the creation of sustainable cities.



### Life on Land

All life on land has many unseen benefits and are integral to our survival. Protecting life on land will work to preserve ecosystems, including the habitat of the African Wild Ass. Eritrea faces issues of land degradation and desertification. Striving towards this goal will help Eritrea combat these goals and support the livelihoods of its inhabitants.



## DPSIR Framework

### Driver

- Land use
- Economic growth
- Expanding agriculture

### Response

- Conservation of land and habitat
- Improved agricultural practices

### Pressures

- Human population growth
- Climate Change
- Pollution



**Ecological Indicator Species:** Wild African Ass, *Equus africanus*

### Impacts

- Habitat loss
- Desertification
- Land degradation
- Loss of the origin of modern donkeys/horses

### State

- Population less than 600
- African Wild Ass population decreasing
- Critically endangered