

# Feedback loops

## Multi-level stakeholder workshops in transdisciplinary research

Land use change in Wayanad is increasingly affecting even remote rural areas, which were formerly sanctuaries for agrobiodiversity. The triggering factors are complex and changes are ongoing. The BioDIVA research team adopted a transdisciplinary approach to address the issue of land encroachment and biodiversity loss. Stakeholder workshops at local, regional and national levels were a key methodological component of this approach. The objectives of these workshops were not only to learn about different stakeholders perspectives, but also to feed results from the BioDIVA case study into the current debate on land transformation, and contribute to achieving more sustainable patterns of land use.

The main research questions were: (1) What are the socio-economic causes of changes to the rice cultivation system of Wayanad, and what are their socio-economic and ecological impacts? (2) How does the local population view and understand land use change?

Stakeholders in agrobiodiversity research include all people and groups that have an influence on or an interest in the project outcomes, or are potentially affected by the results or the practical measures they give rise to. Stakeholder analysis is performed in the initial project phase to clarify who the stakeholders are and to describe their influence and interests.

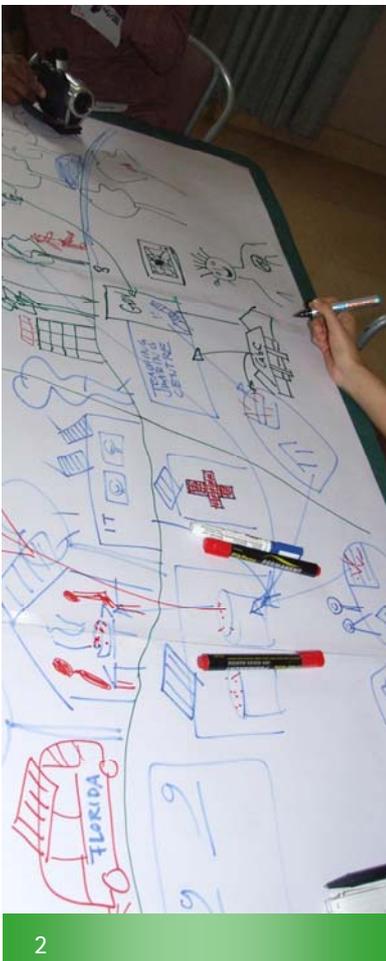
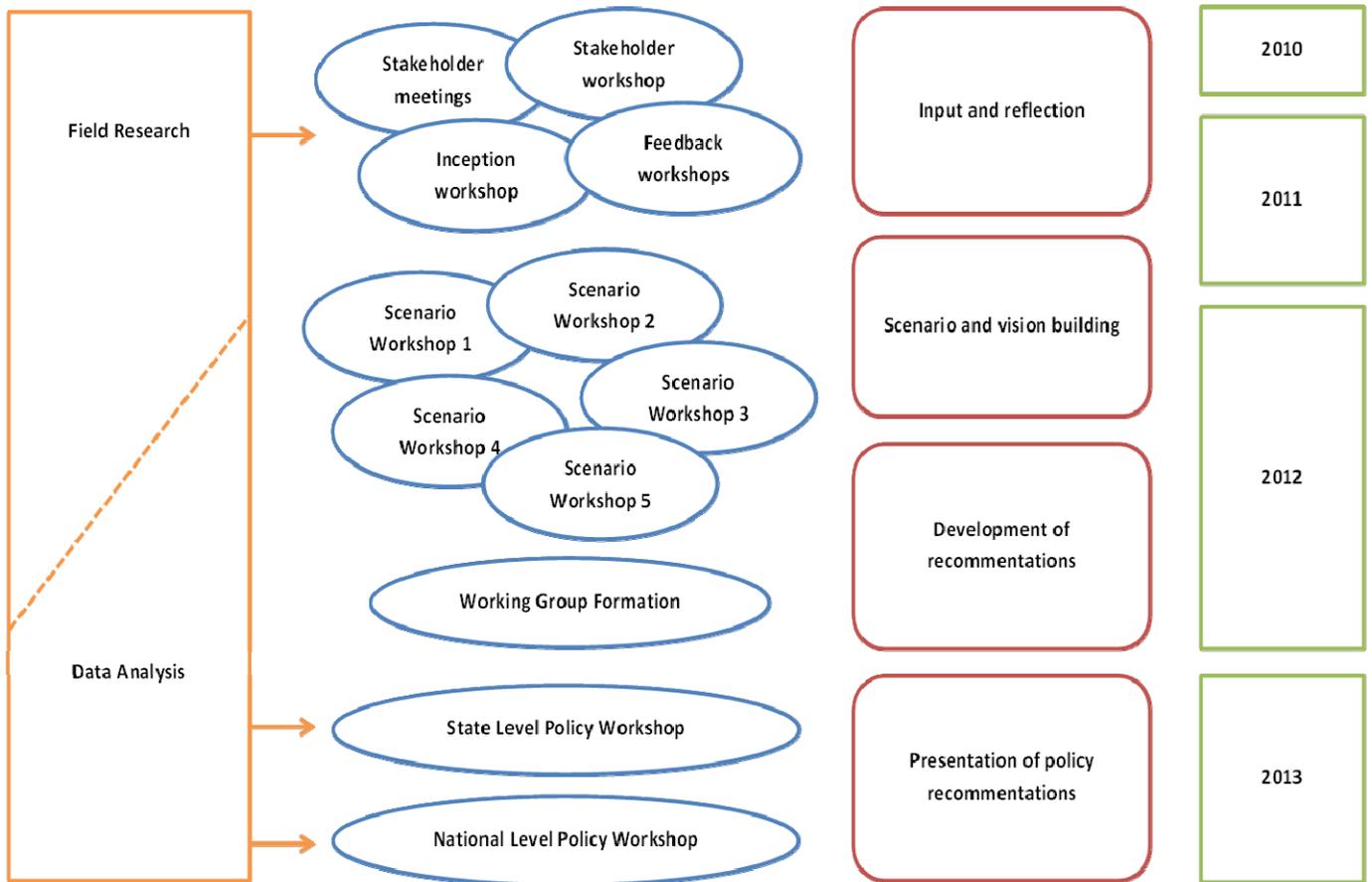
Practitioners are stakeholders who possess expert knowledge and skills that are specific to the local resources and the socio-cultural setting. Practitioners' knowledge complements scientific knowledge, and can play a key role in building a common understanding of the causes and impacts of change in a socio-ecological system. Thus, stakeholders jointly engage in a learning process, resulting in more feasible and relevant outcomes, giving rise to "transformation knowledge".



### TOPICS

- Stakeholder workshops
- Land use change
- Transdisciplinarity
- Transformation knowledge
- Policy integration

## BioDIVA Workshops 2010 - 2013



The workshops identified solutions by assessing and testing options for change together with stakeholders. Their success was dependent on stakeholders feeling that they had joint ownership of the process. This was achieved through capacity building in multi-stakeholder co-operation to improve the problem-solving capacities of the group members, and promote a spirit of mutual respect, thereby helping to overcome social exclusion and marginalization.

### *Preliminary stakeholder meetings*

Preliminary stakeholder meetings with farmers and local decision makers were carried out to learn about: (1) the impact of land use change on the gendered division of labour and the identification of related problems, and (2) the economic situation of the rice farmers, particularly relating to labour issues and economic feasibility of different crops. It was also intended to identify the impact of trends observed in the changing landscape (i.e. conversion of paddy fields to residential use due to a real estate boom).

Each of the project's four disciplinary research groups (sociology, ecology, economics, land use change) conducted group discussion with local land users, to gain an understanding of the rice cultivation practices of indigenous farmers (management decisions, ecological knowledge).

The general objective of the stakeholder meetings was to develop a common understanding as the basis for future cooperation between stakeholders and the BioDIVA research team.



*Stakeholder discussion*

## FEEDBACK-LOOPS: PARTICIPATION OF STAKEHOLDERS

- \* Problem analysis with stakeholders at village level
  - \* Problem analysis with stakeholders at district level
  - \* Inception Workshop with stakeholder groups (district level)
  - \* Scenario development with stakeholders at district level
  - \* Formation of working groups for the development of "Visions for 2030"
  - \* Decision maker workshop at Kerala state level
- ⇒ Working with stakeholders at different levels illuminated the research question from different perspectives.
- ⇒ This process highlighted the dominant strands in local discourse regarding the project's research question.

### *Inception Workshop with political decision makers „The future of rice in Wayanad“*

BioDIVAs Inception Workshop was held at the Community Agrobiodiversity Centre (Wayanad) in February 2011. At the workshop, working groups comprising farmers and local decision makers identified the major problems in rice cultivation and discussed possible solutions. Policy makers and scientists contributed to the discussions during "tea chats", joint field excursions and a plenary session. The two-and-a-half days of interaction and lively discussion established the pillars for the upcoming work of the project.

The goals of the workshop were (1) to introduce BioDIVA, its scope and key concepts to local stakeholders with a central role in the management of local agrobiodiversity; (2) to establish a common understanding for ongoing collaboration in research, and (3) to generate inputs for future workshops. A further key aim was to identify "research gaps" with regard to the agrobiodiversity of rice production systems.

The main results of the workshop results were:

- \* Agreement on collaboration between the participating expert practitioners and the project's researchers
- \* Highlighting of the key influence of government policies at state and central level on agricultural production and rural labour
- \* Identification of the importance of markets and product identity for the valuation of speciality crops
- \* Importance to achieve transdisciplinarity by involving all stakeholders

## INTEGRATING INTER- AND TRANSDISCIPLINARY FINDINGS

BioDIVAs approach towards the creation of transformation knowledge embraced the joint development of a research project from the design up to the final outcome.

While designing the project, the team had to integrate disciplinary theoretical frameworks and methodologies in order to formulate a common research question.

During the project, communication among disciplinary teams was maintained through ongoing discussions, workshops and team days.



New findings and learning outcomes from different disciplines and knowledge systems were integrated into our perspective on the research questions

A further key concern was to identify cross-disciplinary feedback loops.

These inputs were used to develop a conceptual framework, which was then discussed at the National Level Dialogue in Chennai.

## *Joint development of scenarios and visions*

The next participatory event, in late 2011, were the District Level Scenario Workshops, which brought together all groups of actors: farmers, policy makers, scientists and community based organizations. The target of the event was to reach a consensus on the possible effects of a continuation of current development trends in Wayanad. Participants were also asked to discuss and develop visions the future use of agrobiodiversity, and to rank different visions in terms of their desirability. Five alternative "Visions for 2030" were developed and three alternative vision drawings were sketched.

The working method at this District Level Scenario Workshop included the presentation of results from project work and group work, as well as the vision building exercises. This provided insights into decision makers' and land users' assessments of the situation in Wayanad, and facilitated reaching a consensus on the outputs of group work. Furthermore, the implications of scenarios for each group of actor could be assessed. At the same time, solutions and recommendations were explored.

Key elements of the current situation identified at the workshop included:

- \* Economic pressure as a driver of land use change and cause of social strife (income scarcity, loan repayment by farmers).
- \* Stakeholders' demand for incentive schemes, stronger institutions and more needs-based interventions.
- \* The need for better policy, improved policy implementation, and farming-oriented infrastructure development.
- \* The need for research on reasons for crop failure (with scientific input from BioDIVA expected).

## *Formation of the BioDIVA Committee*

The District Level Scenario Workshop was followed by a Scenario Refresher Meeting in 2012, where the results of the scenario workshops were presented.

To ensure continuing stakeholder involvement in the BioDIVA research project, one major aim of the Scenario Refresher Meeting was the formation of a working group to discuss and to develop steps for the implementation of the "Visions for 2030". This working group, the "BioDIVA Committee", consisted of farmers, scientists, as well as local private and public sector policy makers.



Group discussion during the National Dialogue Workshop, "Cultivating Diversity", Chennai 2013

## Kerala state-level policy integration workshop

In early 2013, a Multi-Stakeholder Dialogue on land use change and trans-disciplinary approaches to addressing landscape transformation in Kerala was held in Trivandrum, Kerala. The focus was on experts', civil society's and policy makers' assessment of the current situation of land use change in Kerala.

The goal of the conference was to gain insights into the scope for action and strategic linkages among actors at state level. The idea was to discuss the strategic implications of the scenarios developed at district level, and thereby to provide feedback on project results in the form, for example, of policy recommendations on sustainable land use management.

The main outcome of the conference was to provide insights into the perspectives of the different stakeholder groups at state level regarding land use change. The NetMap method allowed for the identification of interdependencies and power relationships among different impact factors, agencies and stakeholder groups. This in turn shed light on their respective impacts on decisions regarding land use in Kerala.

## Results workshop at national level

On 2-4 September 2013, a National Level Dialogue Workshop, "Cultivating Diversity", was held at the offices of the M. S. Swaminathan Research Foundation (MSSRF) in Chennai. The workshop brought together scientists and practitioners, all of them having a stake in the overall topic of transdisciplinary research on agrobiodiversity and land use change.

The workshop comprised three thematic sessions (1) Transdisciplinary, (2) Equity and Sustainability, (3) Agrobiodiversity, Agroecosystems and Land Use Change. One objective of the workshop was the exchange of knowledge and information on these research topics among BioDIVA researchers and Indian scientists.

During the workshop, the handbook "*Cultivate Diversity!*" was launched at the Indo-German Centre for Sustainability (IGCS), at the Indian Institute for Technology (IIT) in Madras.

One main result of the workshop was the advancement of the concept of bringing scientists and experts together under the umbrella of transdisciplinarity.

## CULTIVATE DIVERSITY!

One of the main outcomes of the BioDIVA research project was the publication "*Cultivate Diversity! A Handbook on Transdisciplinary Approaches to Agrobiodiversity Research*".

The book addresses readers from all disciplines, who are involved in research for sustainable development.

The book provides a platform for sharing the experiences and knowledge of researchers from different disciplines and schools of thought.

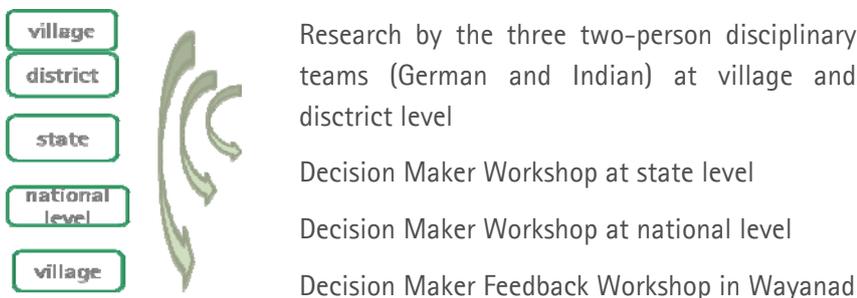
The book presents and discusses a range of theoretical frameworks, methods and practice for transdisciplinary research. It aims to inspire change in research institutions, approaches to research, and in the field.



## Feedback Workshop at village level

In April 2014, a Feedback Workshop titled 'Land Utilization and Agricultural Biodiversity' was held at the district headquarters of Wayanad, Kerala. The aim of the event was to discuss scientifically derived findings with local stakeholders, invite their feedback and work together towards prioritization of solutions. The participants consisted of Panchayat level officials, farmers, member of local governing bodies, media agents, experts from the local Community Agrobiodiversity Centre (CABc-MSSRF) and scientists. The participants recognized that a successful implementation of the recommendations would require a mix of long and short-term planning, advocacy, lobbying of local government agencies, and continuing engagement of both farmers and community-based organisations like CABc.

## Feedback loops in the research process



Co-evolution of knowledge:

Final decisions are to be taken by policy makers.

Important: Comprehensive and speedy feedback on research results to the stakeholder groups.

## Summary: Results of the feedback loop method

1. Building of linkages between formerly unconnected stakeholder groups, e.g., between farmers and members of the Wayanad district government and the Kerala state government.
  2. Exchange between local-level government agencies and farmers regarding:
    - \* Local people's needs and desire for change
    - \* Government agencies' need for information, in order to be able to respond to local peoples' demands
  3. Evaluation of the scientific results, with regard to their potential for application to achieve improvements at the local level
- ⇒ Thanks to the workshops with the stakeholder groups, we could formulate the project's results and corresponding recommendations in a form that is accessible to stakeholders.
- ⇒ We focused on those results which responded to the needs formulated by the stakeholder groups at the beginning of the transdisciplinary research project.
- ⇒ As a result, BioDIVA shaped science in a way that was relevant to the needs and interests of stakeholders: the basic principle of transdisciplinary research.



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