

Titel of the Dissertation (2010)

***Social Impact Assessment of the Natural Forest Protection Program on forest-dependent communities and households in Western China***  
***- Case studies in Gansu Province and Chongqing Municipality***

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**Description / Summary**

Social Impact Assessment (SIA) is the process of analyzing, monitoring and managing the social effects of planned or implemented development interventions. The primary purpose of SIA is to bring about a sustainable and equitable biophysical and social environment. SIA is a prerequisite in FAO and World Bank aided projects which cover sectors of mining, agriculture, fishery, dams and transportation. In forestry it has the great potential of enhancing sustainable forest management, taking into account rural development objectives and local needs. SIA can be applied before and after the implementation of projects and programs.

In the context of recent policy changes in China, the Natural Forest Protection Program (NFPP) has been implemented in a “top-down” process from 1998 to 2010. A large part of the forests on main river basins in Western regions are being conserved with severe restrictions for commercial use. The social effects of the NFPP are still debatable, indicating a need for conducting a SIA of the NFPP using a systematic conceptual approach.

Objectives of the research are: (1) To understand how and to what extent the NFPP affected the local forest-dependent communities and their households; (2) To identify the local strategies currently used to cope up with the impacts; and (3) To develop the optimal strategies likely supported for a better harmonization between livelihood and the NFPP implementation in different regional contexts.

The empirical research is approached through quantitative and qualitative social research methods for data collection and analysis. For the case studies, four villages with a total number of 175 respondents were selected for field surveys where questionnaires, interviews and group discussions were employed.

The research findings indicate that, the NFPP has significant impacts on the population characteristics, institutional arrangements and infrastructure and public services at the community level and at household level, the income derivation, expenditure, labour time distribution, perceptions on public health/safety and changing values of forests perceived by individuals.

The research reveals that, synthesizing *de facto* impacts of the NFPP makes potential negative social impacts predictable. The policy-makers and project teams implementing the NFPP should be aware that, the NFPP results in dynamic change processes which include the *de facto* and potential impacts as well as the influence factors; among these, contribution of strategies derived from local communities and households as the spontaneous reactions to cope with the NFPP impacts should be taken into consideration. Recommendations are given referring to a better implementation of the NFPP and the need for future researches concerning the SIA for sustainable forest management in different regional contexts.

## **Beschreibung / Zusammenfassung**

*Social Impact Assessment* (SIA) ist ein Prozess, der Analyse, Monitoring und Bewältigung der sozialen Effekte geplanter oder durchgeföhrter Entwicklungsinterventionen umfasst. Das Hauptanliegen von SIA ist, eine nachhaltige und gerechte biophysische und soziale Umwelt zu schaffen. SIA ist für Projekte der FAO und der Weltbank in den Sektoren Bergbau, Landwirtschaft, Fischerei, Talsperren und Transport eine Grundvoraussetzung. Für die Forstwirtschaft ergibt sich daraus das Potenzial, nachhaltige Waldbewirtschaftung zu stärken und dabei die Ziele ländlicher Entwicklung und lokale Erfordernisse zu berücksichtigen. SIA kann vor und nach der Durchführung von Projekten und Programmen angewendet werden.

Im Zusammenhang mit den aktuellen politischen Veränderungen in China wird das *Natural Forest Protection Program* (NFPP) im Zeitraum von 1998-2010 nach dem *top-down*-Verfahren durchgeführt. Die sozialen Auswirkungen des NFPP sind noch immer umstritten. Das unterstreicht die Notwendigkeit der SIA unter Anwendung einer systematischen konzeptionellen Herangehensweise. Ein besonders kritischer Faktor dabei ist, dass ein erheblicher Anteil der Wälder in den Wassereinzugsgebieten wichtiger Flussläufe in den westlichen Regionen durch strikte Einschränkungen der kommerziellen Nutzung geschützt wurden.

Die Ziele der Forschung sind: (1) Aufzeigen wie und in welchem Ausmaß das NFPP die örtlichen waldabhängigen Gemeinden und ihre Haushalte beeinflusst hat; (2) Identifizieren lokal entwickelter und angewandter Strategien, um die Auswirkungen des NFPP zu bewältigen; und (3) Entwickeln optimaler Strategien für eine bessere Harmonisierung der Lebensgrundlagen mit der Umsetzung des NFPP in unterschiedlichen regionalen Kontexten.

Die empirische soziale Forschung bedient sich quantitativer und qualitativer Methoden zur Datensammlung und Datenanalyse. Für die Fallstudie wurden vier Dörfer mit insgesamt 175 Befragten ausgewählt. Bei der Primärdatenerhebung kamen Fragebögen, Interviews und Gruppendiskussionen zur Anwendung.

Die Forschungsergebnisse zeigen, dass das NFPP signifikanten Einfluss ausübt auf Größe und Anteil armer Bevölkerung, auf institutionelle Rahmenbedingungen, die Infrastruktur und den öffentlichen Dienstleistungssektor auf Gemeindeebene. Auf Haushaltsebene wurde signifikanter Einfluss nachgewiesen für die Generierung von Einkommen, die Ausgaben, die Arbeitszeitverteilung, die Vorstellungen über Gesundheitswesen und Sicherheit als auch auf die Wahrnehmung der sich verändernden Werte des Waldes.

Es wird ersichtlich, dass durch Zusammenführen der *de facto*-Auswirkungen des NFPP potenzielle negative soziale Einflüsse vorhersagbar werden. Entscheidungsträger und Projektteams sollten sich darüber bewusst werden, dass das NFPP zu dynamischen Veränderungsprozessen führt, welche die *de facto*- und potentiellen Auswirkungen sowie die Einflussfaktoren betreffen. Dies schließt den Beitrag der lokal entwickelten Strategien ein. Empfehlungen betreffen die bessere Umsetzung des NFPP sowie die Notwendigkeit weiterer Forschung hinsichtlich der SIA im Zusammenhang nachhaltiger Waldbewirtschaftung in verschiedenen regionalen Kontexten.

## **Curriculum Vitae**

### ***Academic Research and Study Experiences***

Since 07/2006	PhD fellow, with a research focus on “Social Impact Assessment of National Forestry Policy for Sustainability under Ecosystem models”, financially sponsored by German Academic Exchange Center (DAAD); at Technische Universität Dresden (TU-Dresden)/Germany
10/2003~ 10/2005	M.Sc. in Tropical Forestry and Management, partly financed by German STUBE scholarship organization and German Agency of Technical Cooperation (GTZ) (for field survey of master thesis), at TU-Dresden/Germany
01/2003~ 07/2003	26 <sup>th</sup> UNEP/UNESCO/BMU International Postgraduate Course on Environmental Management, nominated by working organization in China, sponsored by the UNEP, UNESCO and German Federal Ministry for Environment, Dresden/Germany
08/1999~ 12/2001	B.Sc. in Economic Management at Zhejiang Administrative Academy, Hangzhou/China
09/1996~ 07/1999	Suzhou Institute of Urban Construction and Environment Protection (Major: Environmental Monitoring Management), Suzhou/China
09/1993~ 08/1997	Changsha Environment Protection College (Major: Environmental Management), Changsha/China

### ***Work Experiences and Practices***

12/2005~ 06/2006	Local project officer and coordinator for GEF project “China Persistent Organic Pollutants Management and Disposal Demonstration” in Environmental Protection Bureau of Zhejiang Province, in cooperation with World Bank and Ministry of Environmental Protection of China, Hangzhou/China
10/2004~ 03/2005	Internship in “Sino-German Cooperation Program on Forests for Sustainable Development in Western China”, partnerships including GTZ, China State Administration of Forestry, Chinese Academy of Forestry and Beijing University of Forestry; as a project coordinator involved in field surveys for information collection/analysis and for reports/master thesis composition, Beijing- Sichuan- Chongqing- Shaanxi- Gansu/China
08/1997~ 01/2003	Engineer in Environmental Protection Bureau of Zhejiang Province for regional environment management; chairman of Youth Union of provincial environmental sector and vice rector of Green Youth Volunteers Association of Province, leading social activities as “Youth for Green” environmental volunteers movements and services, Hangzhou/China
02/1997~ 07/1997	Internship in Ministry of Environmental Protection of China, as an assistant for composition/analysis of environmental news/reports/tendencies, coordinating with medias for large environmental dissemination programs/education activities such as “5 <sup>th</sup> of June National Environmental Day”, Beijing/China

### **Participated Trainings and Conferences:**

10/2008~ 10/2008	Academic contribution in International Conference Tropentag 2008: "Natural Resources Management in a Changing World", with publication, Stuttgart/Germany
07/2007~ 07/2007	Academic forum: 2 <sup>nd</sup> "Sino-German Forestry Dialog on Sustainability" (GTZ-CAF), Beijing/China
04/2006~ 04/2006	Training: "Procurement and Finance Management in World Bank Projects", the World Bank Beijing Office, Beijing/China
10/2005~ 10/2005	Academic contribution in 1 <sup>st</sup> "Sino-German Forestry Dialog on Sustainability" (GTZ-CAF), with publication, Beijing/China
07/2005~ 07/2005	International Conference and training of 12 <sup>th</sup> ASEF Asia-Europe Cooperation on Forestry and Environment: "Towards Sustainable Resources Management", invited and sponsored by the ASEF, University Bandar Seri Begawan/Brunei
06/2004~ 06/2004	Workshop on "Development Project Planning and Management", directed by senior project managers from GTZ and TU-D, Dresden/Germany
02/2004~ 02/2004	Workshop on "Development Oriented Planning Tools for Sustainable Land Use and Forest Management", sponsored by the German Federal Ministry for Economic Cooperation and Development (BMZ) and NGOs (InWent), Schortau, Leipzig/Germany
06/2003~ 06/2003	Workshop on "Environmental Impact Assessment", Berlin/Germany

### **Paper Presentation and Publication:**

<b>Wang, Y.; Pretzsch, J.; Li, Z.</b> (2010) (Forthcoming) Social impact assessment in forestry field: Case studies of the Natural Forestry Protection Program impacting on local communities and households in Western China. Paper has been accepted by Journal of Environmental Assessment Policy and Management, and is currently under revision. Print ISSN: 1464-3332, online ISSN: 1757-5605.
<b>Wang, Y.; Pretzsch, J.; Li, Z.</b> (2010) (Forthcoming) Conflicts and interrelations between the local traditional use rights to forests by local households and governmental forest project in China. Paper has been accepted by Journal of Forest Policy and Economics, and is currently under revision. ISSN: 13899341.
<b>Wang, Y.; Pretzsch, J.</b> (2008) Assessing the social impacts of the China's ecological oriented forestry policy on local forest-dependent communities in Mountainous Regions: Comparative analysis of Case Studies in Western China. Paper presented to and published in the Annual International Conference on Tropical and Subtropical Agriculture and Natural Resource Management for Sustainability (Tropentag 2008) with subject of "Natural Resources Management in a Changing World". Stuttgart (Hohenheim)/Germany 7-9 October 2008. Hyperlink to the online version: <a href="http://www.tropentag.de/2008/abstracts/abstracts.php?showtime=0&amp;noID=1&amp;menu=11#Subgroup_4g">http://www.tropentag.de/2008/abstracts/abstracts.php?showtime=0&amp;noID=1&amp;menu=11#Subgroup_4g</a>

**Wang, Y.; Pretzsch, J.** (2005) *How much environmental costs the farmers bear?* – Socioeconomic analysis of the Natural Forest Protection Program and its influences on local households in Xiaolongshan State-owned forest area in China. Paper presented to the Sino-German Forestry dialogue on Sustainable Forestry. Beijing 25-27 October 2005.

**Wang, Y.; Uhlmann,** (2003) Ecological function and the proper treatment of surface level water of West Lake Protected Area in Hangzhou of China. Paper presented to the 26<sup>th</sup> UNEP/UNESCO/BMU International Postgraduate Course on Environmental Management, Dresden/Germany 13-15 July 2003.