Die wirtschaftliche Bedeutung des "Rainforestation Farming"-Konzepts für Schwellenländer in den Tropen am Beispiel der Philippinen



Freie wissenschaftliche Arbeit zur Erlangung des akademischen Grades Diplom-Ökonom an der Fakultät Wirtschafts- und Sozialwissenschaften der Universität Hohenheim

Eingereicht am Lehrstuhl für Volkswirtschaftslehre, insbesondere Umweltökonomie sowie Ordnungs-, Struktur- und Verbraucherpolitik Prof. Dr. Michael Ahlheim

Vorgelegt von:

Marc-André Fritsche Zur Schiessmauer 34 74372 Sersheim

Matrikelnummer 0260027

Erstgutachter: Prof. Dr. Michael Ahlheim Zweitgutachter: Prof. Dr. Harald Hagemann

Diese Arbeit wurde gefördert aus Mitteln der Eiselen-Stiftung Ulm

Diese Arbeit wurde unterstützt durch die DaimlerChrysler AG Stuttgart

Stuttgart-Hohenheim, den 30. Januar 2004

Abstract

This Diploma thesis deals with the economic implications of the Rainforestation Farming concept which was developed against the background of a progressing landscape destruction in the Philippines. Rainforestation Farming can only be established in the long run if the obvious ecological advantages come with new economic chances. These could arise from the integration of crops in the Rainforestation Farming system which can be used in industries as a renewable raw material, for example the Abaca fibres of *Musa textilis*. The question is which economic conditions will be necessary to realize the application of sustainable produced Abaca fibres for example in the automotive industry. Furthermore it has to be clarified, how the implementation of the Rainforestation Farming concept is able to support the economic development of Leyte Island and the Philippines and which consequences arise for the living conditions of the local population. For this purposes Interviews with farmers and local politicians were conducted during the stay on Leyte Island in autumn 2003.

Firstly, a market analysis of Abaca fibres shows that price fluctuations are varying with the different fibre grades. Secondly, relationships between the participants in the Abaca market are extremely rigid. Thirdly, Abaca diseases and climatic conditions are important factors that influence fibre quantities and qualities. The question is what are the chances of sustainably produced Abaca fibres in this market. One possible solution is the development of a new institutional framework, as e.g. in Public Private Partnership projects. If it is possible to get planning reliability through price stability, to ensure stable quantities through circumventing the climatic factors and to guarantee quality continuity through a certification system the application of sustainably produced Abaca fibres in the automotive industry could be realized.

However, a new cultivation concept can not alone solve the ecological and economic problems. Therefore, the population's awareness for the acute ecological problems has to be increased. Hence, reforms in family and educational policy as well as in the regulations of land classification and landownership have to be enforced in order to reduce the settlement pressure of the remaining forest areas. Besides the obvious ecological advantages Rainforestation Farming offers provable economic chances. The selling of additional harvested crops and fruits as well as gains from seedling nurseries on the on hand contributes currently more than 10% to the total income of the farmers. On the other hand the integrated cultivation of Abaca can ensure a higher and stable additional income for the farmers. Thus the Rainforestation Farming and the integration of Abaca cultivation can improve the living conditions of the farmers and achieve an significant contribution for the struggle against poverty and hunger.