



9. Symposium der schweizerischen Gesundheitszusammenarbeit  
Medicus Mundi Schweiz

**“Nutrition – Bio-fortification – Health - what else?  
Perspectives of SDC”**

Ruth Huber, Vizedirektorin DEZA a.i.  
Chefin Globale Zusammenarbeit a.i.

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Ladies and gentlemen

I would like to thank the organisers for their kind invitation; I welcome the opportunity to speak today at the Symposium of Medicus Mundi Schweiz, which gives me the opportunity to contribute some considerations from the point of view of the Swiss Development Agency, SDC. We welcome that this annual event has become an important opportunity for exchanging perspectives and operational experiences in international health cooperation among Swiss practitioners.

Thinking of the situation at home, in our Swiss context, speaking of nutrition and health will probably evoke a variety of images among all of us, which reflect certainly to some extent the public perception of the topic: for example, we may see the growing number of obese people and think of the cardiovascular disease epidemic; we may critically observe the marketing

campaigns of so called functional foods, which is food claimed to have a health-promoting or disease-preventing property; such as vitamin-enriched or pro-biotic products. We may consider “healthy food” as a mere cultural and lifestyle issue. And we may think about the “Swiss cervelat crisis” which received more attention in the TV news than the El Niño induced droughts and famines in large parts of the world.

When we change the perspective from Europe to other parts of the world where most of our co-operation is taking place, our images change: the obese person is accompanied by images of hunger and malnutrition. These pictures have the potential to raise pity and perhaps solidarity in most of us. But this is not enough to address the complexity of health and nutrition in developing countries.

For those of you who have been exposed to the media reports about Biafra and Ethiopia more than two decades ago the topic of the day will probably evoke a *déjà vue*. It may remind us that dealing with hunger is always to someone’s benefit: “do they know it’s business” was the cynical parody of a British pop singer who commented on the mega event ‘live aid’ in the 1980s where money for relief food was collected and the music industry boasted itself. Ten years later Alex de Waal published his book ‘famine crimes’ eliciting the politics of hunger in the war zones of Northern Africa. Twenty years later, after the millennium turn, Roger Moore toured in southern Africa to convince governments to accept genetically modified food imports as food aid, pointing inadvertently at the global dimension of every local food crisis.

What do I want to point out with these anecdotes? Hunger is never a purely local phenomenon. National and international trade, agricultural policies, political interests and global economic trends affect food supply chains and consumer prices as much as the pricing and availability of agricultural inputs. A

lack of food, or a dwindling dietary diversity are usually a consequence of global and local crisis, with deteriorating effects on the health of millions of people.

As SDC we are according to our mandate as a cooperation agency primarily concerned with the nutritional and health problems of low income countries, where climate change, political and economic instability, and local livelihood changes take the highest toll. Just recently the 2010 World Hunger Report has been released. While some countries, such as Brazil, have achieved considerable progress in addressing nutritional deficiencies, the report shows that under nutrition has increased in other parts of the world. Especially children are affected by nutritional deficiencies, and the health consequences for children of not having enough food, or of not having a balanced diet, have remained a pressing problem of many low income countries.

The Swiss Agency for Development and Cooperation, SDC, has for a long time been committed to addressing inequalities in health. Last year, Switzerland spent 2,499 million CHF on Official Development Assistance, targeting many important underlying factors of impaired health: Themes such as food security, agriculture and rural development, climate change and environment, education, gender, governance, or conflict prevention as well as humanitarian aid, to mention some of them. All encompass aspects that relate to under nutrition and its health consequences. For example, climate change in Sub-Saharan Africa restricts access to arable land and water in many regions, increasing food insecurity; or, conflicts and refugee crisis can destroy local systems of production for a long time. SDC is active in many bilateral and multilateral cooperation projects, as well as in humanitarian aid, through support of organisations such as ICRC, MSF, WFP, and others. In sum, SDC looks at the problem of malnutrition from a comprehensive perspective.

It is though important to mention that under nutrition is no longer the only public health concern in low income countries. Changing dietary pattern has led towards a raise in micronutrient deficiencies and over nutrition in these regions, too. A transition towards energy dense foods with low micronutrient content can be observed in urban as well as rural areas where poverty and low health literacy are widespread. Consequently, diet and lifestyle related chronic adds to the burden of disease also in low income countries. Following today's theme, however, I will focus on problems of under nutrition.

### **Under nutrition and health**

It might be no news for you that under nutrition, meaning not having enough and usually also not having the right food to eat, is the most important risk factor for the disease in low income countries. Especially children are susceptible to food shortages and to a lack of diversity of foods. Undernourished children are more likely to have impaired immune systems, poorer cognitive development, and show higher chronic and acute illness counts and behaviour problems. Sometimes, children are malnourished even if they obtain sufficient amounts of energy through food. But if their diet is not adequately balanced, they might suffer from micronutrient deficiencies. For example, zinc deficiency places children at increased risk of illness and death from common infectious diseases such as diarrhoea. Overall, according to WHO, it is estimated that 35 % of all child deaths worldwide are associated with malnutrition (WHO 2003).

But of course, also adult persons can suffer from health problems caused by an inadequate diet. This is especially true for chronically ill persons – such as persons living with HIV or AIDS. But also infectious diseases can be more

severe if a person's immune system is compromised by a lack of essential micronutrients, such as iron, zinc, or different vitamins.

Malnutrition often leads into a vicious cycle. Maternal under nutrition raises the risk for having a low birth weight baby. Low birth weight in turn can lead to chronic health problems later in life, such as high blood pressure and coronary heart disease, restricting productivity in adulthood and thus perpetuating poverty. Moreover, if a woman who was born with a low birth weight herself gives birth, her children are at an increased risk of having a low birth weight, too. It is therefore necessary to address the access to sufficient food, as well as to an adequate variety of food if we are to address under nutrition from a public health perspective.

## **Food security**

Ladies and gentlemen,

Why are some populations lacking access to adequate food, why are they food insecure?

Before 1970 food security was mostly considered in terms of national and global food supplies, influenced by environmental hazards and put into relation with population growth. For example, supply shortfalls in Africa were seen as created by production failures caused by drought and desert encroachment. Now, latest since the Universal Declaration of Human Rights in 1948, where

the right to food was explicitly mentioned<sup>1</sup>, joint efforts of national governments and international organizations were made to address food shortages, Attempts to increase agricultural production and productivity by means of green revolution (hybrid, drought resistant monoculture crops) and irrigation were initiated. While such technical solutions may lead to an increased food production, they cannot solve problems of access to food and to natural resources such as land.

During the 1970s the public perception of famines shifted from a mere problem of production to a problem of differential entitlements to food within a region or population, maybe triggered by political crises. It became acknowledged that even a sufficient food production did not automatically mean food security for everyone, but that social and political processes often discriminate particular parts of the population, and not only in conditions of war <sup>2</sup>. This problem has not lost its actuality. The increasing volume of large-scale land acquisitions in developing countries – often referred to as “land grab” – intensifies the problem of food insecurity and of marginalization of smallholder producers in many – especially African – countries.

SDC therefore focuses on different aspects: on improving food production on the local level with local means, on income-generating activities and on governance issues. Regarding the problematic of large scale acquisitions of agricultural land by foreign governments or private companies, we support the development and implementation of voluntary guidelines which contribute to secure land tenure and land governance.

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<sup>1</sup> Universal Declaration of Human Rights (UDHR) (U.N. 1948), Article 25: “Everyone has the right to a standard of living adequate for the health and well-being of himself and his family, including food.”

<sup>2</sup> Sen’s theory of food entitlement 1981 represented a paradigm shift in the way that food problems were conceptualised in the political discourse.

At last, culturally perceived concepts of health also play a role for the occurrence of malnutrition. Food preferences, culturally prescribed food taboos for particular groups in the population, often women and children (many food taboos are linked to reproduction), may constrain their dietary diversity during some periods of their lives. Patterns of food production, too, may follow culturally shaped preferences, and especially female producers might not be in a position to decide about how their produce is used. Addressing these socio-cultural dimensions of malnutrition, SDC is committed to improve gender equity and equal opportunities to basic education.

### **SDC strategy: fortified foods, intersectoral approaches**

Ladies and gentlemen,

In addition to these activities broadly relating to nutrition and health, SDC also supports specific interventions aimed at addressing malnutrition. We are supporting interventions which embrace the whole cycle from production to consumption, which are locally integrated and sustainable, gender sensitive, and may reach also the weakest members in a population. One example of such an approach is the ***Pan-Africa Bean Research Alliance PABRA***, a project introducing fortified beans in rural communities. PABRA, founded in 1996 is a consortium of African-owned regional bean networks, consisting of National Agricultural Research Systems (NARS) in a total of 18 countries in sub-Saharan Africa, an international research organisation (CIAT) and a number of donor organisations, one of them being the SDC.

### **PABRA: A promising approach**

Beans are a major source of energy, proteins, and micronutrients such as iron and zinc for low income rural and urban communities who have limited access

to animal protein, fruits and vegetables. PABRA has developed improved bean varieties with enhanced levels of iron and zinc through a process known as bio-fortification. These are high yielding varieties which are tolerant to multiple constraints: drought, pest and diseases. The introduction of these beans in particularly vulnerable communities has several effects: its consumption leads to improved nutritional status while it also allows better incomes and more secure livelihoods. . People – and especially women - not only eat better, they can also increase their income through the production of these beans. Once integrated in local agricultural cycles, innovation through micronutrient enhanced beans can make a valuable contribution to both nutrition and food security.

Nonetheless it needs to be considered that despite all the beneficial aspects of the micronutrient enhanced beans there are some limitations to this approach. It must be guaranteed that women will be the ones benefiting from the production, which is not evident in settings where men control all intra-household resources, including women's income. This may especially pose a problem when beans become a cash crop. At last, access to the necessary inputs (such as seeds or water) must be sustainable for the project to succeed.

## **Conclusions**

Ladies and gentlemen

Nutrition-focused agriculture, such as the PABRA project, combines technical innovation with improved nutritional awareness of the producers, as well as providing skills to achieve better and more sustainable livelihoods. In addition,



it does not introduce a new dependency on imported fortified food products but it offers a locally adapted way to improve the nutritional status of vulnerable people.

But nonetheless, solving the hunger problem of the world is not a quick fix. We need to make sure that Richard Horton's prediction doesn't become reality. Being editor in chief of the Lancet he stated that "Seeking a technological food fix for world hunger may be the... most commercially malevolent wild goose chase of the new century." Fighting hunger needs coordinated efforts of actors like you, and it needs our willingness to engage in multi-sectoral approaches involving stakeholders at every level in the affected regions.

I can only confirm that the interface between nutrition and health will remain for SDC a very important focus in addressing poverty. Our countries knowledge and expertise in this respect provides comparative advantages, which need to be brought into practice and policy. This symposium is a unique opportunity for us to learn from each other. I wish you fruitful discussions.

Thank you for your attention.