





# **AGROECOLOGY & ONE HEALTH**

#### Context

The One Health approach means thinking about health between animals, humans, and their environment, at the local, national, and global levels. This way of approaching health in the current global context of the Covid-19 pandemic allows to find solutions that respond to both health and environmental issues. Agroecology is closely associated with this perspective as it considers and federates a set of disciplinary fields and provides the framework for jointly associating ecology, society, culture, and economy. It achieves this goal by optimizing the interdependencies between plants, animals, and humans and by creating healthier environments, food production and societies. In that way, agroecology allows to face the environmental and food crises.

#### Risk factors impacting overall health

The degradation of this fragile balance between plants, animals, and humans, results in several processes that contribute to different types of risks.

- Deforestation, which causes wildlife to move and mix with humans and other animal species, thus promoting the spread of zoonotic pathogens;
- The intensification of livestock farming in restricted spaces, which increases the risks of disease transmission (zoonoses);
- Antibiotic use and the amplification of antibiotic resistance;
- The use of pesticides and phytosanitary products in an unmoderated way;
- Industrialization and the release of greenhouse gases (GHG).

# **Arguments from the field**

To combat these risks factors, agroecology presents major assets, some of which have been identified from initiatives and field experiences and are shared here.

#### Agroecology can improve human health

- The diversity of crops within a farm and a territory allows to diversify the food products and to improve the nutrient inputs;
- Agroecological production limits the use of pesticides and other chemical products and thus preserves the health of producers and consumers.

#### Agroecology allows a better collaboration between Man and Nature

- Placing the relationship with the living beings and the relationship between humans and nature (eco-dependence) at the center of the agroecological transition process ensures that these relationships are respected and promotes cooperation for mutual benefit;
- The holistic approach of agroecology serving territorial development to think of the spaces to be managed in good balance and thus limiting the risk factors.



### Farmers and the population

- Use biofertilizers, biopesticides and non-chemical plant protection products;
- Adopt a healthy diet, based on diversified, high-quality products produced in an environmentally friendly manner.

## Governments

- Facilitate access to funding for projects and initiatives that promote agroecological practices to contribute to the improvement of human health without degrading ecosystems;
- Strengthen regulatory and technical instruments to reduce the use of antibiotics and chemical inputs and support the development of biopesticides and naturebased solutions.

### Research and education

- Develop rapid and accessible diagnosis tools (imagery, sensors, colorimetric tests, etc.) and instruments for monitoring air, water, and food auality;
- Support awareness of the One Health approach within agricultural schools and develop analytical and decision-making capacity for nature-based solutions.



We target Sustainable Development Goal (SDG) 3 (Good Health and Well-being), while contributing to knowledge and development practices aimed at achieving SDGs 1, 2, 3, 5, 6, 7, 10, 12, 13, 14, 15 and 16.























