Public hearing – 15 November 2023

Academy of Agriculture

Forest fires: state of play, prevention strategy, forest restoration

During this public hearing on forest fires, several speakers shared their point of view. Particular attention was paid to the 2022 forest fires in Aquitaine (France).

Yves Birot (a member of the Academy), together with Charles Dereix (a member of the Acedemy) introduced the session by presenting an overview of the main recent incidents in terms of forest fires worldwide. Around 60M hectares of forest are concerned every year. This figure tends to rise, because of climate changes and of its consequences.

Preventative actions should be the priority, but the fight against actual forest fires is prioritized.

Pierre Macé, Director of DFCI Aquitaine (defense against the fires), organized by forest owners, provided feedback on the major forest fires that took place in 2022 in the Gironde department. Not only 30,000 hectares of forest owned by 2000 owners burnt, but also 55,000 people needed to be evacuated.

Under challenging circumstances, especially because of the temperature (+ de 40°C), it was necessary to upgrade the methods usually used to fight against forest fires, and give up tens of hectares to create areas for the vehicles. He offered a pessimistic assessment for the next few years and called for a better anticipation of future damages; enhanced prevention methods will be needed, particularly at the interface between the forest and urban areas.

Roland de Lary (CEO of the National Centre of forest Ownership) presented a recent paper outlining new guidelines for restoring forests destroyed by fires.

After highlighting that experiments aimed at finding alternative or complementary species have been conducted for ages, he came to the conclusion that diversification is necessary, whilst acknowledging that the maritime pine, which is the right fit where the soil is very poor, as is the case in the Landes, will remain the predominant specie for restoring the forest after the fires. However, mixed forests will need to be developed by introducing deciduous species in order to create "forest mosaics".

Hervé Jactel, a researcher at INRAE, and a specialist of tree deseases, provided a description of the new risks facing forests because of climate change. Every year, new

hasards (insects, fungus) threaten afforestation areas and forests encounter many unpredictable events. Forest management should rely on a multi-risk approach by diversifying species. He ended up his presentation by calling for the creation of forest groves made of deciduous and resinous species.

General engineers F. Mortier and Durand took turn to present a brand new interministerial report they had contributed to.

This report is divided into two parts:

- Facing the situation in the short term
- Adapting to a change of era

After developing models which led them to the conclusion that all indicators are deteriorating, they called for a change of paradigm, by listing many actions that should be taken urgently in order to preserve our forests.

In his brief conclusion, Y. Lesgourgues, member of the Academy, thanked all speakers and the many attendees, and reminded the audience that our forests proved to be resilient over the past centuries. He also saluted today's "whistleblowers" who deserve to be heard because of the acceleration of climate change that brings a lot of uncertainty.