GENETIC RESOURCE BANK NETWORK FOR ENDANGERED SPECIES IN ASIA

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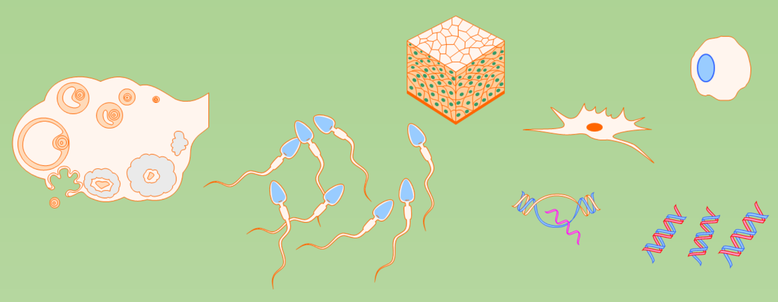
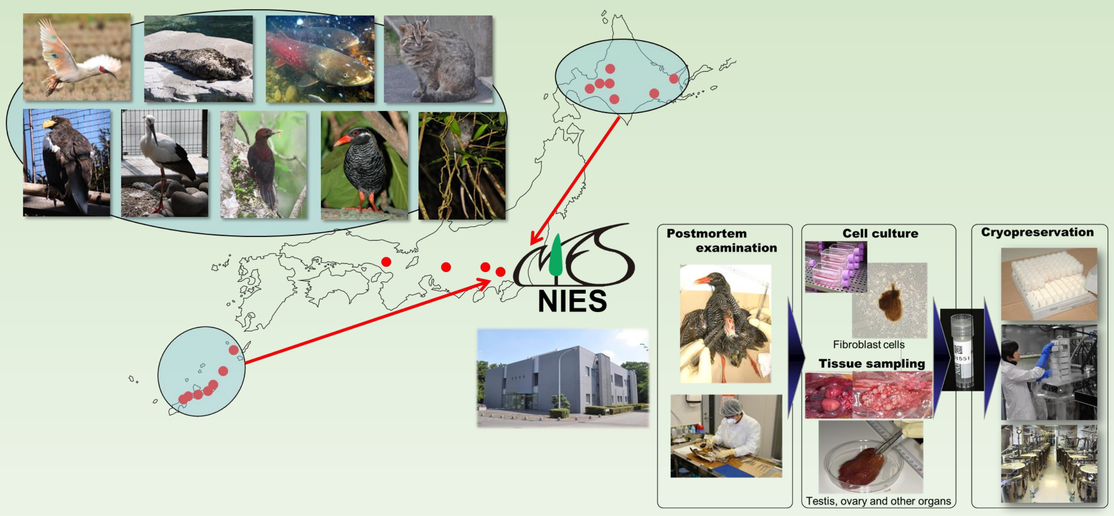
Introduction

IN-SITU Conservation			*EX-SITU* Conservation		
Wild	Sanctuary in range	Captivity in Range	Sanctuary out of range	Captivity out of range	Genetic resource banks



A genetic resource bank (cryopreserving genetic materials and live cells) is one of the options for ex-situ conservation. This kind of activity had been conducted in some zoo/institute such as San Diego Zoo Global (The Frozen Zoo), Smithsonian Institute, The Frozen Ark etc.

Genetic resource bank in NIES, Japan

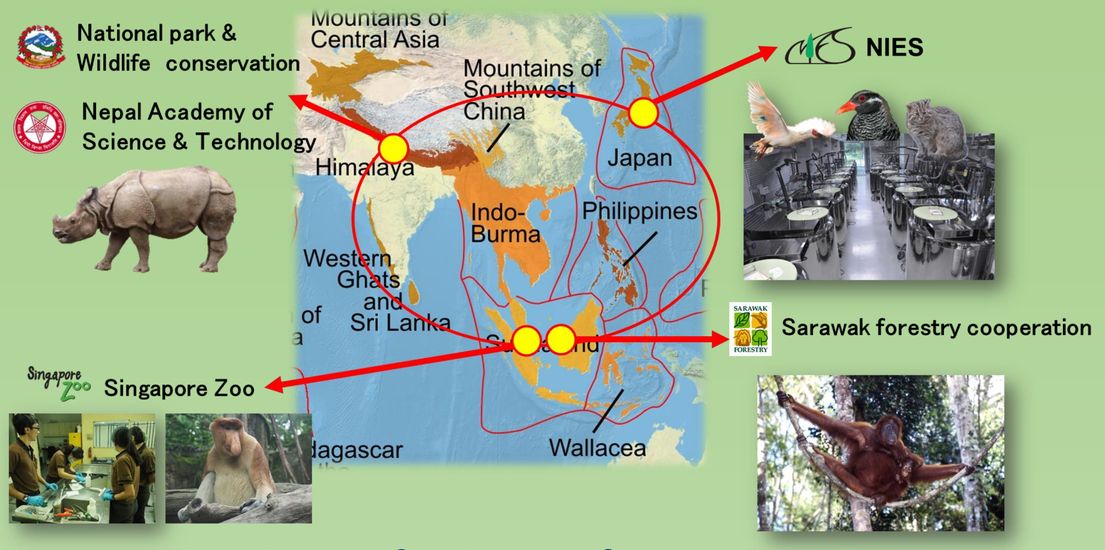


The National Institute for Environmental Studies (NIES) in Japan has been cryopreserving the genetic resources of endangered species (mainly avian and mammalian species) since 2002. The NIES collections include viable cells derived from the skin tissue of the Japanese crested ibis (*Nipponia nippon*), which was categorized as EW (Extinct in the wild).

The last Japanese-born crested ibis died on Oct. 10, 2003

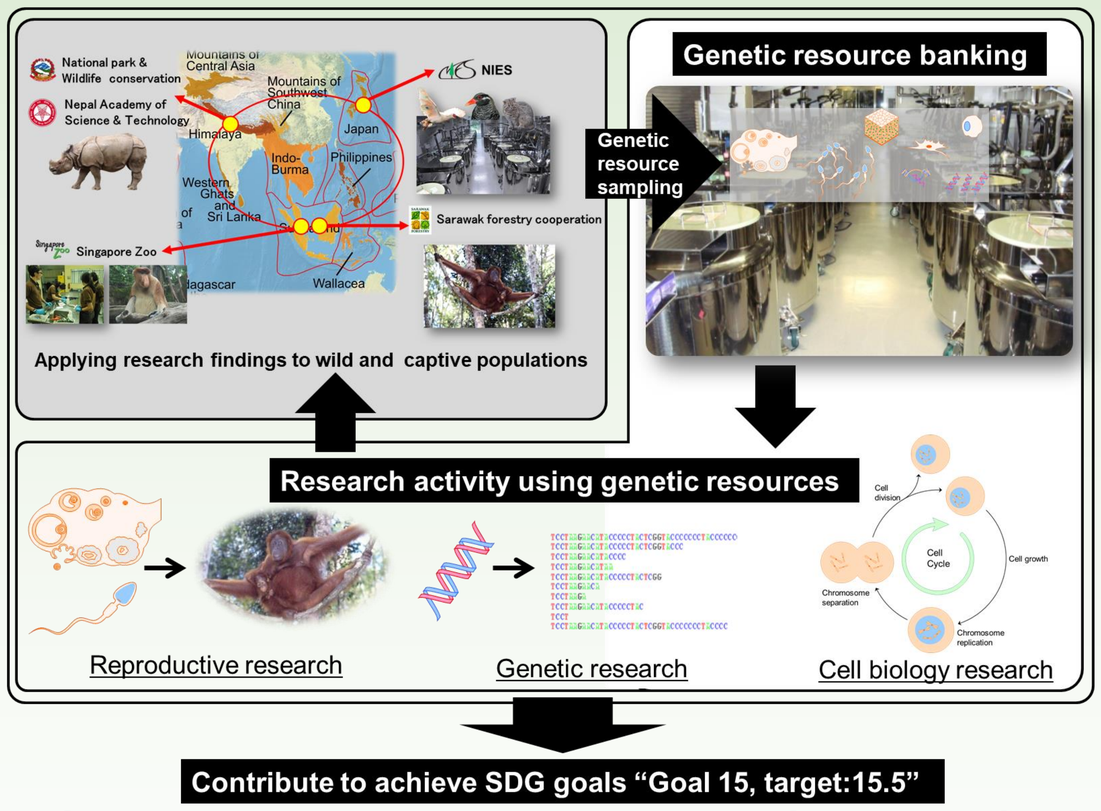
http://upload.wikimedia.org/wikipedia/commons/thumb/8/83/Ibis_KIN.JPG/250px-Ibis_KIN.JPG

Expand activity to Biodiversity hotspots in Asia



NIES is introducing the genetic resource banking project to other country in Asia region to promote ex-situ conservation activity. Because there are nine biodiversity hotspots including Vietnam and Japan. There are four priority species for the activity, Asian rhinoceros, Primates, tigers and bears. Currently, NIES have already established the network among three countries, Nepal, Malaysia and Singapore.

Utilization of genetic resources for conservation



The genetic resource can be used for conducting various kinds of researches on endangered species (for example, genetic researches, reproductive researches, disease researches, cell biology researches etc.). Through such activities, we want to contribute to achieve SDG goals, especially Goal 15 (Life on Land) target: 15.5