

## The "sweet desire" Cacao cultivation and its knowledge transfer in Central Sulawesi, Indonesia

Diplomarbeit im Institut für soziokulturelle Studien

Prüfer : Dr. M. Fremerey
 Prüfer : Prof. Dr. O. Hensel

Vorgelegt von: Maria Abbate

Witzenhausen, 13.11.2006

## Summary

This case study focuses on the project concept of STORMA (Stability of Rain Forest Margins), a research co-operation project in Central Sulawesi around the Lore Lindu National Park, Indonesia. The aim of this thesis is to figure out how Sulawesian cacao farmers gain access to valued knowledge and how they acquire, reproduce, utilise, transfer such knowledge, as well as the interaction among the different actors in the global cacao business. For this purpose a case study has been carried out in the village Sintuwu, Donggala Regency, Central Sulawesi, Indonesia. Cacao farmers have been interviewed about their knowledge of cacao cultivation, processing practices and how information or data about the cash crop cacao are communicated among cacao farmers. Further the Agriculture Department, different NGOs, Cacao Traders in Palu/Central Sulawesi and the Coffee and Cocoa Research Institute Jember, East Java/Indonesia have been visited as interviewed.

The results of all interviews of this case study, which include the application of a qualitative approach together with a quantitative one, were carried out with special regard on knowledge transfer among these different groups.

The extreme expansion of Indonesian cacao production in the last ten years was mainly caused by large production increases by sulawesian smallholders. Sintuwu's cacao farmers understandable wish to improve their economic status and the protection of the Lore Lindu National Park has led to a conflict between the aims of environmental and socio economic development. The size of the cacao plantations in Sintuwu still increases, 78% range from 0,25 to 2 ha, the remaining 22% is up to 13 ha big and can not be classified as a smallholder farms anymore. The adoption of cacao cultivation in the last 10 years, is shown by regarding the age of cacao plantations in Sintuwu, 32% are up to 5 years old and 48% are between 6 - 10 years old.

The knowledge about cacao cultivation is not only transferred through educational programs of the Indonesian government or of NGOs. The outreach of the cacao trainee programs and technical assistance supported by the Indonesian Government and different NGOs, were currently stopped. The dissemination of knowledge, has only been partially successful. The acquisition of cacao cultivation knowledge in Sintuwu is mostly supported by the family, or by friends as well as neighbours and other cacao farmers of the village. The exchange of information and the cooperativeness between the cacao farmers is very vivid and they work in different

ways together. The family, friends or other farmers have been the main source of knowledge for those who start new cacao plantations in Sintuwu. The adoption of cacao cultivation knowledge by seeing and hearing and by working together, should also be recognised as an important way to receive knowledge about this new adapted cash crop.

The problem of the boom and bust cycle of cacao production is, that in this cycle, pioneer planters commonly benefit from early forest rents, experiencing a boom period which is then followed by declining production due to loss of soil fertility and the infestation of pests and diseases. While the climate and soil in Sulawesi as well as the entrepreneurial attitude of the smallholders were vital for this development, a relative lack of support interventions in sustainable agriculture and marketing distribution arose.

In the last decade pest and disease problems lead to a strong earning decline in production and losses of income that smallholders often try to compensate this by extension of land under cultivation, in many cases on cost of the rain forest. Due to increasing cacao world market trends, it can be expected that the forest exploitation around the Lore Lindu National Park will go ahead however, tolerated by the Indonesian government or not. To face this challenge, it is of great importance to guide the cacao farmers on their way to sustainable agriculture systems.

Conclusively it can be pointed out that it is necessary for the future to increase the field productivity through improved plantation management to guarantee smallholders a higher income without the need for extended cultivation area. Transfer of knowledge is the basis to improve cacao-farming profitability, thus technological progress resulting in higher yields would mean less land in agriculture and more in forest. A proper guidance by involved organisations who can show new possible sustainable modes of land use and disseminate the therefore necessary knowledge is going to play an important role for future coexistence of the National Park and the local people who live at its margins.