

EXTINCTION RISK IN SEMI-ARID SOCIAL-ECOLOGICAL SYSTEMS

CLIMATE CHANGE

RAPID HUMAN
POPULATION GROWTH

LIMITED SOCIO-
ECONOMIC CAPACITY

POLITICAL
INSTABILITY

West-African giraffe (*Giraffa camelopardalis peralta*)

Niger

Giraffe Zone population

Long-term
monitoring

Capture-mark-recapture analysis

CLIMATE-SURVIVAL RELATIONSHIP



SOCIO-ECONOMIC SCENARIOS

CMIP6 CLIMATE PROJECTIONS



Food insecurity



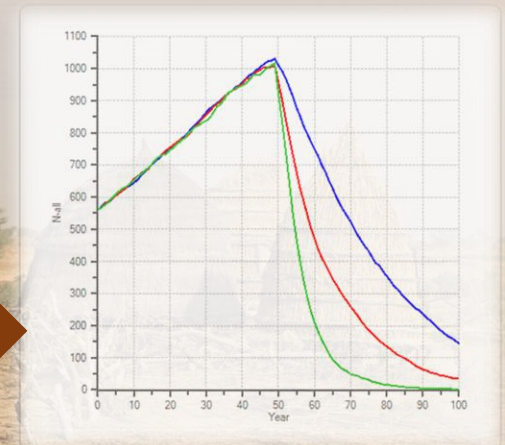
Habitat loss



Poaching

POPULATION VIABILITY ANALYSIS

POPULATION DECLINE AND
HIGH EXTINCTION RISK



Extinction risk rises sharply when climatic stress coincided with threats linked to human food insecurity, underscoring that addressing global biodiversity decline cannot be separated from efforts to enhance food security and rural livelihoods.

Transferable workflow for
conservation planning of large
mammals.