

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 population, livestock density and diverse wildlife. The frequency and spread of zoonoses is increasing globally, mainly due to its high human population density, the high number of livestock and the diversity of wild animals. It is estimated that, globally, over 70% of the new pathogens that affect human health come from animals. Therefore, to protect against such health risks, a multi-sectoral collaboration is required.

The failure to address risks in one sector can lead to significant problems and costs in other sectors. 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.



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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.



Dr. Stefanie Preuss
Project Manager
biodiv.india@giz.de

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Left: Raising awareness against zoonoses is important for animal handlers to minimize the health risks.

Right: Vermicomposting is depicted as a bridge connecting soil health, animal well-being, plant vitality, and human health.

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 identified risk areas in selected partner states.

Contribution to the Agenda 2030



By reducing risks and promoting the health of animals, thereby supporting food productivity.



By reducing risks and promoting the health of humans and animals, and their shared environment.



By creating awareness among communities against health risks.



By improving food safety through better animal and agricultural management practices.



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



By fostering partnerships and cooperation among relevant Indian ministries and interest groups regarding health topics.

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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One Health and Agroecology
Indo-German Biodiversity Programme
A-2/18, Safdarjung Enclave,
New Delhi-110029, India
T: +91 11 4949 5353
E: biodiv.india@giz.de
W: www.giz.de/india

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