

**Ex-post evaluation 2008**

**Indo-German Bilateral Project  
Watershed Management (IGBP) India**

Brief Report

**gtz**

**Produced by:                      AGEG Consultants eG**  
**This report was produced by independent external experts.**  
**It reflects only their opinions and assessments.**

**Published by:**  
Deutsche Gesellschaft für  
Technische Zusammenarbeit (GTZ) GmbH

Evaluation Unit

Dag-Hammarskjöld-Weg 1-5  
D-65760 Eschborn  
Internet: <http://www.gtz.de>

Eschborn, January 2009

## Tabular overview

### The evaluation mission

Evaluation period	September until November 2008
Evaluating consulting firm	AGEG Consultants eG, Kirchheim unter Teck
Evaluation team	Prof. Dr. Eckart Koch Rahul Sen

### The project

Title of the project according to the order	Support of the Ministry of Agriculture (MoA) in Integrated Watershed Management, India
Project number	1987.2521.0 1997.2082.2 2001.2050.1 2003.2208.1
Overall term broken down by phases	04/1989 - 06/1997 Orientation Phase, Phase I, Phase II 07/1997 - 12/2000 Phase III 01/2001 - 12/2003 Phase IV 01/2004 - 06/2005 Phase V
Total costs	6.013.827 Euro Orientation Phase, Phase I, Phase II 2.568.299 Euro Phase III 3.072.072 Euro Phase IV 1.097.716 Euro Phase V  12.751.918 Euro Actual German contribution  695.000 Euro Actual partner contribution
Objective of the project	Governmental and non-governmental implementing organizations apply procedures to enhance sustainability and outreach of integrated governmental watershed management programs
Lead executing agency	Ministry of Agriculture (MoA)
Implementing organisations	Ministry of Agriculture (MoA)
Other participating development organisations	none
Target groups	(approx. 30.000) land user in selected RWS, particularly women. Intermediaries: Staff of MoA, state-level governmental and non-governmental organizations.

## The rating

Overall rating	2 (good)
Individual rating	Relevance: 1 (very good); Effectiveness:2 (good) <sup>1</sup> ; Impact: 3 (satisfactory); Efficiency: 3 (satisfactory); Sustainability: 2 (good)

## Executive Summary

The **ex-post evaluation** of the Indo-German Bilateral Project Watershed Management (IGBP) was carried out by AGE G Consultants eG, Kirchheim/Teck from September 14 until October 4, 2008. The evaluation team consisted of Prof. Dr. Eckart Koch (international consultant) and Mr. Rahul Sen (national consultant). The mission analyzed relevant selected documents, had interviews with representatives of various federal-, state- and district level institutions in New-Delhi and carried out field visits in four representative watersheds (RWS) in Rajasthan, Andhra Pradesh and Tamil Nadu.<sup>2</sup> A comprehensive questionnaire served as a general guideline for the whole evaluation process and for all interviews. This summary will give an overview on concept and implementation of IGBP, followed by an assessment of IGBP's capacity development (CD) approach and its development-policy effectiveness (measured by the DAC criteria relevance, effectiveness, impact, efficiency and sustainability), comment on gender, poverty reduction and sustainability aspects and will finally summarize some conclusions.

IGBP was launched in April 1989 as a technical cooperation between the Government of India (GoI), the Ministry of Agriculture (MoA) and the German Federal Ministry for Economic Cooperation and Development (BMZ). It ended in June 2005. The project was implemented under the responsibility of the Natural Resources Management (NRM) Division of the MoA and various State Government Departments (SGDs) at federal state level. Non-Governmental Organisations (NGOs) were engaged to mobilise communities for soil and water conservation works, self-help and income generation activities.<sup>3</sup> Technical assistance was provided by *RODECO* Consult GmbH on behalf of GTZ. IGBP worked in geographically differentiated areas and focussed on developing new technical and socio-economic models for improved utilization of small watersheds. The initial focus was on hydrological monitoring and technical aspects, such as the collection and evaluation of hydrological parameters

---

<sup>1</sup> See Annex 1.

<sup>2</sup> IGBP selected the RWS from watersheds in the River Valley Project (RVP) area according to special selection criteria in accordance with IGBP Format P1: Selection of RWS.

<sup>3</sup> NGOs have been selected according to IGBP Format P2: Pre-Selection of NGOs.

through silt monitoring stations (SMS). Starting 1992 the project began extending its activities into developing and testing a participatory watershed management approach in nine selected RWS in seven different federal states. This process included additional socio-economic interventions, such as participation of NGOs as implementation partners, initiating women self-help groups (SHGs) and community based Watershed Committees (WSCs), support for livelihood as well as agricultural and non-agricultural income generating activities (IGPs) and influencing the revision of watershed implementation guidelines. Final target groups for all phases and approaches were land users in the RWS, 65% of them living below the poverty line.

IGBP was only required to develop a **results chain** in 2003, appropriate results were not yet available. Hence, the mission team was requested to carry out the ex-post evaluation based on a new suitable results chain. *Outputs*: "To set up a hydrological data bank, to develop monitoring instruments for watershed development, to carry out capacity development measures through training, exposure trips to other RWS, vocational trainings, trade fair visits, exposures to Germany and regular field visits, to provide innovative technical and socio-economic implementation models to increase water supply and food security and to develop models for income generating activities at target group level". *Intermediate Outcomes*: "The MoA integrates relevant measures and proven results in guidelines or ordinances; governmental institutions and NGOs implement procedures for improving sustainability and impact of governmental integrated Watershed Management Programs, the target groups implement the procedures and models, and replicate/expand the results of the pilot projects and - particularly females - implement/replicate agricultural and non-agricultural IGPs." *Outcome*: "The population in selected rural areas in India increase their food supply and their household income on a sustainable basis". *Impact*: "Poverty is reduced and food security is increased in rural India".

**Capacity development** (CD) has been most effective at the RWS level: Trainings in community institution building and management has led to the establishing of 146 active women SHGs in nine RWS that have significantly benefited their members through credit support from their savings and bank linkages. The 2000 female SHG members have become aware and empowered and are now participating actively in public decision making in the villages. Training in vegetable cultivation and non-agricultural IGPs has led to increased household incomes and better livelihoods. As many of trained staff at SGD level and at central level have either retired or have been redeployed to other projects and tasks, only a few trained persons are still or again related with watershed activities mainly at senior

positions. But all five NGOs interviewed have retained trained project staff and most of them are still working in the project area but covering other villages or watersheds.

**Relevance:** IGBP was relevant. Watershed management belongs to the high priority development issues of India. IGBP was able to address important development issues of the GoI and the target groups as well. It complied with the sector policies of the partner country, the policies of the MoA, particularly the "River Valley and Flood Prone River Project" (RVP/FPR), and the respective NGOs involved. The special focus on women made IGBP highly relevant for women. Being the only externally funded project supporting RVP/FPR, IGBP had a high priority for the Ministry of Agriculture (MoA). On the one hand, it introduced innovations in the field, thus making IGBP meaningful and relevant. On the other hand, the fact that IGBP operated in only four to five watersheds at the same time and was covering only 3% of the overall RVP/FPR area as well as the low overall budget volume has reduced its weight and importance to a certain extent. The relevance was rated as **"very good" (1)**.

The project's **effectiveness**<sup>4</sup> is measured by accomplishments regarding intermediate outcome, results hypotheses and outcome of the new results chain. *Intermediate Outcome:* Two regional guidelines for watershed management have been adapted and in 2008 new redesigned central guidelines that took up major IGBP features became effective. At least three RWS are serving as showcases for visitors from other agencies and projects. IGBP was trying to influence the national discussion on watershed management with many publications, case studies and handbooks, however, the real effects are hardly to assess. The target groups in all four RWS visited have taken the idea of integrated watershed management and are still implementing the livelihood approaches. While SGDs and NGOs have been implementing IGBP concepts during the lifetime of IGBP, SGDs did not report that such approaches have been continued after the finalization of IGBP. On the other hand, all three NGOs visited confirmed that they have continued implementing such approaches in other watersheds. All *results hypotheses* needed to achieve the output have been met. The soil and water conservation measures have resulted in improved availability of water in at least three RWS visited. In all four RWS visited small farmers were able to increase their agricultural output and a few non-agricultural IGPs have been initiated in three out of four RWS visited by the team. The *project outcome* has been fully achieved. It could be verified that the IGBP approach led to a sustainable increase in household income and food supply. So, IGBP was very effective in achieving results and outcome of the revised results chain. Due to minor shortcomings the overall rating is **"good" (2)**.

---

<sup>4</sup> See Annex 1.

**Impact:** Over a period of 16 years IGBP was able to influence the lives of around 60.000 poor people in India, at the most to a certain extent. The full implementation of the new guidelines might change this figure. Even if IGBP's share in revising the guidelines is not known in detail, it is obvious and was confirmed by at least four key officials at central level that some of the revised contents are owed to IGBP's influence. It is meritorious that finally, three years after the termination of IGBP, this has been achieved, but even now, it remains to be seen, how this will be put into practise in order to achieve an impact outside the project area. The impact on cross-cutting issues such as environmental protection, conservation of natural resources, participation, good governance and conflict sensitivity was positive but remained generally small as well and was - even after the long project duration - mainly restricted to the project area. So the impact during the lifetime of IGBP remained small and the rating is - only - "**satisfactory**" (3).

**Efficiency:** There was no cooperation with other donors or projects, project guidelines on planning and implementing interventions for non-technical livelihood-oriented interventions of NGOs were not developed. The practical shift of IGBP's focus from a technical to a community development and poverty reduction oriented project was not fully reflected in the composition of the international expertise. An increase of the share of non-technical international short-term experience at the expense of long-term expertise could have been considered. An effective results-based monitoring system has not been established. The concept of establishing a total of 48 Silt Monitoring Stations (SMS) that were equipped with automatic and manual recording instruments acquired from Germany did not really work. On the other hand, IGBP made several attempts to increase the project's efficiency, such as advisory field visits (which increased productivity), implementing a participatory approach, insisting on budget transparency and recommended to concentrate on three to four neighbouring federal states only ("cluster approach") to cut down costs and increase synergy and spill-over effects; unfortunately the project partner did not agree. A Cost-Benefit-Analysis (CBA) has not been carried out, but a rough estimation revealed that 10.000 families/households have benefited from IGBP: While IGBP spent approximately 1.300 Euro per family, it is estimated that the additional income caused by IGBP interventions ranges between 3.000 to 6.000 Euro per family over the period of ten years. The CB-relation of roughly 1:3 to 1:5 is acceptable. In balancing all effects a rating of "**satisfactory**" (3) seems to be fair.

**Sustainability:** At the level of the RWS IGBP's approach was sustainable. Attempts to achieve sustainability at SGD-level were only partly successful: There were no parallel structures, regular cost norms were not exceeded, ownership of constructions were handed

over. SGDs and NGOs that had worked together throughout the project did not continue their cooperation once the project ended and the SMS concept was not successful. With regard to NGO inputs, there were no attempts made to reach some cost sharing, NGO-implemented activities were fully subsidized. Only few organisations decided to replicate the IGBP approach. Through the new guidelines on watershed management, that became effective in April 2008, there is the expectation that the outreach for this concept will be enhanced and that in future parts of these activities will be financed from the government budgets. The final rating for sustainability is **"good" (2)**.

**Gender** aspects have been observed within the local cultural norms. With the formation of 146 women groups during the time of IGBP support in nine RWS, women have achieved a higher self-confidence. Women started to take a more active role within the community. IGBP did not provide for a specific gender component but promotes gender mainstreaming which is an appropriate approach. Women are main beneficiaries of self-help group (SHG) activities. Impressive achievements, particularly with respect to empowerment and the development of self-esteem could be seen during the field visits.

IGBP was a **poverty** oriented project by nature. It considered the needs of the poor and increased food security. It promoted pro-poor growth and improved the access of the landless people to employment, resources, income, know-how and health services. IGBP was not able to reduce the number of people living below the poverty line, as defined by World Bank and MDG 1, sizably. However, calculations and assessments show that the living standard of families living below this standard could be uplifted. All technical watershed measures undertaken in the frame work of IGBP have been contributing to increase the water availability in the former project areas.

**Sustainable development:** IGBP followed an integrated approach: It linked technical soil and water conservation methods with approaches to support livelihood in the respective watersheds and it linked economic, social and ecological dimensions. Moreover, it adopted a multi-level approach and intervened at national, state/district and village level. Regional linkages were not really established. It was process-oriented and adapted a value oriented approach as well: Democratic principles were introduced (SHG and watershed committees), human rights gained importance by focussing on landless and low-caste people and on women's empowerment. Strengthening poor people and high transparency of budgets and expenditures is positively correlated with more importance for "rule of law" and promoting good governance. The increased economic activities promoted the integration of target groups in the market system.

**Conclusions and Recommendations: Integrated watershed management approaches** create positive direct results for the poor target groups. IGBP was able to transform vague general concepts into practise and produced models for possible replicators. But such projects should develop a systematic implementation concept that is continually monitored and updated and **scaling-up concepts** should be developed at an early point of time. **Financial contributions** should be channelled through official budgets and the personnel concept should consider special expertise on community development, microfinance, poverty reduction strategies, IGPs, organizational development, rural development and the like. Similar projects should insist on a "**cluster approach**" by concentrating all approaches on a smaller total area to achieve higher degrees of visibility, spill over effects and efficiency.

IGBP was **gender-focussed**, **poverty-oriented** and followed an **integrated approach** (technical-livelihood; economic-ecological; sectoral-organizational-policy). It worked successfully on various levels (**multi-level**), adopted a **flexible** and **holistic approach** and was **process-oriented**.

**Cooperation** with other German or international donors did not take place, but cooperation at district level worked well, was effective, opened up new options and removed fundamental development barriers, however, only in the project area. Collaboration with the project partners was based on a long-term, continuous, trustful and personal relationship that created some sort of **in-group feeling**. This "family approach" was conducive to capacity building and stimulating learning situations. Mechanisms to create such approach should be examined, compiled, tested and replicated. Cooperation with **NGOs** is crucial for achieving a new dimension in watershed management. IGBP tried out new concepts and instruments that were able to directly respond to the needs and problems of the target groups.

A **results-based monitoring system** is strongly needed. Experiences and learning processes should have been more carefully examined, systematically documented, (**knowledge management**) disseminated to and discussed with other actors for wider experience sharing. A comprehensive documentation of evaluated approaches, instruments and experiences should be available.

# Indo-German Bilateral Project (1989 - 2005)

## Target-Performance Comparison



**Project Goal (old)**  
 Governmental and non-governmental institutions implement procedures for improving sustainability and impact of governmental integrated Watershed Management Programs.

**Indicator 1**  
 In at least two districts guidelines are available considering essential project innovations (diversified implementing structure, impact monitoring).

**Indicator 2**  
 Vegetation coverage in the RWS has increased by at least 30% compared to adjacent watersheds

**Indicator 3**  
 The availability of selected consumer goods in the RWS has increased by at least 20%.

**Indicator 4**  
 The ground water level in the RWS has increased by at least 25% compared to adjacent WS.

**achieved**

**partially achieved**

**not achieved**

**Project Outcome (new)**  
 The population in selected rural areas in India sustainably increases their food supply and/or their household income, so that their living conditions are improving

**Impact Hypothesis 1**  
 Sufficient supply of water for small farmers is secured on a permanent basis

**Impact Hypothesis 2**  
 Small farmers are able to increase their agricultural output

**Impact Hypothesis 3**  
 Regional market prices do not fall as a result of increased output

**Impact Hypothesis 4**  
 Income generation activities are successfully practised

**Intermediate Outcome 1**  
 MoA integrates relevant measures and proven results in guidelines / ordinances

**Intermediate Outcome 2**  
 Governmental and non-governmental institutions implement procedures for improving sustainability and impact of governmental integrated Watershed Management Programs

**Intermediate Outcome 3**  
 The target groups implement the procedures and models; they replicate/expand the results of the pilot projects and - particularly females - implement/replicate agricultural and non-agricultural income generating measures

**Note**  
 Indicators for the new impact chain have not been formulated, as this seemed not to be appropriate nearly three years after project termination. A direct assessment of the Intermediate Outcomes, the relevant Impact Hypotheses (for achieving the Project Outcome) and the Project Outcome itself are used as substitutes instead.