

Food crises and booming agricultural markets – How can development policy best respond?

After decades of low producer prices, a boom situation has prevailed in global agricultural markets. Demand keeps going up, but production cannot be expanded indefinitely. Natural resources are becoming scarcer, and the majority of smallholders can no longer respond rapidly to price incentives. How can development policy help smallholder farmers respond to these opportunities?

The demand for food has increased dramatically in recent years; prices are rising daily. There are limits to how much food production can be increased, especially by smallholder farms in developing countries. What measures should development policy implement so that smallholders in the developing world can also take advantage of the high demand for food?

We need to think outside the box. For decades, limited demand and low producer prices prevented widespread success with promoting smallholders in many countries. This story of farmers in a high-yield maize-growing region in south-western Tanzania is typical: “We pray to God that he does not send much rain to our brothers in Zambia. We will only be able to sell our surpluses if the harvest there is poor. In Dar es Salaam they eat grain from overseas because shipping from here is too expensive.” The withdrawal of governments and donors from the business of providing agricultural assistance was, in part, a consequence of the lack of market opportuni-

ties. Now that demand is booming (for the causes of this cf. J. von Braun and M. Brüntrup in *Rural 21*, issue 03/08), it would be worthwhile to produce surpluses. But the smallholders’ elasticity of supply – their limited ability to expand production over the short term – is turning out to be a bottleneck.

Constraints for expanding smallholder production

Expansion of agricultural production is currently being limited in many regions by three factors:

- mounting scarcity of natural resources, aggravated by climate change;
- limited capacities of rural households due to rural-urban migration and the multilocal rural livelihood systems caused by this;
- institutional deficits.

The limits to intensified use of natural resources (soil, water) and the long-term trends of growing scarcity and variability in the face of climate change were highlighted in the articles by J. von Braun and M. Brüntrup in *Rural 21*, issue 3/08. The scope for expanding the amount of cultivable land has been largely exhausted in many regions. But wherever increasing demand comes up against limited resources, intensification is called for. The positive aspect of

this is that it is only at this point that the outlays for intensification are worthwhile – for producers, for governments, for investors.

Even poor *smallholder households* can increase the productivity of cultivable land. But since there has not been any future in farming for decades, many smallholder families have tried to gain additional opportunities for a secure existence outside of agriculture, in the cities or out of the country. So the picture is often no longer one of smallholder farms, but of diversified, multilocal *livelihood systems*. During this transition, agricultural knowledge was lost, as was farming identity, the “ties to the land”. These changes were accompanied by a rise in population density and a corresponding scarcity of land. As a result, most poor rural households have only limited land, labour and capital to expand production. On the other hand, actors in diversified livelihood systems tend to respond quickly to new opportunities, for example by returning to rural areas when food gets more expensive and producer prices become more attractive.

Smallholders need access to services and markets to exploit new market opportunities. Functioning *institutions* are needed for this. However, state agricultural services were dismantled in many countries as part of the structural

Professor Dr. Theo Rauch

Centre for Development Studies (ZELF)
Institute for Geographic Sciences
Freie Universität Berlin
Berlin, Germany
theo.rauch@aol.com

adjustment programmes of the 1990s. Private service providers only filled the gaps in well-situated, centralised locations. As part of decentralisation policies, usually, only political responsibility was decentralised, not resources. So poorly equipped local governments are often confronted with unsolvable problems in terms of agricultural assistance. Weak government capacities now persist alongside agribusiness's growing interest in taking advantage of the new market dynamics and in involving smallholder farms, to the extent that the latter are able to join that process.

This scenario entails great risks: In cases where smallholders and institutions are not able to take advantage of new opportunities and to intensify production, increasing demand will either lead to depletion of natural resources or to displacing smallholders from their production basis. But in situations where smallholders understand how to take advantage of opportunities and to supply the markets as contract producers or as farmer co-operatives, new livelihood opportunities will arise in rural areas while the people in the urban areas will be better supplied.

These trends have been described here in very general terms. In real-

ity there are significant *location- and target-group-specific differences* the many aspects of which can ultimately only be determined through field analyses. So, for example, one needs to distinguish between central and peripheral locations, between surplus and deficit regions, among households with different resource endowments, as well as between countries with strong and weak institutions. Therefore the question of which production systems, technologies and actor constellations can best meet intensification pressures can only be answered by analysing the specific situation in question.

Intensification with limited human and institutional capacities

An agricultural policy capable of meeting the challenges of the new developments in the agricultural markets must keep three objectives in sight – objectives that tend to be in conflict with each other: It must ensure that the urban poor have access to food, keep smallholder agriculture as secure a livelihood basis as possible for as many people as possible, and conserve natural resources. This can only be achieved through intensification.

Intensification is often associated with images from the “green revolution”: high-yielding varieties, mineral fertilisers, pesticides, irrigation, mechanisation, and the requisite extension and credit systems. Not only has this type of intensification become more expensive because of drastically higher oil prices, but neither

can it be implemented by the majority of poorer rural households with their limited resources and weak rural institutions.

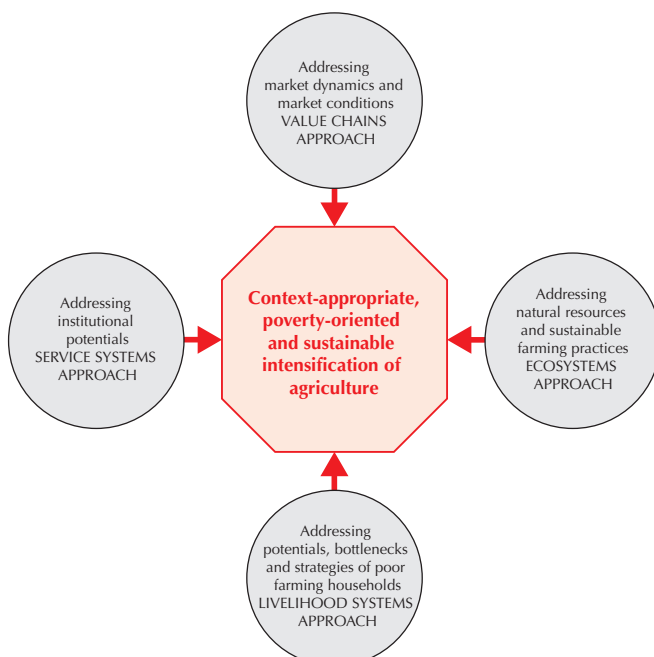
However, intensification can also mean replacing fallow land with crop rotation systems that integrate legumes, using green manuring and appropriate soil management techniques to increase the soil's water absorption and storage capacity, planting fruit trees at the margins of fields, saving rainwater for a vegetable garden, or gathering marketable herbs and spices in communal forests. In other words: expanding production with little capital outlay, a low risk and a minor need for agricultural services.

On the **supply side** it comes down to assisting smallholders in finding opportunities for intensifying agricultural production sustainably – opportunities tailored to the specific locations and target groups. Distribution markets (value chains), livelihood systems, ecosystems and agricultural service systems all need to be taken into account (cf. Figure 1).

Numerous examples from Africa, Asia and Latin America demonstrate that smallholder households with few resources can also be in a position to intensify production if it is worthwhile. Where capital is scarce, the willingness to assume risk is low and agroservices are poor and where the prices for commercial inputs are also climbing, it makes sense to give preference to *low-external-input* technologies. Where land is scarce, where seasonal labour shortages and lack of access to inputs conflict with agricultural intensification, it makes sense to give preference to off-season crops which do not require much land (fruit, vegetables, small livestock, wild berries).

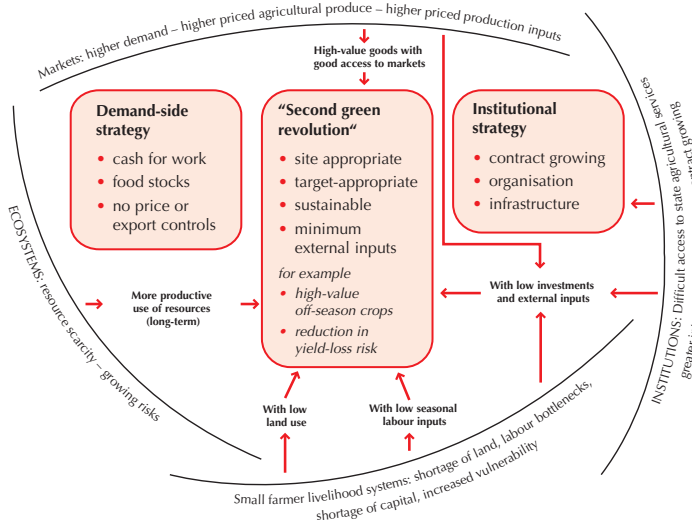
This commonly involves production for external markets. Therefore, the motto “food first” is not always the best way to ensure food security for every situation. In cases of limited land resources, it is probably harder for smallholders to double crop yields;

Figure 1: Intensification of sustainable agriculture



INTERNATIONAL PLATFORM

Figure 2: Strategies for sustainable smallholder agriculture



less worthwhile, riskier and more ecologically problematic than, for example, using part of the land to supply vegetables to the market. Measures for reducing the risk of low yields, e.g. due to increasing precipitation variability, can also help increase average crop yields. Thus, for example, the effect of small water reservoirs to get through a dry period during the main planting season may be greater on total production amounts than that of expensive irrigation systems that make it possible to have a second planting period.

To do this, agricultural services and the involvement of smallholders in value chains are necessary. In view of the weaknesses of many national agricul-

lural services, the capacities of agribusiness should be used to procure the required services for smallholders in the context of contract production. Smallholder producers only have a chance, as contract partners with agribusiness, when they are organ-

ised appropriately. It is not necessary that they be organised into expensive, formal types of organisations such as co-operatives – which most poor households steer clear of. All that is needed is basic marketing groups that pool their surpluses once a planting season, at a specific time at a specific location and with produce of guaranteed quality. Unorganised smallholders will be among the losers of the new developments, and they will be driven from the market and displaced from their land.

As to the **demand side**, the necessary adjustments on the supply side, i.e. expansion of agricultural production, take time. But those sections of the population whose food security is in acute danger cannot wait this

long. They need additional purchasing power (e.g., through cash-for-work programmes) immediately to be able to continue to afford increasingly more expensive food. On the other hand, price-lowering interventions – such as price controls, food aid, export restrictions, etc. – are problematic because they discourage and delay measures for intensification on the supply side. They are only necessary in situations where regional markets are temporarily overheated by speculation. Subsidies that artificially increase demand – such as for biofuels – should be discontinued so that the rise in prices is not further compounded.

Conclusion

The agricultural boom will lead to increased food crises, to additional environmental degradation and to the displacement of smallholders from their resources, which increases poverty if the opportunity is missed to assist them in their quest for intensification opportunities. However, the increase in producer prices presents an opportunity to escape rural poverty not seen for decades if it can be grasped by finding forms of intensification that are appropriate to each specific situation and do justice to the limitations of smallholder livelihood systems and rural institutions.

Zusammenfassung

Nach Jahrzehnten niedriger Erzeugerpreise und von Vermarktungsproblemen hat in den vergangenen Jahren auf den Weltagarmärkten ein deutlicher Aufschwung eingesetzt. Dieser Boom wird zu verstärkten Lebensmittelkrisen, zusätzlicher Umweltzerstörung und der Vertreibung von Kleinbauern von ihrem Land führen und dadurch die Armut weiter verschärfen. Vor allem diese Kleinbauern müssen in ihrem Wunsch nach Intensivierungsmaßnahmen unterstützt werden. Die gestiegenen Erzeugerpreise sind gleichzeitig eine einmalige Chance für die Linderung der

Armut in ländlichen Gebieten, wenn sie genutzt wird, um bedarfsgerechte Formen der Intensivbewirtschaftung sowie eine gerechte Behandlung für Kleinbauern auf dem Land zu finden.

Resumen

Después de décadas de precios bajos para los productores y problemas de mercadeo, durante los últimos años ha prevalecido una situación de auge en los mercados agrícolas mundiales. Este boom agrícola llevará a un incremento de las crisis alimentarias y a una mayor degradación ambiental, y obligará a

los pequeños campesinos a renunciar a sus recursos. Tal situación puede llevar a un incremento de la pobreza si no se aprovecha la oportunidad de ayudarlos en su búsqueda de oportunidades de intensificación. El aumento en los precios para los productores también representa una oportunidad – no vista en las últimas décadas – para dejar atrás la pobreza rural. La manera de lograrlo consiste en hallar modalidades de intensificación apropiadas para cada situación específica, que tomen en cuenta las limitaciones de los sistemas de subsistencia de los pequeños agricultores.