**Game Hygiene and meat handling subject**

**Homework**

Topic: The impact of climate change on wildlife will be felt in your country

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**Country overview Lao PDR**

Lao People’s Democratic Republic (PDR) is located in Southeast Asia, a region that has grown rapidly during the last three decades. Lao PDR is ranked as one of the poorest or least developed countries in the region and in the world. According to the UNDP Global Human Development Index (HDI), Lao PDR was ranked as 133 out of 179 countries.

Lao PDR has a total land area of approximately 236,800 km2, 80% of which is mountainous. The population in 2020 was about 7.276 million and the total gross domestic product (GDP) was US$ 5 billion with a GDP per capita of US$ 940. The population growth is around 2% annually and the population density is about 27/km2. 26% of people lived below the poverty line.

**Forestry**

Lao PDR is the most densely forested country in mainland Southeast Asia, with forests covering 41% of the total area. 29 However, due to population development, economic growth, excessive logging, and land-use change, forest cover has been reduced to less than 40% in recent decades, with an average annual loss of roughly 134,000 ha.

Climate change may pose a new challenge to this ecosystem. The increased frequency of forest fires, as well as pest and disease infestations, may be exacerbated by rising temperatures. Soil erosion, watershed degradation, and major landslides are projected to grow when the size and frequency of extreme events such as flooding rises. Changes in precipitation patterns may have an impact on seedlings and saplings' survival. Some of the country's endemic flora and animals have already vanished.

**Climate change on wildlife**

Climate change projections for the sites include an increase in mean and maximum annual temperatures. The findings indicate an increase in average annual rainfall, as well as longer and more frequent floods throughout the rainy season. Predictions for the dry season include lower rainfall and higher evaporation rates of water bodies.

Changes in precipitation and temperature will affect some habitats within the wetlands in Lao PDR and its habitats are highly vulnerable to climate change which are susceptible to erosion and sedimentation impacts, and wetlands, are increasingly threatened by higher temperatures warming the shallow waters, and increased water extraction during the dry season.

The forest landscape was "relatively stable" or remained largely unchanged, according to the study, but the coastal ecosystem continued to erode. The number of beach forests has decreased, while notable sites such as Songkhla Lake have deteriorated. According to the report, there was no systematic management of tourist attractions on several islands as was supposed to be the case.

Meanwhile, the mountain ecosystem lacked a significant amount of knowledge to aid in its management, according to the report. Changes in land use, farm chemical use, inefficient waste management, alien species, and disaster-related incidents, such as climate change, posed a major threat.

**Climate change effects on animals, birdlife and plants**

Climate change and global warming are already affecting the distribution and behavior of animals, birds, and plants, according to incontrovertible data. Climate change might wipe out a quarter of all land animals, birds, and plants unless greenhouse gas emissions are drastically curtailed.

Climate change and unpredictability affect birds and animals in a variety of ways: birds lay eggs earlier in the year, plants bloom earlier, and mammals emerge from hibernation earlier. Animal distribution is also impacted, with many species migrating closer to the poles as a result of rising global temperatures. Birds are migrating and arriving at their breeding grounds earlier, and the nesting grounds to which they are migrating are not as far away as they formerly were, and in certain nations, the birds do not even depart because the climate is right all year.

**Global warming and climate change are caused by human activities**

Worldwide warming refers to the rise in global average temperatures. Human activities such as coal or oil production and combustion, rice field cultivation, livestock husbandry, and deforestation all contribute to global warming. Agricultural activity and deforestation are the biggest contributors to global warming in Laos.

