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Increasing vegetable production and consumption in Africa: **Fighting malnutrition and poverty Detlef Virchow** The Challenge



Africa lags behind in world vegetable production and consumption: The hunger for more vegetables in Sub-Saharan Afri Consumption vs required intake The slow growth of sub Saharan vegetable production The production of vegetables in Africa is lagging far behind the world-wide average: annually approximatly 50 kg of vegetables per capita are produced, which is less than half of the ┝╓╓╖

The consumption of vegetables in Africa is lagging far behind the world-wide average: less than the WHO/FAO recommended minimum uptake of 200 g of vegetables/day/person (or more than 73 kg/year/person).

production in all other regions of the world.

Increased vegetable production, marketing and consumption has the potential to contribute significantly to the development of especially the rural and poor population in Africa. Its role is neglected in the nutritional and development discussions, especially that of African indigenous vegetables.

Opportunities for Africa



Kenya Ghana Sudan anzania Mati Uganda

Increasing African vegetable consumption and production will have

positive health and economic effects (based on the experience from Asia): · Increased consumption will reduce the devastating health effects of

- insufficient vegetable intake;
- Increased consumption will lead to an increase in production;
- · Increased production will lead to an increase in employment because of
- high labor demand for cultivation and eventual food processing;
- Higher production and adding value to the produce on site will lead to increasing incomes for the producers.

An Engine for Job Creation: The Asian Perspective				
Country	Average number of labor days per hectare			
	Cereals	Vegetables	Increase (%)	
Cambodia	81	437	440	
Vietnam (southern)	111	297	168	
Vietnam (northern)	216	468	117	
Bangladesh	133	338	154	
Lao PDR	101	227	125	
Philippines	93	185	99	
India	80	124	55	

High income generation through vegetables

30-500% more income per nectare compared to the production of cereals		
Country	Percent difference in net farm income (%)	
Kenya	497	
Lao PDR	380	
Cambodia	117	
Vietnam (northern)	189	
Vietnam (southern)	20	
Bangladesh	29	
	Source: Weinherner and Lumpkin 2005	

What needs to be done?

To increase the demand of vegetables, promotion and awareness raising has to take place (for consumers, at local markets and supermarkets) and more research has to be done on the nutritional value of vegetables

Evaluate nutritional and functional properties of vegetables;

urra Weinberger and Luttrakin 200

- · Optimal food preparation methods;
- Nutritional security and diet diversification;
- · Promoting their health benefits to women
- · Selecting and breeding varieties suited to consumer
- preferences;

Promotion of improved vegetable varieties.

To increase the supply, improved technologies have to be offered and propagated:

- Breeding locally adapted varieties;
- Improved (integrated) pest management methods;
- · Access to water and appropriate irrigation technologies / effective use of available water;
- Improved post-harvest technologies;
- · Vegetable production and market systems.

These investments will have a high return in improved health status of the population as well as being a motor for economic development, thus fighting malnutrition and poverty in Africa.



Literature cited

>AVRDC (2003): Vegetables for life: Confronting the crisis in Africa. AVRDC >FAOSTAT, 2004: Accessed November 2004, <http://www.fao.org>. Weinberger, K. and T.A. Lumpkin (2005): Horticulture for poverty alleviation - the unfunded revolution. AVRDC, Working Paper No. 15. >Weinberger, K. and J. Msuya (2004): Indigenous Vegetables in Tanzania - Significance and Prospects. AVRDC, Technical Bulletin No. 31. >WHO (2003): Fruit and Vegetable Promotion Initiative - Report of the meeting, Geneva 25-27 August 2003.



They are easy to grow, full of healthy nutrients, and can diversify income. Once forgotten, African indigenous vegetables are emerging as important crops in Africa's future. Such vegetables, mostly leafy greens, are hardy, resistant or tolerant to pests and diseases, and quite acceptable to local tastes.

The tragic effects of the HIV/AIDS crisis have given indigenous vegetables a special role in Africa's future. A diet rich in micronutrients can bolster the body's immune system and slow the progression of AIDS. Many indigenous vegetables are rich in micronutrients and they can even increase the bioavailability of micronutrients in staple foods when consumed together.

Another attribute of indigenous vegetables is that they require less energy-intensive labor to produce; some are even simply gathered. This is especially important now as the loss of life due to HIV/AIDS is drastically reducing the availability of strong laborers for agricultural production.

Women farmers have the most to benefit, as these crops are mostly grown or gathered by them. There is a high potential for women to earn additional income from selling surplus indigenous vegetables locally. Once information on the special qualities of these crops are known, for instance their anti-oxidant properties, their (export) market value could rise significantly.

For instance: New Initiative – High Quality Vegetable Seed for Africa

A new 9-year program will boost the vegetable production and consumption in Africa: Vegetable Breeding and Seed Systems

for Poverty Reduction in Sub-Saharan Africa

- develop national breeding units in hub countries of Tanzania, Madagascar, Cameroon, and Mali
- build vegetable seed system capacity with national vegetable breeding programs & private African seed companies
- breed 150 new vegetable varieties

promote increased and sustainable vegetable production, marketing and consumption in the hub and spoke countries

