

Reply

The African Food Crisis: Another Look Beyond the Emergency

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ABSTRACT

The following contribution refers to the article of Shahid J Burki (Vol 1 no 2, 1986). It discusses the causes of hunger and shortage of food, the green revolution and the situation of the peasants. In the end some principal reflections on an agricultural ecological renaissance are mentioned and followed by suggestions to realise this in Southern Africa.

Introduction

The contribution of Shahid Burki (Vol 1 no 2, 1986) sums up some facts which obviously contribute to the deterioration of food supply in Africa: abnormal weather conditions, land degradation, desertification, decreasing growth rates in the production of food, etc. A more precise analysis of Burki's article, however, reduces the factors responsible for the food crisis to only one: "Starving means not being able to buy food" (p12) and further on "We have made the point . . . that the food crisis in Africa today . . . should be viewed as an income crisis" (p16). As a way out of the crisis he makes two suggestions:

- a) "Government must find efficient ways of advancing credit for implements, seed and inputs to the small farmers." (p 17)
- b) "Another government responsibility is to determine the proper balance between emphasis on export crops and food imports." (p17)

He then emphasises that "world-wide, there is adequate food that can be purchased" (p17). It is exactly this method of transferring the European/North American modes of production to Third-World countries that has been pursued for several decades. In my opinion this mode of production has led to overproduction in the industrialised countries, to poisoned and polluted soil and ecological disasters and in the Third World to underproduction of food, crisis in food supply and acute hunger.

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In Africa every fifth human being suffers from hunger; 80 million of 500 million Africans are affected by hunger and related problems. While the population has doubled the production of food has diminished in the last 20 years. In 1984 in 26 African states the per capita consumption of basic food was less than in 1970. Those suffering most from hunger are

- a) marginal classes in the cities — for the poor in the cities it is correct to say that 'starving means not being able to buy food'; and, especially,
- b) small scale farmers who are, in the long run, no longer in the situation of being able to produce sufficient food for family reproduction because agrostructural conditions are steadily worsening. Within this group it is mostly women and children who are affected. For these people hunger is not an income problem but a problem of production of food.

The African food crisis has — in addition to the well known causes of unjust land distribution, increases of population, the negligence of the small scale producers of food, problematic pricing policies, etc — above all, a dimension which depends on the world economy. This dimension will increase in the next decade as the industrialisation of the production of food is monopolised by only a few transnational companies.

The Green Revolution

This process of monopoly was started by the so-called green revolution. Since the 1950s it has been possible to grow special High Yielding Varieties (HYV) of the world's most important food supply plants, including wheat, oats, rice, barley, rye, millet, beans, peas and tomatoes, as well as cotton. The yields of these main food supply plants were therefore drastically increased.

In Zimbabwe, for example, the average yield of wheat per hectare was raised from 1 200 kg in 1955 to 4 400 kg in 1980. A similar development can be observed with Zimbabwe's staple food crop maize. Within the same time limit the average yield per hectare was raised from 1 400 kg to 4 700 kg. This was mainly due to the cultivation of the new high yielding varieties. One is tempted to believe that such drastic increases in the yields of basic foods should be considered a true blessing for the countries of the Third World, who very often have to cope with high rates of increase in population. Unfortunately, these hybrid varieties also have considerable disadvantages which are often not mentioned or are minimised, for example.

- a) Hybrid varieties can only be grown in certain favourable climates and only with a massive use of artificial fertilisers and pesticides. Often they need irrigation systems.
- b) Hybrid varieties are artificial, which means they do not disseminate on their own. It is therefore always necessary to buy fresh seeds from the cultivators.

Transnational companies

The beginning of the green revolution, namely the successful cultivation of high yielding varieties, also started a strong competition for the legal ownership of these varieties. Large companies either bought the patents for the newly cultivated hybrid varieties or bought the seed producing firms as a whole. To them controlling the seed market logically meant coming pretty close to controlling the entire food supply chain. It meant being able to decide which seeds were to be cultivated, which agricultural chemicals were to be applied and where the products were to be sold. It is therefore only reasonable that the large agrochemical companies were most interested in the new seeds. A rapid process of concentration of business followed. Some transnational companies bought several seed cultivating firms in a row. Today there are 18 large multinational companies which do business in both agrochemicals and seeds, among these are Cargill, Ciba-Geigy, Monsanto, Pfizer, Pioneer, Royal-Dutch-Shell, Sandoz and Union Carbide. Along with the seeds they sell fertilisers and biocides, and very often also command production industries and marketing organisations, thus enabling them to sell the final products like flour, bread and beer to the final consumers. This means that the subsistence varieties of some plants are controlled by only a few companies.

The ideology of the green revolution claims that with the help of the new high yielding varieties enough food for all can be provided worldwide, thus solving the problems of malnutrition and hunger in the Third World once and for all. This ideology therefore helps the transnational companies to find a ready market for their products. Between 1974 and 1980 the worldwide demand for hybrid seeds for rice rose by at least 50%, that of wheat by 60% and of maize by about 40%¹. The leading company on the seed world market today, and only insiders are aware of the fact, is the oil and chemical giant Royal Dutch Shell, with head offices in The Hague and London. They control at least 30 seed producing and trading businesses.

Seed cultivating and fertiliser transnationals are also active in Southern Africa, for example among those active in Zimbabwe are:

- the English agro-business and food-company Tate and Lyle, which is the owner of the Hippo Valley Estates and of sugar-refineries, markets irrigation implements and, recently, has bought up the seed cultivating company Berger and Plate.
- the chemical giant Union Carbide (USA), which produces insecticides, pesticides and chemical food-additives and has recently bought up the Keystone Seed Company.
- the pharmaceutical company Pfizer (USA), which is active mainly in Third World countries, owns a number of seed cultivating companies and belongs to the leading companies on the market for maize, soyabeans and at seeds.

- the food and chemistry company Unilever (Lever Brothers), which has become the owner of the specialised seed company Anderson-Clayton in Brazil and Mexico.
- Pioneer Hi-Breed International (USA), which controls a third of the market-shares of hybrid maize in the USA and part of the American poultry market as well. On the Zimbabwean market Pioneer penetration is mainly in the communal lands and it offers its services even in the local languages, Shona and Ndebele.

Furthermore in Zimbabwe these companies can count upon an increasing share of the market. The Report of the Commission of Inquiry into the Agricultural Industry says:

“Agricultural chemicals are essential to productive agriculture in Africa. This is as true of the communal land and small scale sectors as it is of large scale agriculture. Herbicides assist the communal farmers to overcome the critical labour peak at weeding . . .”

(Report of the Commission of Inquiry into the Agricultural Industry, 1982:144)

Concerning the distribution of fertiliser the report recommends that:

“the fertiliser companies establish regional distribution depots to spread the peak load of fertiliser deliveries more evenly over the transport network.” (op cit, p 146).

Of course the same applies to the distribution of seeds and agro-chemicals.

Oppression of small peasants

The effect of these transnational groups on the agricultural production as well as on the agricultural markets of the Third World is disastrous, as we can learn by the experiences of Latin America and Asia.

Small peasant farmers are pushed out of agricultural business and large land-owners are encouraged to expand. Propaganda and attractive credits help to make the cultivation of high yielding varieties seem an interesting project for small peasant farmers. They are often not able to calculate the additional costs for the inevitable fertilisers and pesticides. Ignorance about the best way to treat high yielding varieties adds to their difficulties. In this case poor harvests and low profits means that the small peasant farmers cannot pay their debts or repay loans. Their land goes to the money lenders or to banks and is then bought by the large land-owners or agro-companies. This is the classic circle of pauperisation. Other aggravating circumstances enhance this impoverishing circle to such an extent that the situation of the small peasant farmer in the Third World becomes hopeless.

On the other hand, the withdrawal from subsistence farming and small production for local markets means that the small peasant farmers have to produce for the national market, but they are unable to respond to the mechanisms of this system. National markets are dependant on the varying

prices of international trade. Without savings small peasants cannot survive an economic depression. Moreover, they are not in the least able to compete with big business. Their infrastructural conditions are less efficient because they can only buy in small quantities, are forced to pay a higher price for all raw materials, and their harvests are of poor quality because of insufficient technical equipment. Profits achieved after the withdrawal from traditional ecologically oriented farming, ie after forsaking shifting cultivation and the rotation of crops for mono-cultural farming, will lead to the overexploitation of the soil within only a few years. The immediate results are erosion and the gradual growth of prairies or even deserts. Small peasants with their limited acreage are particularly affected by this process.

If small peasants are forced to produce agricultural goods for export, their situation gets worse again. They become totally dependant on the seed-multinationals or their respective marketing agents. Without being able to cultivate grains for family subsistence they are subject to the prices dictated by the agro-companies.

Food aid

From the point of view of political economics there is only one advantage in the agricultural export production of Third World countries, the opportunity to earn foreign currency. The disadvantages, however, are numerous including the dependence on energy, imports and technology, the increase in prices for basic foods because of insufficient supplies, etc. Profits in foreign currency are never made for the benefit of the small peasants, they are used for capital intensive industrial projects.

In many countries of the Third World, especially in Africa, it has become necessary to buy and import basic foods with the money earned by agricultural exports, instead of strengthening the national industry. Once the basic structures for the supply of food, of which the small peasants are an important component have been destroyed, food has to be imported from the rich states in the north. In 1984 Africa imported 5,7 million tons of wheat from the USA, 1 million from Canada and 2,4 million from France. This food-transfer from the rich north to the poor south is often described as *food-aid*, a form of humanitarian assistance from the rich to the poor.

Undoubtedly the food-aid is justified in cases of acute catastrophes, provided that the suffering people get it directly and immediately. But the food-aid in cases of catastrophes constitutes only a small part of the whole food-aid situation. Both in the United States and in the European Community the food-supplies serve to cut-down the stock of their own excess production. Thus the so-called aid-supplies are nothing other than the concealing of classic agrarian export policies. The legal authority for American food-aid programmes is represented by the Public Law 480, which also says:

"The Congress hereby declares it to be the policy of the United States to expand export markets for United States agricultural commodities; to use the abundant agricultural productivity of the United States to combat hunger and malnutrition and to encourage economic development in the developing countries . . . and to promote in other ways the foreign policy of the United States."

(US-Department of Agriculture, Foreign Agricultural Service, Public Law 480, Congress Chapter 469-d, Session, p1).

Even the guiding principles of the European Community emphasise the humanitarian character of these measures. However, in some less official statements politicians of the European Community state again and again that food-aid is an economic necessity for the European Community, in order to reduce the agrarian surplus in the Community. Consistently European food-aid confined itself to the supply of grain, but with the surplus production of butter and skimmed milk-powder later on it was extended to these products. Therefore, since 1973 European butter oil and skimmed milk-powder must be consumed in developing countries as well.

These massive food interventions, whether on the grounds of the seed transnationals' aggressive expansion policy or based on the policy of food-export of the United States and the European Community, end in the breakdown of domestic traditional production, of national markets and finally in the disappearance of self-reliant cultures in Third World countries. The only group profiting from this international food trade are the six transnational grain trading companies which monopolise 90 percent of the world grain trade, viz Cargill Inc (USA), Continental Grain (USA), Louis Dreyfus (France), Bunge Corp (Argentina/USA), André SA (Swiss), and Toepfer (Fed Rep of Germany). These are not deplorable secondary effects of a policy which is usually necessary and rational, but rather deliberately developed strategies of the First World for the Third World. The American President Harry Truman illustrated this economic philosophy as follows:

"All liberty depends on free enterprise . . . The whole world should take over the American system . . . The American system will only survive in America, if it becomes the system of the world . . ."

(In George, 1978).

World culture

In 1987 we approached this point in many ways. A world wide culture with one and the same class structure lies ahead. All the suggestions given by Shahid J Burki support this trend towards a new world-culture under the leadership of the USA. The structure of this 'global society' today consists less of owners of means of production on the one hand and wage earners on the other hand, but rather of those who have food and those who have no food.

Today there is a plenty-food-class, a fast-food-class and a no-food-class about to be formed world-wide. The plenty-food-class, which has plenty of food and wastes resources of food, is found both in industrial countries (the rich and possessives) and in developing countries (a national bourgeoisie and the ruling elites).

The fast-food-class is represented by the majority of wage earners; this class also asserts itself world wide. Thoroughly organised, rationalised and rushed work organisation corresponds to an organised, rationalised, levelled and time-sparing preparation and intake of food system. Culturally differentiated preparation of food, and specific forms of nourishment fall victim to the ham, cheese, beef and fish-burger industry.

The no-food-class, the class of the non-possessives, the paupers and the starving is less relevant in the big industrial countries. However, in the developing countries this class forms the majority of the population. In spite of the fact that 50 million people die of hunger yearly, this class is about to increase. Deprived of their traditional forms of production and nourishment and forced to follow the inadequate conceptions of progress of their national elites, they are the victims of the strategies of expansion of the industrial countries and their transnational companies. The majority in this non-food-class are peasants and landless families. Contrary to the opinion of Shahid Burki, for these people hunger is not a question of missing income but that of missing permanent food security within the family. To achieve this food security the peasants want and can use their knowledge and technical know-how and their own manpower.

Food security today is impossible because of the recent transformation of traditional African agricultural structures.

Effects of monocultural thinking

Industrialised agriculture which is no longer limited to export crop enclaves but starts to effect all fields of agriculture prefers, for reasons of economic rentability, monocultural production. The spread of monoculture depends on our monocultural and monocausal thinking. The increasing ecological and hunger disasters are based on this unilateral thinking and acting. During the course of the history of industrialisation we have followed more and more the fetish of being obliged to treat and prepare technically, as well as chemically, all natural products. The more technical and the more chemical a product is, and the more processing it has undergone, the more progressive and the more desirable the product seems to become. This way of thinking, developed in the industrialised countries and put over on the Third World, does not exclude the production of food. The highly manipulated and prepared hybrid seeds which are gaining ground in all fields of food production, have, as their only purpose, to reach high outputs. This purpose can only be one among others. Economic rentability can be only of minor importance within an agriculture

which takes into account national economic and ecological dimensions and is rooted not only in history but also gives perspectives for the future. In the field of food production we could start a new process of learning, including the large number and varieties of food and the proper balance of calories and proteins, vitamins and minerals which existed in Africa in former times. In spite of the importance of cattle in various cultural regions the basis of nutrition was in plants. If today African cattle breeding for meat production is managed on the best soils this makes no sense for a sufficient and healthy nutrition for the African people. A cow transforms one third of the absorbed calories of nutrition into milk whereas only one-eleventh amounts to meat. This means that milk production is therefore three or four times more economic than meat production. If these soils were used for plant raising instead of meat production the economic output would be ten times more productive if potatoes or similar plants were raised and sixty times more productive in the case of soyabeans. Obviously it is not sensible from the point of view of the politics of nutrition to force the production of soyabeans in large scale monoculture for export to Europe as forage for cattle, and then to get back these outputs as food aid, ie as milk powder and processed products. Soyabeans are human food. The direct use of soyabeans as human food makes more sense from the point of view of the physiology of nutrition and is healthier.

Monocultural agronomics needs intensive capital and a high level of mechanisation. It is a concept that depends on high energy inputs, eg industrialised agriculture shows, in some fields, the alarming disproportion of 9:1, between input and output: this means that in order to get one calorie from the soil you have to put in nine (Vester, 1982). Giving themselves the publicly attractive image of wanting to fight hunger in the Third World, the transnationals forge ahead in the fields of production of food with their hybrid seeds, fertilisers and pesticides. In the Third World the use of fertilisers rose drastically from six kilogrammes per hectare in the mid sixties to twenty kilogrammes in the mid seventies. With steadily increasing energy prices and deteriorating terms of trade the small peasants will not be able to pay for these industrial products in the near future.

A future-oriented national economy should not be interested only in a short term increase in outputs but take into consideration too the longterm results of monocultural commercial farming. Among other considerations there are:

- the steadily increasing vulnerability of plants and animals
- the high demand for artificial fertilisers and pesticides
- the drastically increasing resistance of pests against the chemical control measures
- the diminution of the original variety of plants and animals
- the leaching of soils to total erosion
- the poisoning of sub soil water by nitrates

- the poisoning of water in general and the increase of agricultural chemicals in food
- a drastic increase in energy inputs
- intensive mechanisation and rationalisation, with the effect of decreasing employment
- the oppression of the small peasants farmer with the well known effect that these people migrate to the shanty towns of the big cities.

In contrast to industrialised agriculture we can find alternatives which are getting more and more publicity. Through experimentation, the National Science Foundation of the USA obtained knowledge about the high efficiency of ecological agriculture. A detailed investigation of 32 farms in the same grain raising location (16 farms worked on conventional methods and the other 16 with applied ecological systems) obtained the result that the ecological group reached the same output and the same earnings per hectare as the conventional group. But the conventional farms with their monostructures and high inputs of pesticides, artificial fertilisers and intensive mechanisation consumed three times more energy than the farmer in the ecological farming group. In addition, the total running costs per hectare were higher by about fifty percent. Not mentioned in this investigation are the stress on the environment and permanent ecological damage caused by industrialised agriculture which should have to be taken into account in an investigation of the whole national economy. The US Ministry of Agriculture repeated this experiment with more than a hundred farms and came to the same results.

Food security programmes

The answer to the question of how to realise an environment saving, resource sparing, ecological agricultural system, which can simultaneously abolish acute and future hunger disasters, is the promotion of food security programmes. These programmes would enable the small peasant farmer to produce sufficient food for family subsistence and to sell surplus on the local markets. I think food security programmes should be based on the following principles:

1. The most important aim of the programme should be to secure the permanent subsistence of the people and to mobilise their capacity for self-help, and, by means of production-oriented measurements, stimulate a surplus production for the market, in this way reaching integration of these groups in the national economy.

Apart from food security such a programme aims at other basic needs too, that is, to improve the living conditions of these people. Therefore, an integrated food security programme should include, in coexistence with the main target of food-production, social and infrastructural measures, including road-building, clean water supply, construction of latrines, etc.

2. All these measures should be realised by the people themselves. Using

machines should be avoided for manpower is the resource of this group. Using cooperatively organised labour the people should obtain food for themselves and for their families. Furthermore, the programme would depend on the following support:

- technical assistance by an interdisciplinary team of experts (agricultural engineer, civil engineer, expert for agroforestry, sociologist, etc.)
- provision of tools and materials for construction
- provision of the means of production for experiments and demonstrations
- the provision of small credit.

These combined means of support are meant to guarantee that the people can satisfy their basic needs after several cycles of harvest, production or work. This programme should release in the medium term, groups who had need of food-for-work programmes. This is not necessary for the technical assistance and other measures which can be continued to ensure the effectiveness of the programme indefinitely.

3. Those foods used in the food-for-work programme should be purchased in the local, regional or national market. They should be in accord with the traditional diet of the target group.
4. It is not the individual who participates in the programme but groups. This should diminish the administrative and logistic costs. Beyond this, the principle of group promotion leads to a process of self-organisation and the increase of problem solving capacities. The process of discussion, organisation and problem solving should start before the group is incorporated into the programme. This phase of reflection enables the groups to be ready for self-initiative and self-organisation.
5. The programme is founded on the principle of self-help which should promote both active participation and self-reliance. The groups have to join the programme through their own effort.

The active participation of the people in the discussion of problems, and problem solving should re-enforce their engagement and ensure the independent continuity of the project.

Instead of supporting the so-called green revolution with its massive input of hybrids, pesticides and artificial fertilisers, to the sole profit of a few transnational companies, a real green renaissance should be promoted by the introduction of food security programmes which will abolish hunger and malnutrition as well as comply with the demands of national economies. A green renaissance means a decentralised, ecologically oriented agriculture which is in compliance with the special needs of the various locations on one hand and on the other is rooted in the traditional know how of the peasants themselves, but also gives future perspectives in making use of technical and scientific know-how. Agricultural politics which makes a pledge to the green renaissance is a policy in favour of the interests of the poor and starving (the

no-food-class) but also one which takes into account the basic interests of the respective national economy. It seems to me that this policy is in contrast to the thesis that "world-wide, there is adequate food that can be purchased" (Burki, 1986).

FOOTNOTES

1. Mooney Pat Roy (1981) *Scat-Multis and Welthunger*, Hamburg, p 69f.

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