Food security in South Asia: Much needed regional cooperation

Workshop G: Incentive talk. Theme III: More development using fewer resources.

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With 1.7 bn people, South Asia has more inhabitants than Europe, North and South America put together. In a few years time South Asia is expected to overtake East Asia and then will be the most populous region of the world. Unfortunately it is also the poorest region. More people are going hungry than in Africa (The state of food insecurity 2012: 46-49). Feeding better a rising population will be one of the most pressing needs of the years ahead (Zingel 1999, 2006).

There is substantial inequality within the region, especially in food supply. If South Asian Cooperation is to become meaningful, more collaboration will be needed. This paper, therefore sets out to give an overview over the food situation in South Asia, its prospects and its requirements. Given the fact that poor people spend most of their income on food and that food production depends on human and natural resources, the food production and distribution are of greater importance than anywhere; it is crucial for income and employment. A sustainable use of the natural resources is a precondition for the lives of future generations.

These questions will be dealt in the following order: The state of food and nutrition; regional distribution; regional cooperation; future requirements and developments; strength and weaknesses, opportunities and threats; the role of partners and donors.

The state of food and nutrition in South Asia

South Asia is self-sufficient in food, at least on a net basis. Food production is enough for an average supply of above 2.000 Kcal per head and day that is the lowest of any world regions. Besides substantial inequality and insecurity of food supply, South Asia has a gender gap: Women and girls are the worst fed in the world. Compared by income groups, women and girls are less well fed in South Asia than in Africa. One of the reasons may be that families not necessarily eat together; usually the male bread winners eat first, the rest fo the family later.

As Hindus, Jains, Sikhs and Buddhists, most South Asians do not eat meat or any other animal-based food. The rules differ a lot: They are most strict in the case of beef for Hindus and in the case of pork for Muslims. The rules are less binding in the cases of poultry meat, dairy products and cooking oil. Besides religion, income and wealth are determining what people eat: Bangladeshi, although Muslims, eat less meat and non vegetable fats than Indians. As a rule, with higher income, people eat more and better, they eat more meat, but also fresh fruit. Malnutrition for the better-off segments of the population means too much rather than too little. Too much food combined with too little physical exercise seems to be a major cause of obesity, diabetes mellitus and heart conditions, all spreading at an alarming rate over South Asia. Only the very affluent and educated seem to be in a condition and prepared enough to remain healthy and fit.

As harvests fluctuate over the years, still depending on the seasonal monsoon rains, especially the poorer people suffer in years of bad harvests. The poorest of them almost regularly suffer during the pre harvest season, when they are happy to have just one meal a day; they often have to go hungry. As Amartya K. Sen (1999: 16) has brought out, there are no famines in democracies. But there still is hunger. Since the days of the Second World War, governments intervene in food markets in order to stabilize and even to lift ("support") prices. In South Asia, this is usually done by subsidizing agricultural inputs like fertilizer, water and power. Especially in India essential items like food are sold in limited quantities to selected low income groups in special shops at lower prices. Other systems are to distribute food items physically to needy consumers, like in school midday meal schemes. Income support programmes, like employment guarantee programmes, leave the choice how to spend the money to the consumers.

With population growth rates still above 1 per cent, populations will continue to grow at least another half century until a plateau is reached at more than two billion people. Poor people spend more than half of their additional income on food. If South Asian economies keep growing at around 5 per cent, food production has to rise at around 3 per cent per year or double within a generation, i.e. in a time span of 20 to 25 years.

While the population growth is slowing and incomes are growing, consumers shift their priorities towards superior, more expensive food items. To produce one calorie of meat, at least two or three calories of feed have to be produced: The demand of primary food energy will continue to grow, even if population growth has come to a halt.

Whether it is possible to satisfy such growing needs, has been discussed for centuries. In 1798 Thomas Robert Malthus, later Professor of History and Political Economy at the East India Company College (now known as Haileybury) in Hertfordshire, in his 'Essay on the Principle of Population' warned (end of chapter VII):

'That the increase of population is necessarily limited by the means of subsistence, That population does invariably increase when the means of subsistence increase, and, That the superior power of population is repressed, and the actual population kept equal to the means of subsistence, by misery and vice'.

Malthus is quoted every time there is a food scarcity. In the following I shall discuss, whether an even greater population can be fed, and how. Before doing that, I shall discuss the problem of regional distribution.

Regional distribution

Studying Poverty and Famines (the title of his seminal book), Amartya Sen (1981) found that famines are less caused by a lack of food production than by a lack of income, wealth and distribution. Although enough food is available, people do not have the means to buy it. South Asia may be lacking social security of the European kind, but family systems are usually intact, and the family, clan, caste or tribe guarantee a certain degree of resilience. Such a system can be very efficient in case of individual calamities, but not, if all of the same community are hit by misery at the same time. Then a situation of shortages quickly can turn into disaster. During the 19th century, India was hit by one or two famines every decade. Most of these disasters were

local or regional, as India was lacking the organisation and the infrastructure to build up the necessary food stocks, to store them properly and to move around large quantities. Damming the rivers and digging canals created the largest irrigation system of the world and helped to increase production. The new railways provided the means of transport. It was only that the colonial government saw little reason to interfere; the Great Bengal Famine of 1943 became one of the worst of the century,

People not necessarily live where food is grown. Settlement follows food production only in principle. We do have the highest population density, where we have the best soils and/or other means of income. However, we often have to observe a mismatch between agricultural production, the carrying capacity of the land and population density. One reason could be that settlement patterns follow a changing environment only slowly and with a time lag. And when people are willing to move to more promising lands, they may not be in a position to do so unhindered. In western India there are complaints about 20 million or more Bangladeshis residing illegally in India. One could discuss the numbers, but certainly there would be many more, if migration across the subcontinent would be easier.

Food is secure usually only in the most affluent regions. Poverty means not just a low level of consumption, but also highly insecure incomes and the risk of being without income for longer periods of time. Poverty on a national level is lowest in the Maldives, Bhutan and Sri Lanka. Poverty is widespread in the other South Asian countries. Average incomes today are higher in India than in Pakistan and higher in Pakistan than in Bangladesh.

Pakistan and India are self-sufficient in (net) food production. Bangladesh has been so successful that it would be self-sufficient on a level of consumption of the 1970s and 1980s. On average, the country imports one tenth of its food-grains requirements. People are fed on a higher level than at any time since at least late colonial times, but the average consumption level is still low in international comparison.

Regional cooperation

In 1985 India, Pakistan, Bangladesh, Sri Lanka, Nepal, Bhutan and the Maldives founded the South Asian Association for Regional Cooperation (SPARC). The main driver was General Zia ur Rahman, President of Bangladesh. The idea was that South Asia might be united like Europe in the European Union or Southeast Asia in ASEAN. In that hope, a South Asian Preferential Trade Area (SAPTA) and a South Asian Free Trade Area (SAFTA) were established by the same states. Afghanistan joined in 2007. Other states have observer status. It was hoped, that the regional cooperation would help to overcome hostilities among neighbours as in Europe and in Southeast Asia. South Asia, however, is different, mainly because of the tense relation between its two major partners, India and Pakistan. Since 1947 they have been at war several times and are still engaged in a border war, especially in Kashmir and in "low intensity warfare" of transborder terrorism and a proxy war in Afghanistan. Both countries are armed with nuclear weapons and delivery systems. At least twice, they are said to have been close to a nuclear war.

How a regional cooperation might work under such hostile conditions is left to everybody's imagination. Although India and Pakistan are founding members of the WTO, they have used all possible excuses not to open their borders for bilateral trade. Most of the bilateral trade goes via

third countries, especially Dubai, blamed in India and Pakistan as "smuggle". The trade between Pakistan and Afghanistan mostly goes unaccounted, helped by Afghanistan's transit rights through Pakistan and the Federally Administered Tribal Areas (FATA) being a virtual free trade zone bordering both countries. Pakistan until recently applied a 'positive list' of goods allowed to be traded. This has been supplanted by a 'negative list' recently. This implies, that all goods are allowed to be transported across the border, except those listed.

On the ground this still means that there is only one opening in the long Indo-Pakistan border, from China to the Arabian Sea. Goods can be moved between Amritsar and Lahore by train. Trucks, however, were not allowed into the neighbouring country until recently and had to be unloaded at the border. Coolies carried them on their head up to the border gate, where they passed them on to the heads of their fellow-coolies of the neighbouring country. Now trucks are allowed a few hundred metres into the respective neighbouring country to dusty dry ports, where goods can be shifted from truck to truck. The situation between India and Bangladesh is not much better: There are only a few crossings; paperwork easily takes days, and Indian entrepreneurs are blaming the Indian government more than the governments of the neighbouring countries of obstructing trade and transport. Between Pakistan and Afghanistan there are only two major crossings; only part of trade passes through the official channels; most goods are traded either with faked documents or are smuggled across the open border.

In short: Regional Cooperation leaves much to be desired. The problem is political. If the countries of South Asia could agree on easier terms of trade and transport, the picture could change totally within days.

Future requirements and developments

Nehru's policy of self-reliance and non-alignment also meant a de-linking from the world market. Population growth accelerated during the first years after Independence so much that 'population explosion' became a byword for the subcontinent. Food production grew hardly in step with population numbers and it was doubted that India and Pakistan would ever be in a position to feed their population. In a Malthusian sense, population would be checked by an insufficient food supply. Family planning programmes for various reasons showed little results. Fortunately, the major grain exporters like the USA, Canada and Australia, and later also the European Community, had amassed huge food grain reserves. This was not so much the result of wise planning and foresight, but of the high support prices for agricultural goods to the benefit of their farming community. When in 1965 bad weather resulted in a steep decline in production and India and Pakistan were on the brink of famine, the subcontinent was saved by large scale 'wheat loans' of the USA and other exporters that later were turned into grants. Nehru had just died when the Pakistan dictator of the day thought it wise to invade Kashmir, a bone of contention between the two countries since Independence. The war lasted only a few days, as the USA and the Soviet Union forced the two warring states into a cease-fire and later into the Tashkent Agreement of 1966. 'Food power' as the then US Vice-President called it, had become a mighty weapon. For Indira Gandhi, who became prime-minister after Tashkent, it was a clear signal that India had to become independent in food supply at any cost. That was possible indeed, because exactly at this time new high yielding varieties became available, first of wheat and later of other food crops. Together with mineral fertilizer, pesticides and secure and sufficient water, the new varieties became the 'wonder wheat'. Yields rose so quickly that India dreamt of becoming a food grains exporter. This development bacame known as the 'Green Revolution', in contrary to the Red Revolution that saw land reform, a redistribution of land, as the tool for solving the economic and social ills of rural societies. Since then, India has been pursuing a policy of price control, procurement and public food distribution. Indian stocks of food grain became the largest in the world. The World Bank advised India to sell the stocks and save half a billion US-Dollars in interest every year. However, India did not follow this advice. Whenever the country experienced poor harvests like those of the early 2000s, this policy proved to be beneficial, as it saved India from a food crisis of the greatest order.

The main argument for a cautious food policy is that a huge country like India cannot hope to simply close a production gap by imports from the world market. The world production of cereals is in the range of 2.3 bn tons every year. Roughly one quarter each is maize, wheat, rice and all others together. Only 300 million tons, 13 per cent of the production are traded. World end stocks are above 500 million tons. In South Asia rice and wheat are the most important cereals. Whereas about one fifth of the world wheat production is traded, it is only 7 per cent for rice (FAO 2012). Since almost all the major rice consuming countries are located in the same world region and share (and suffer) the same weather phenomena, they all have to draw to the world market. However, an increased demand will meet a much smaller supply in the absence of sufficiently large food stocks, because most of the main exporters are also located in Asia. Serious harvest shortfalls can be in the range of 10 per cent of production – more than the available stocks, especially in the case of rice. Price changes of the highest order are to be expected.

On top of all these limitations, come the impact of bio fuel production and excessive speculation in agricultural commodities as an alternative to bonds, stocks, currency, immovable property and minerals. When the rice price exploded in recent years, India was in the happy position to export rice rather than to have to import food-grains at sky high prices.

The situation is different in neighbouring Bangladesh that usually imports around one tenth of food-grain requirements. In previous years, imports used to come from Thailand and other countries, now they come from India. The Bangladeshi government had the greatest difficulties to remind the Indian exporters to stick to prices agreed on earlier.

Food production has to grow faster than population numbers, if the per capita availability is to increase. That this is possible, can be seen if South Asian yields are compared with the much higher ones of East Asia.

SWOT: strength and weaknesses, opportunities and threats

The greatest strength of South Asian agriculture is that food production has been keeping the pace of population growth; it even grew a little faster, so that South Asia on average has been better fed by own production than in previous decades. However, population numbers keep growing. The share of the poor may be going down, but their absolute number remains in the range of half a billion. Theoretically it should be possible to eradicate hunger in South Asia. Even in Bangladesh we have been witnessing an unexpected rise not only of industrial, but also of agricultural production.

The major weakness is distribution not of production, but of incomes and wealth. Markets work quite efficiently. There is hardly any need that South Asian governments engage themselves in the physical distribution besides investing in the necessary infrastructure for transport and communication. What is needed is a distribution of incomes and wealth, so that people have the necessary means either to produce enough for their own consumption or to purchase the quantities needed for a healthy subsistence.

Opportunities are provided by programmes like the Indian Public Distribution System (PDS) or the National Rural Employment Guarantee Programme (NREGA). Both programmes, however, have to overcome their many insufficiencies before they could become more successful. So far, most of the money disappears before it reaches the target group.

The greatest threat comes from an overuse of the natural environment, from an irresponsible price policy in the power sector and a non sustainable use of irrigation water.

The role of partners and donors

Given the magnitude of the task of food security, the comparatively small amounts of money provided to India and the often counterproductive role of aid in Pakistan, the role of partners and donors is very limited, indeed.

Not to forget that global agricultural markets are highly distorted by government intervention of almost all rich countries for the benefit for their own agricultural producers. At present, food aid plays no (India) or almost no (Pakistan, Bangladesh) role.

Much needed regional cooperation

India has a population three thousand times as big as that of the Maldives; the population of Bhutan is just twice as much. Afghanistan, Sri Lanka, Nepal have populations smaller than mid-size Indian states. Even Bangladesh has fewer inhabitants than the most populous Indian state and Pakistan has just as many as Uttar Pradesh The seven SAARC members outside India together have not more than one third of the population of India. In case of need, they could only supply a small fraction of what would be needed in India. They other way round, India would be in the position to meet almost all requirements from her neighbours.

The small food reserve that SAARC is planning to set up would not be of much use. According to Bangladesh's food Minister: 'The Saarc Food Bank is yet to become operational despite the framework and mode of operation being in place'. (Ironic rice 2012). But better relations would help in times of need.

Where cooperation is urgently needed is in resource management. Pakistan and Bangladesh are lower riparians of the Indus, Ganges/Padma, Brahmaputra/Jamuna, Meghna/Surma and many of their tributaries. In 1960 Pakistan and India signed the Indus Water Treaty that gave excusive rights to three rivers each to the two countries. Economically a costly solution, it has been a blessing politically. Its main advantage is its simplicity, although there are differing positions regarding the use of hydel power. In the case of the Ganges such a solution has not been possible, Although there is a bilateral agreement between India and Bangladesh on the use of the

Ganges water, the most important factor has not been addressed: Water all over South Asia is highly subsidized. Governments bear most of the construction and running costs of the irrigation networks, fuel for diesel and for electric pumps are provided at below market prices, if not free of charge. The resulting overuse of irrigation water means that hardly any water arrives at the lower stretches of the large rivers; in the case of the Ganges less and less water is left to be distributed among the neighbours.

Utilizing resources more carefully, thus, would ease relation between South Asian states.

References

FAO cereal supply and demand brief. Rome: FAO. 2012. http://www.fao.org/worldfoodsituation/wfs-home//csdb/en/

Global Hunger Index. The challenge of hunger: ensuring sustainable food security under land, water, and energy stresses. Bonn: Welthungerhilfe; Washington, D.C.: International Food Policy Research Institute (IFPRI); Dublin: Concern worldwide. 2012. http://www.ifpri.org/sites/default/files/publications/ghi12.pdf

Muhammad IQBAL, Rashid AMJAD: Food security in South Asia: strategies and programmes for regional collaboration. Islamabad: Pakistan Institute of Development Economics. 2010. http://mpra.ub.uni-muenchen.de/38077/

Ironic rice of India. In: The Daily Star. Dhaka. November 25,2012, pp. 6 and 20. http://www.thedailystar.net/newDesign/news-details.php?nid=258824

Amartya SEN: Development as freedom. New York: Anchor. 1999.

Amartya SEN: Poverty and famines: an essay on entitlement and deprivation. New Delhi: Oxford UP. 1994 (Oxford: Clarendon, 1981).

The state of food insecurity in the world 2012. Rome: FAO. 2012. http://www.fao.org/docrep/016/i3027e/i3027e.pdf

Wolfgang-Peter ZINGEL: Food security in South Asia. In: In: Eckart Ehlers, Thomas Krafft (eds.): Earth system science in the anthropocene: emerging issues and problems. Heidelberg: Springer. 2006. pp. 229-246.

Wolfgang-Peter ZINGEL: Genug Nahrung für eine Milliarde Inder? In: Werner Draguhn (Hrsg.): Indien 1999: Politik, Wirtschaft, Gesellschaft. Hamburg: Institut für Asienkunde. 1999. pp. 217-233.