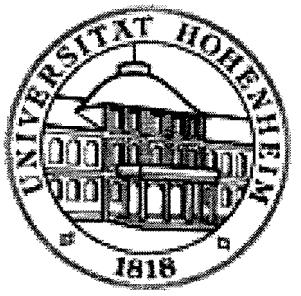

THE ROLE OF INDIGENOUS VEGETABLES FOR MICRONUTRIENT CONSUMPTION IN SOUTHEAST ASIA: A CROSS SECTION ANALYSIS OF INDIGENOUS VEGETABLE CONSUMPTION IN THE PHILIPPINES

Mireille Hönicke

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Prof. Dr. Qaim, Prof. Dr. Dr. h.c. Heidhues

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Abstract

Micronutrient deficiencies are one of the main causes of malnutrition in developing countries. The number of people in Southeast Asia suffering from micronutrient malnutrition, especially vitamin A deficiency and iron deficiency anemia, is alarming. The main cause is the lack of access of poor people to a diverse diet to meet their daily nutrient needs in order to maintain a healthy life. One promising approach to overcome micronutrient deficiencies is to improve dietary diversification through the production of vegetables in home and school gardens. Within this approach indigenous vegetables deserve more attention, since many species are considered as rich sources of vitamins and minerals.

In this study the role of indigenous vegetables for micronutrient consumption and its contribution to food and nutrition security of resource-poor households will be analyzed. The study uses cross sectional data from the Philippines assembled within a school garden project conducted by The World Vegetable Center (AVRDC). The data contains information on household food consumption, demographic, and socioeconomic aspects, as well as anthropometric and hemoglobin values for school children. A dietary assessment will be carried out with particular emphasis placed on the indigenous vegetable consumption. In addition, the effects of indigenous vegetable consumption on the health and nutrient status of school children will be analyzed. Non-parametric statistical tests and correlation methods are used. Finally, a regression analysis is applied to identify the effect of different socioeconomic and demographic factors on indigenous vegetable consumption.

The study results highlight the fact that indigenous vegetables contribute significantly to micronutrient supply. They contribute to dietary diversification and have positive effects on overall bioavailability of micronutrients. Especially in the lowest expenditure group people rely more on indigenous vegetables and tend to substitute animal sources. Results of the regression analysis demonstrate that indigenous vegetables are consumed as inexpensive sources of micronutrients and people change to more highly desired foods as income increases. The level of education has no significant effect on the consumption. The home production of vegetables, as well as the aim of respondents to learn how to grow indigenous vegetables shows a positive effect on indigenous

vegetable consumption. Overall, resource-poor households are not able to meet the recommended level of energy and micronutrient intake. Findings on the nutritional status of school children underline the need to enhance dietary diversification to combat micronutrient deficiencies.

Considering the low vegetable consumption and the overall inadequate micronutrient supply, study results can only emphasize the need to strengthen promotion of indigenous vegetables, as resource-poor households are heavily dependent on them.

Keywords: Micronutrient malnutrition, dietary diversity, indigenous vegetables, home and school garden, Southeast Asia, the Philippines

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