

“The State protects the environment and the country natural resources. It recognizes its close link with sustainable economic and social development; to make human life more rational and to ensure the survival, well-being and security of current and future generations. It is responsibility of competent bodies to apply this policy. It is the citizens’ duty to contribute to water protection, the atmosphere, soil conservation, flora, fauna and all potential use of nature.”

Artemisa province has considered the environmental problems that have the greatest impact and a strong consequence:

The following are identified in this way:

- Soil degradation.
- Impacts on forest cover.
- Pollution.
- Liquid residuals.
- Solid waste.
- Emissions to the atmosphere and sonic pollution.
- Hazardous chemicals and wastes.
- Loss of biological diversity.
- Lack and difficulties with the availability and quality of water.
- Impacts of climate change.

### **Characterization of the main environmental problems of the Province:**

#### **1-Soil degradation.**

The improper use and management of soils in a non-sustainable way is the main cause of the appearance of degradation processes -in some cases- or anthropic acceleration in others; this can lead to the appearance of other problems in medium or long term; even more harmful and worrisome environmental phenomena for our species; such as desertification and the loss of natural fertility of the affected soils.

#### **2-Impacts on forest cover.**

Forest fires are the main cause of damage to forests in the province. Most fires in rural areas start in paddocks, sugar cane fields, and agricultural crops; which eventually reach and affect forests. There are problems with the quality of most natural forests, as a consequence of inadequate management and exploitation in previous stages; especially in the most important hydrographic basins.

#### **3-Contamination.**

**Liquid residuals.**

In the Province, industrial facilities located in urban areas use surface currents, as receivers of raw or partially treated residuals; which frequently reach the coastal zone and hydrographic basins. These negatively influence: the use of obsolete technologies and technological indiscipline; together with the lack of demand in the concretion of a program that gradually plans solutions to these situations.

**Solid waste.**

Systematic evaluations carried out are indicating, that the greatest negative incidence of pollutant load -to be mitigated and solved in the coming years- are those coming from urban areas, from agro-food, industrial, tourism, hospitals and the domestic and mixed residuals that are generated .

**4-Chemicals and hazardous waste.**

There are also idle chemicals in entities, that require use to prevent them from becoming hazardous waste, as they deteriorate. In Artemisa province, the inadequate management of chemical products and hazardous waste; as well as the progressive accumulation of these wastes (without the technical solution for their final disposal) has a significant impact on the increase in volumes and dangerousness of these contaminants with risk for human health.

**5-Emissions to the atmosphere and sonic pollution.**

The main environmental problems associated with air quality are given by the levels of pollution that some industries, settlements and landfills cause with the emission directly into the atmosphere; without any treatment of toxic substances, dusts, aerosols, gases and emissions of bad smells.

**Loss of biological diversity:**

Particularly in the Province, the location of the South Dike, so close to the coastline (about 500 meters on average) has triggered a series of impacts and irreversible changes in the flora and fauna of the region. There has been significant loss of coastal vegetation, mainly the red mangrove; which is the main protection shield of the coast against erosion.

Affectations to species of flora and fauna are also highlighted, due to the incidence of felling, hunting and poaching with purpose of

their commercialization; a situation that occurs even in protected areas of the Province, where it takes on special significance. Fish harvesting from state fishing-traps, taking the gear and illegal trade of closed marine species is a manifest phenomenon in the coastal areas of the territory.

**Lack and difficulties with the availability and quality of water.**

Taking into account the substantive Cuban hydraulic development; in the Province -as in the rest of the country- there is still a lack of water to supply all economic, social and environmental needs. This is aggravated by the occurrence of natural phenomena (prolonged droughts, variations in the seasonal regime, etc.) and others induced by anthropogenic causes (saline intrusion, overexploitation, contamination, etc.).

One of the main environmental problems associated with terrestrial waters, and that puts its future availability for man at risk, is given by the level of contamination; which has a significant impact as a result of the mismanagement of solid and liquid residuals. They are decisive factors in the quality of the waters of reservoirs, streams and rivers.

**6- Impacts of climate change: Life-Task.**

Our country has paid attention to the State-Plan for confronting climate change: "Life-Task"; approved by the Ministers' Council on April 25th, 2017. It has been incorporated into the environmental agenda ever since.

The current situation forces all sectors in the Province -particularly those most vulnerable to climate change impacts- to include in their strategies and effectively develop all actions, that allow better adaptation to the effects of this serious environmental problem; as well as minimizing the impacts.