

Visions for Wayanad

„The land of paddy fields“

Wayanad is a bio-cultural diversity hotspot, located in the hills of the western Ghats in Kerala State. It possesses a distinct socio-cultural mix of communities, as well as a mild climate and forested landscape. Most of the diverse population lives on farmsteads, producing rice and supplementary seasonal crops for home consumption. There is a high diversity of agricultural plant varieties, in particular rice, which has been the mainstay of indigenous populations. Since the mid-70s, an overall trend away from rice cultivation can be observed (30.000 ha to 13.000 ha in 2010). After the introduction of modern cultivars of rice, farmers shifted to areca nut and banana plantations. This shift in land use is driven by economic considerations, relating to input costs, labour availability and marketing options.

In recent years, Wayanad has become interesting for the tourism industry that wants to capitalise on the popularity of Kerala as a tourist destination. Concurrently, the conversion of arable land from rice to cash-crops also leads to the preparation of land for real estate construction, causing an erosion of genetic resources and reducing livelihood options for farmers and landless labourers. Members of indigenous tribal groups and women rely on seasonal farm labour to supplement their income.



TOPICS

- Transdisciplinarity
- Participation
- Scenario building
- Visioning exercises

BIODIVA

The research project BioDIVA aims to generate knowledge for transformation by examining land use change and agrobiodiversity of the rice farming system in Wayanad, India. The focus lies on sustainability and gender equity, in particular regarding the use of agricultural diversity in indigenous communities. The Indian-German cooperation addresses these issues by conducting inter- and transdisciplinary research accompanied by capacity building and dialogue between local and regional actors.

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Reaching out

Knowledge shaped by the environmental and cultural setting is fundamental for sustainable development and equitable use of natural resources. A viable "translation" of the outcomes of academic research into an appropriate terminology and concepts open to practitioners is vital for promoting transformation knowledge.

BioDIVA's take on transdisciplinary research concentrates on the problem of agrobiodiversity loss in the field. In addition to transcending and integrating different disciplinary paradigms, the inclusion of different stakeholder groups within the community of Wayanad is at the centre of the research approach. Farmers, agricultural resource managers, decision makers and different experts are included in the interdisciplinary research design.

The research process employs scientifically established methods of generating qualitative and quantitative data. In addition, stakeholders are invited to regular stakeholder feedback meetings. They are actively consulted regarding the analysis of underlying factor, providing ideas for solutions and engaging in long-term interactions. Adding scenario work to the exchange enables researchers and local civil society to explore options for future action and decision making.

Envisioning the future to shape the present

Working with scenarios and visions

In recent years, there has been a rise in the application of scenario work in transdisciplinary social-ecological research. The scenario workshop method is developed and driven as an analytical tool by different institutions, such as urban planning departments, utility providers, development brokers and risk management. A differentiated analysis of causes, contributing factors and dynamics, combined with the integration of different types of expertise enables a multi- and interdisciplinary assessment of the current realities experienced by the participants. The presentation of different possible future outcomes of current practices, in case they continue unchanged, encourage the relevant actors to cooperate in formulating recommendations and taking decisions.

Whilst the final scenario and the derived recommendations constitute the main outputs, the process itself plays a major role. Drawing participants' focus away from current issues in the rural areas and directing their attention onto a broader spatial and temporal horizon, requires systematic process management and facilitation in order to cooperate in a joint search for solutions

Scenario Workshops

Applying various concepts and tools of scenario and visioning work, BioDIVA gathers several stakeholders and land users to identify and vocalise issues in land use change. In November 2011 and February 2012, BioDIVA and CAbC held several workshops on land use change and scenario building to reflect on the participants' assessment of the situation in Wayanad in 2030. The workshops brought together different participants: Mixed groups of farmers and land users, local level government representatives, researchers and local experts, as well as several smaller groups of disaggregated stakeholders, namely women, young farmers, officers of the agricultural department and local Panchayat administration.

The specific objectives are to

- gain insights into decision makers' and land users assessment of the situation in Wayanad
- verify and build consensus on findings and analyses
- assess the implications of each scenario for each group of actor
- explore solutions and recommendations
- present the opportunity to build groups and alliances

Applied in the context of BioDIVAs research in Wayanad, the scenario work and visioning exercises are embedded in the plans by BioDIVA to build a dialogue with policy makers at district, state and national level.



Stakeholders discussing scientific results

TERMS

MGNREGA: Mahatma Gandhi National Employment Guarantee Act. Also referred to as NREGA, enacted in 2005.

Panchayath: Council of elected members from a village or a group of villages.

HYV: High Yield Varieties of crops introduced since the 1970s

Kerala Conservation of Paddy Land and Wetland Act 2008: Passed by Kerala state, it prohibits the conversion of rice land unless the farmer faces extenuating circumstances.

INSIGHTS SO FAR

1. Farmers cherish their socio-cultural identity as farmers and are aware of the impact of current practices on the environment, however they have to make decisions based on economic viability.
2. Farmers have a direct impact and influence on the ecological status of the landscape. They offer vital ecological services to society by maintaining certain ecological functions.
3. Farmers link the observed deterioration of the environment and crop quality with the impact of the increased use of agrochemicals
4. Even though the farmers lack expert knowledge on agrochemicals, they observe a negative impact on (reproductive) health and in drinking water quality.
5. The Indian job guarantee scheme MGNREGA and the irregular implementation thereof has caused an increase in labor costs of up to 60%.
6. Traditional family structures are changing, impacting directly on labor organisation, land property rights and agricultural practice.
6. New HYV call for greater support from government and technicians, which is severely lacking. For indigenous communities, this missing capacity has an even greater impact due to their marginalised status.

Setting the scene

All participants gain insights into the research results and understand BioDIVAs point of view. BioDIVA provides background information, overview of research results and a brief introduction to the project, research questions and results so far. The preliminary results have been presented to the farmers and communities that were involved in the research for cross-checking and feedback. These feedback-loops ensure the joint learning of researchers and farmers alike and ensure the use of a commonly shared language.

Business as usual...?

In the „business as usual“ (BAU) exercise, stakeholders discuss in small groups how Wayanad's landscape and social-ecological situation will look like in the year 2030 if conditions remain the same. The groups are asked to base their statements on current situations and analyse possible causes, consequences and solutions.

..if it continues till 2030

The five scenarios show striking overlaps in their basic features: All groups state that more land will be allocated to tourism, with an unfavourable development of land-grabbing and illegal ownership structures, favouring the rise of a „land-mafia“.

The unchecked use of new cash-crop cultivation systems and conversion of land for construction will lead to degradation of ecosystems and landscapes, reducing agricultural diversity. Concurrently, less food will be produced by local homesteads, raising the reliance on imported staple foods from outside Kerala.

Linked to the larger debate on climate change and irregular rainfall patterns, water availability will be further diminished, making low-input farming a difficult venture.

The social change will have proceeded to a point where smaller nuclear families are the norm and employment as farm labourers will be less attractive, exacerbating the already difficult situation of farmers who struggle to find skilled and willing labourers.

The alternative vision

In the visioning exercise, the aim is to move away from current problems to a positive, pro-active, solution-oriented approach. Consciously, the determining factors are paraphrased quite loosely: A sustainable, equitable Wayanad that is self-sufficient and makes best use of its resources. As a native of the district, each participant has a vested interest in ensuring the best for the future. The visioning exercise taps into this desire. The creative process that takes place shows up new ways where the possibilities for making a desirable future are considered.

The participants are divided into three mixed groups and asked to draw a picture of the "New Wayanad". The pictures were backed up by a reflection on how to achieve this new Wayanad from each stakeholders perspective: Distinct groups of young and old farmers, government officials, representatives of civil society, women farmers and officeholders and researchers propose achievable and well-founded recommendations.



The best traditions of the past with the new achievements of the future.

„New Wayanad“

Wayanad in 2030 as it is envisioned by the local stakeholders is a thriving district characterised by mixed land use and livelihood options based on local resources. Agriculture and agri-businesses, rural industries, service and tourism industries form the livelihood basis, while the residents live in traditional family structures and actively engage in their culture and heritage conservation.

In particular, the following areas were focussed on:

- Improved infrastructure for agricultural activities, including
 - ⇒ Irrigation and water management
 - ⇒ Subsidies for inputs
 - ⇒ Expert advice from local government
 - ⇒ Good access to markets and cooperative marketing
- Fair remuneration for agricultural activities
- Transparency in the formulation and implementation of policies such as MGNREGA



KEY MESSAGES

1. Vision exercises bring together different perspectives on sustainable development and create a platform to negotiate this diversity.

2. The personal identification with a specific landscape, region and way of living motivates stakeholders to engage in the visionary dialogue.

3. Focusing on the influence of each stakeholder on possible change highlights the potential for agency and ac-

Making it happen

In order to root the visions in plausible and quantifiable activities, the following stakeholder-specific suggestions were formulated:

- Engage more in conservation of traditional rice varieties and the related know-how
- Apply integrated rural resource management and land use
- Explore ways to rehabilitate and maintain the irrigation and watershed management scheme
- Streamline farming subsidies and employment options, including MGNREGA
- Enforce existing laws regarding land conversion
- Community based organisations to act as a voice for stakeholders, unifying and connecting actors
- Government offices offer adequate and demand driven support



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Next steps

The scenario and visioning workshops were the first steps in providing a forum for dialogue between different actors. The above mentioned problems are not unique to Wayanad, nor are the proposed solutions easily practicable, however providing well-researched knowledge for a multi-stakeholder dialogue is part of BioDIVA's claim to transdisciplinarity.

The need for a sustained dialogue was voiced by many workshop participants, which leads to the formation of a community working group, named the BioDIVA committee. The group will consist of farmers and land users from different economic and socio-cultural backgrounds to continue the in-depth discussion on land use change and agrobiodiversity loss with invited experts and researchers. This committee acts as an intermediary between academic research and local action.