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FOOD SYSTEMS AT RISK NEW TRENDS AND CHALLENGES

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Published by the Food and Agriculture Organization of the United Nations and Le Centre de Coopération Internationale en Recherche Agronomique pour le Développement and the European Commission

Rome, 2019

Citation:

Dury, S., Bendjebbar, P., Hainzelin, E., Giordano, T. and Bricas, N., eds. 2019. *Food Systems at risk: new trends and challenges*. Rome, Montpellier, Brussels, FAO, CIRAD and European Commission. DOI: 10.19182/agritrop/00080

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ISBN 978-2-87614-751-5 (CIRAD)

ISBN 978-92-5-131732-7 (FAO)

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CONCLUSION OF SECTION 5

THE ELUSIVE AND UNSTABLE LINKAGES BETWEEN FOOD CONSUMPTION AND FOOD PRODUCTION

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There is a contrast in food and nutrition security issues between the global and local levels. At a global level, production of most food products has increased faster than population growth and now exceeds the nutritional caloric average requirements. Today, the average consumption of animal products, sugar, fat products and ultra-processed foods are far too high, leading to several global pandemics (obesity, diabetes, cancers etc.) (*cf.* Chapter 5.4). At the same time, important food shortage threats exist at local levels, especially in Africa, and many new food safety problems have emerged in LI and LMI countries due to the rapid industrialisation of food systems, increasing consumption of animal products and poor regulation capacity (*cf.* Chapter 5.5).

No single and simple solution exists, and the contributions in this section shed light on the complexity of possible answers, especially with regards to production and marketing.

Solutions based mostly on trade are not desirable since relying on the international market to import food on a regular basis or during specific events will become increasingly risky. On the one hand, increasing climatic shocks, together with erratic national decisions (do not forget the numerous export bans during the 2008 crisis), are likely to make international staple food markets more unstable (*cf.* Chapter 5.3). On the other, there is a serious possibility that international food price trends will rise compared to their level before the 2008 food price crises (*cf.* Chapter 5.2).

Instabilities in food supply and food prices are also locally driven. They have serious consequences for poor consumers for whom food accounts for a large share of total household expenditure. To smooth food supplies and reduce price variations, more investments could be steered towards physical investments in LI and LMI countries, such as transport and storage infrastructure, and market regulation policies. In LI countries, and more specifically in Africa, there is an obvious need to reduce the yield gap and improve the productivity of cropland. But health, natural resources and climate issues mean conventional intensification is questionable. Agroecological intensification is therefore considered as a possible pathway (*cf.* Chapter 5.1). However, the issue is controversial since the productivity of agroecological agriculture is deemed to be low and may lead to an expansion of cultivated land at the expense of tropical forests (*cf.* Chapter 5.2).

Technology may contribute to meeting the growing demand in an increasingly risky context if it is able to reduce production sensitivity to natural hazards (climate shocks, pests and diseases), lags in production, and transport and storage costs. Research can help the required technologies to emerge, but a significant level of investment would also be necessary. In both cases, supportive policies will be required.

However, tailoring food supply to meet the needs of a highly diverse and changing demand is only one side of the coin. On the other are public policies, which will need to contribute to driving consumption towards more sustainable and healthy diets.

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119