UNITED NATIONS
ESCAP
Economic and Social Commission for Asia and the Pacific
EAST AND NORTH-EAST ASIA OFFICE

Expert Group Meeting on the NEASPEC Project, "Study on Transborder Movement of Amur Tigers and Leopards using Camera Trapping and Molecular Genetic Analysis"

15-16 April 2014, Incheon, Republic of Korea

Presentation Guidelines and Discussion Points

NEASPEC implements a project entitled, "Study on transborder movement of Amur tigers and leopards using camera trapping and molecular genetic analysis" during 2014-2015 in support of its Nature Conservation Strategy for Amur tigers and Amur leopards. The project aims to:

- strengthen scientific understanding and analysis capacity of Amur tigers and leopards and their habitat conditions through joint study using molecular genetic techniques;
- strengthen linkages between policy framework and scientific basis to conserve Amur tigers and leopards in transboundary areas in North-East Asia;
- provide scientific basis to protect and improve existing transboundary ecological corridors; and
- promote and strengthen bilateral, multilateral, and international cooperation for Amur tigers and Amur leopards

In order to achieve the goals, the project plans to undertake (a) expert group meeting, (b) camera trapping and molecular genetic analysis, (c) joint field study, and (4) international workshop. As an inception meeting of the project, the Expert Group Meeting (EGM) will:

- review existing experience and molecular genetic techniques related to conservation efforts on Amur tigers and leopards;
- discuss expected outcomes and objectives, and draw up a project work plan;
- discuss scientific and technical approaches for the project, including transfer of knowledge and skills, and long term cooperation; and
- explore ways in which scientific output can be translated into conservation plans and even wider policy decisions

In this regard, this document is prepared to facilitate discussions by providing presentation guidelines and discussion points.

A. Presentation guidelines

Experts of camera trapping and molecular genetic analysis are expected to make a presentation on their topics for up to 20 minutes. The presentation should highlight following points:

a. any programmes or projects that you/your organization has been/will be involved: please briefly review objectives, scientific technologies, activities, (expected) outcomes, etc.;

b. results from camera trapping and molecular genetic analysis directly related to this Project's goals and approaches;

c. up-to-date technical information on camera trapping and molecular genetic analysis, which could be applied to the NEASPEC project; and

d. suggestions and recommendations to methodologies and activities of the project

B. Discussion points

1. Planning project implementation

As proposed in the project concept paper, key components of the project include (a) Molecular Genetic Analysis including DNA Analysis, (b) Joint Field Study, and (c) International Seminar on Subregional Cooperation for Science-based Conservation of Amur Tigers and Leopards in Transboundary Areas.

I. Sample collection, DNA extraction and sample distribution

- How many/what kinds of samples have been collected?
- Do you need further sample collection for the first phase of DNA analysis?
    - If yes, where/when should we visit for sample collection and how many/what kinds of samples do we need more?
- For the first phase of molecular genetic analysis:
    - 1) Do your labs have enough samples and/or DNA extracts?
    - 2) How do you distribute samples and DNA extracts?
- For the joint field study in 2015:
    - 1) Which areas will be covered for the NEASPEC project?
    - 2) How many/what kinds of samples do you expect to have?
    - 3) when/how long do researchers stay in the field?
    - 4) who/where/how to extract DNA from the collected samples?
    - 5) How to distribute collected samples and DNA extracts?
    - 6) How to link camera trapping with molecular genetic analysis?

- Other matters to be discussed

II. Camera trapping and genetic molecular analysis – methodologies

- What should be a main research area to achieve the goals and outcomes of the Project, particularly in order to provide policy recommendation for improved ecological corridor management and conservation plan?
    - ex. demographic characteristics, transboundary movement, complementary genetic analysis to describe adaptation and survival mechanism
- For molecular genetic analysis:
    - Which methodology do you want to apply?
    - How many microsatellite markers do you use?
    - Do you think that SRY gene or mtDNA analysis is also required?
    - What kinds of commercial toolkits do you use?
    - Is it necessary for all participating agencies to use same methodology with same toolkits?
    - How to compile and compare outcomes from all participating agencies?
    - Should we apply same methodology or different one to the first and second phase?
    - To what extent do your agency/all participating agencies draw meaningful outcomes for the NEASEPC project?
- Communication channel: how to report and share research outcomes with the Secretariat and other participating agencies in a timely manner?
- Other matters to be discussed

III. Leading/supporting agencies and their roles and responsibilities

Based on the previous session, experts will be invited to discuss the following matters:

		Leading agency	Supporting agencies	Roles and responsibilities
Camera trapping				
Molecular genetic analysis	Amur tigers			
	Amur leopards			
Joint field study	Sample collection			
	DNA extraction			

	Sample/DNA distribution			
NEASPEC Secretariat		-	-	

IV. Overall review of the proposed timeframe

NEASPEC Secretariat proposes the following ***tentative*** timeframe for discussions during the EGM:

Timeline	**Activity**
April 2014	Inception Meeting
April-December 2014	First phase of DNA analysis
	First report
January-February 2015	Joint field study for sample collection
	DNA extraction
March-November 2015	Second phase of DNA analysis
	Second (and/or Final) report
December 2015	International workshop
	Completion of the project (or start up new project for follow-up actions)

2. Planning project implementation: administrative arrangement

I. Institutional and administrative arrangement with the agencies

NEASPEC Secretariat has proposed the tentative budget plan as below:

Items	**Amounts (in USD)**
Inception Meeting/ International workshops	35,000
DNA analysis	50,000
Joint field study	10,000
Miscellaneous	5,000
Total Amount	**100,000**

The EGM will review the proposed budget plan, in particular including the budget for each required work for DNA analysis, and may revise it in accordance to the agreed implementation plan.

II. Partnership with relevant programmes

The EGM will seek the possibility to create partnership with any relevant programmes or projects.

III. Any other issues to be clarified