

ONE HEALTH AND AGROECOLOGY

The Challenge

The COVID-19 pandemic and the suspected origin of the SARS-CoV-2 virus from an animal host reminded us how closely linked human and animal health are and how easily diseases can be transmitted from one group to the other. Yet health is dependent on diverse ecosystems and their services. To be and stay healthy, clean air, pure water, nutritious and safe food, fertile soils, protection from extreme weather events and pathogens are of utmost importance. Therefore, holistic approaches, such as One Health, which look at the relationships, dependencies and interactions between human, animal and environmental health, are needed to address health risks.

In India, there is a high risk of the emergence and spread of zoonoses (diseases transmitted between animals and people) due to its high population density, a large number of farm animals and very diverse wildlife. The frequency and spread of zoonoses is increasing globally and it is estimated that, globally, over 70% of the new pathogens that affect human health come from animals. Therefore, to protect the population against such health risks, a collaboration between institutions from different fields is required.

The failure to address risks in one area can lead to significant problems and costs in other areas. In addition to specific diseases, also general environmental conditions like water, air and soil quality have a huge impact on the health of humans and animals. There is considerable

Project Name	One Health and Agroecology
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Project Regions	Goa and Madhya Pradesh
Lead executing agency	Ministry of Environment, Forest and Climate Change
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potential, especially at the local or community level, to use agroecological measures within the scope of a One Health approach. For this, the exchange of information and the cooperation between different sectors and stakeholder groups is paramount.

Objective

The project aims to strengthen the institutional framework conditions in India in order to reduce risks to human, animal, and environmental health. Additionally, to demonstrate the effectiveness of the One Health approach on the ground, the project contributes to the implementation of pilot measures in the states of Goa and Madhya Pradesh, which also take into account agroecological principles.



Page 1:

Left: Both, humans and some monkey species, like these Hanuman Langurs (*Presbytis entellus*), can get sick from the tick-transmitted Kyasanur Forest Disease (KFD).

Right: Proper production and preparation of food-stuff is important to prevent foodborne diseases.



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Page 2:

Left: Raising awareness about zoonotic diseases among animal farmers is important as a way of reducing health risks.

Right: The use of vermicompost is an agroecological measure that can improve soil health and plant vitality.

The Project Supports

- One Health related cooperation between relevant Indian ministries and stakeholders.
- Knowledge management and capacity building on One Health and Agroecology by developing or upgrading curricula and specific One Health related modules in collaboration with training institutions in the field of One Health and Agroecology. This includes collecting, documenting and disseminating best practices for health risk mitigation measures.
- The implementation of cross-sectoral pilot measures for the mitigation of risks to human, animal and environmental health for communities in partner states.

Contribution to the Agenda 2030



By supporting sustainable agricultural practices that help maintain ecosystems and progressively improve soil quality



By strengthening capacities required to detect, assess, and respond to public health risks, including those linked to zoonotic diseases and food safety.



By fostering judicious drug use in animal husbandry in order to reduce their release to water and soil.



By promoting sustainable agricultural practices that also increase resilience to climate change and by raising awareness of the impact of changing weather patterns on the spread of disease vectors.

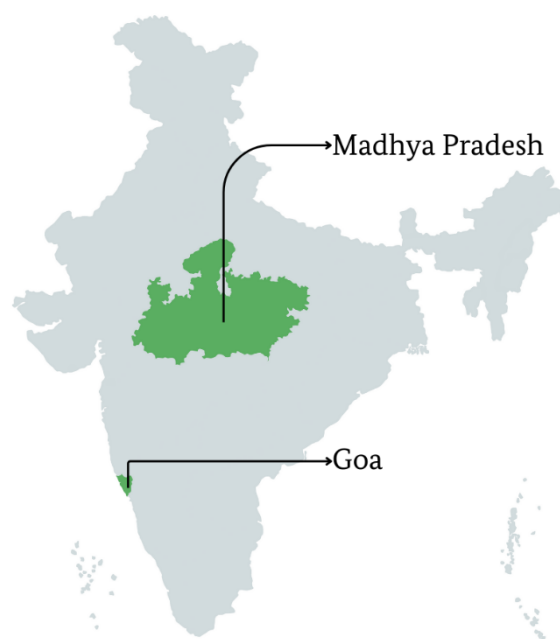


By aiming to protect and restore ecosystems, thereby supporting biodiversity conservation and sustainable land use.

Project Implementing States

The project is implemented at the national level and pilot measures are implemented in two states:

- In Goa, the project focuses on reducing the risk of Kyasanur Forest Disease (KFD), especially for foresters and communities dwelling near forests as well as for monkeys.
- In Madhya Pradesh, the project focuses on reducing the entry of the deworming drug Albendazole into the environment and food chain to protect biodiversity and human health.



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