

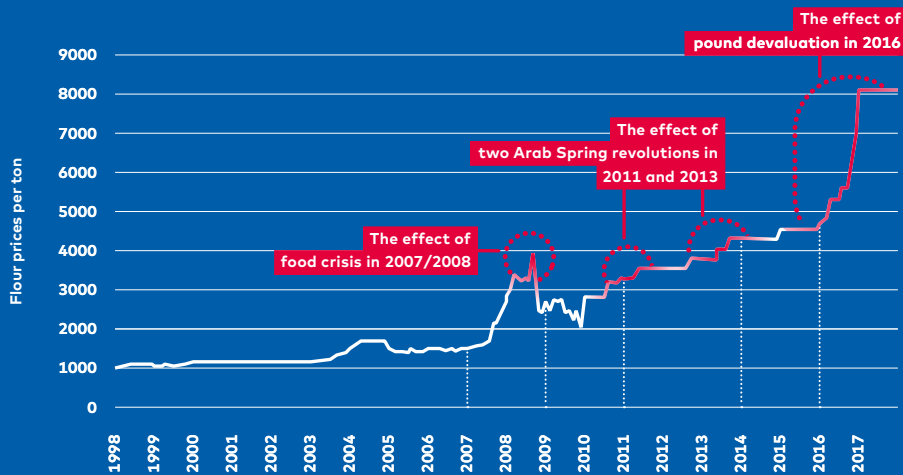
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Agriculture after the Arab Spring

Planet in crisis

Agrarian economics
and scarcity of resources

Flour prices development in Egypt



Exported food is in high demand worldwide; however, considering the impact it has on our ecosystem, it is just as much in crisis. In fact, Germany requires about twice as much land as other, often poorer, countries to meet its demand for agricultural products. The growing demand for meat and biofuel in industrialized and emerging countries also consumes large amounts of grain, water, and land, causing food prices to skyrocket.

Such dynamics hit countries already weakened by political unrest and vulnerable to economic collapse particularly hard. During the Arab Spring protests in 2011 and 2013 in North Africa and especially Egypt, established economic structures

and trade relations were increasingly destroyed. Previously sustained economic growth was suddenly halted and even reversed, and unemployment rose to 12.5%. Currently, about one-third of the population suffers from acute poverty.

In Egypt, the government has carried out comprehensive economic reforms in an attempt to return the Egyptian economy to the path of growth. These reforms include abandoning the fixed exchange rate, which had kept the price of the Egyptian pound artificially high, in favor of a free exchange rate. As a result, Egypt has witnessed the depreciation of its currency and high food inflation, as the country is particularly dependent on imports in this sector. Wheat and bread, Egypt's staple food, became particularly expensive. The prices of fertilizers and petrol also rose immensely, causing increasing problems for farmers—not least because agricultural subsidies were scrapped as part of structural adjustment programs. In addition, droughts, which have occurred in Egypt with increasing frequency in recent years, have resulted in crop losses, and excessive irrigation and the use of chemical pesticides have reduced soil quality. With production costs high, many farmers produce less wheat, and thus more wheat must be imported at high prices. Consequently, many households opt for lower quality food for which they must spend a majority of their income.

Economic reforms are essential to counteracting this crisis. For example, a planned reduction in subsidies or the devaluation of the currency can create investment incentives and stabilize markets. Moreover, reforms must be implemented in such a way that they do not trigger renewed upheaval in the region. The price of food plays a decisive role in this respect. In order to counteract price inflation, self-sufficiency must be improved through greater agricultural production. This can be achieved by optimizing crop rotation, or the cyclically changing, coordinated cultivation of different crops on the same area, reducing the use of fertilizers and pesticides, and improving irrigation systems. The aim is to increase yields and reduce production costs by means of »high-precision farming« that incorporates digitally supported systems. This also includes the prevention of losses after the harvest through improved storage facilities.