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What needs to be done post Copenhagen? Is it now the citizens who are called on to stop climate change?

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Bonn, 25 January 2010. The expectation expressed in the column before Christmas that a success of the Copenhagen climate summit could well spill over to other international negotiations, perhaps even inspiring the negotiators at the WTO finally to bring the long-overdue World Trade Round to a successful conclusion, has proved elusive (see: *The Current Column* of 14 December 2009, *From Geneva to Copenhagen – What does the World Trade Conference Have to Do with the World Climate Conference?*). In fact, though, on the heels of the failure of the Copenhagen conference, at which China, seemingly intent on becoming a new blockade power, did its best to play the spoiler, the mood in the old industrialised countries could take a turn for the worse, not only inducing their governments to opt for a harder line in other fora but at the same time motivating ordinary people to take things into their own hands, seeking guidance in the following line of reasoning:

Would we not be killing two birds with one stone if we resolved, from now on, to buy as much of our food as possible from regional sources? That, after all, would not only help avoid transport-related greenhouse gas emissions, it would also enable us at the same time – and on the sly - to settle an open score with the stubborn developing countries, namely by showing them that we can get along quite well without their cheap products, and need feel no remorse in doing so. Indeed, was it not even a German environment minister disappointed with the outcome of the Copenhagen summit who noted that it would be "no sacrifice (...) to buy food produced regionally instead of food that needs to be transported over long distances"? (*Der Spiegel* 53/2009) But would that be the solution? While there is certainly no reason why everyone should not contribute more than they have until now to reducing greenhouse gas emissions, we do have to be careful to that we do the right thing, and not, with the best of intentions, even further damage the world climate – and the developing countries to boot.

We are now in possession of a comprehensive body of international scientific literature that subjects the climate effects of food products to exact scrutiny, even comparing regional products with imports from abroad. These studies are predicated on the insight that it would be shortsighted to seek to measure the climate effects of food products only in terms of the distance from producer to consumer. Looked at in terms of this criterion, there is no doubt at all that regional products would be preferable. In fact, though, we need to give due consideration to the climate effects of all inputs, and not only those associated with transport.

Indeed, any really consistent life-cycle assessment would factor in the climate effects of chemical fertilisers, of the fossil fuel that drives tractors, of the energy needed to cultivate produce in heated greenhouses, of energy-intensive processing and storage (refrigeration!) activities, and, finally, of the energy consumers use in purchasing food (in the supermarket down the street or – fuel-intensive! – from farmers in the region). The picture we then come up with is highly differentiated. The apple, or the lamb chop, transported by sea to Germany from New Zealand may in fact be far less hard on the climate than the same products purchased from farmers in the region. It is perhaps not widely known that transport, above all per container ship, contributes no

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more than a very small share to a given food product's overall greenhouse effect. What plays a far larger role is the energy needed to produce the whole range of inputs required as well as for the various stages of production and processing involved in the value chain.

There are, in other words, no scientific grounds for the general assertion that regional products are more climate-friendly than imported products. In fact, what counts is the individual case, and even the season, concerned. The apple picked in Europe in the autumn months is more climate-friendly than the apple imported from Argentina or New Zealand. But in the summer months, prior to the apple harvest in Europe, the European apple, having spent months in refrigerated storage, may be inferior in climate terms to the apple picked in the southern hemisphere and shipped to Europe.

Now, when the stressed city dweller goes shopping there is no reason to expect her or him to have in mind the highly differentiated data from the life-cycle assessments of all kinds of different products. German-style environmental Blue Angels and other eco-labels are not much help there, either. They do not as yet give consideration to a product's climate relevance – and label information indicating the mileage a product has travelled would of course be misleading. The fondest dream of environment-minded economists would be for prices to reflect for the consumer, simply and straightforwardly, how climate-friendly, or -damaging, the apple or lamb chop in fact is that he or she has in mind.

Of course no one knows the ecologically "right" prices of all goods and services. But the findings of climate researchers indicate beyond doubt that the prices of fossil energies should be far higher than they are in today's world energy markets – high enough, that is, to ensure that energy consumption and waste are reduced by exactly the amount needed to decelerate climate change. And subsidies for fossil energies should be a thing of the past – the worst possible policy is to use artificial means to encourage their overconsumption. This constitutes a problem above all in the developing countries, where energy prices are far more highly subsidies than in the industrialised countries. Instead, energy prices should be increased, step by step, with, in the ideal case, all countries raising energy taxes in unison with a view to avoiding distorted competition and ruling out circumvention imports.

The higher prices for fossil energies (along with price increases for other growingly scarce environmental goods) would then lead to higher prices for all goods in keeping with both the climate effects of all inputs used to produce them and the amount of energy used at all stages of their processing and transport, right down to the final consumer. If prices were in this way to "tell the ecological truth," consumers would have clear-cut monetary incentive to gear their purchases to climate concerns. This is the most effective mechanism available to democratic climate policy. At the same time, both producers and transport and logistics firms would in this way have a greater incentive to cut costs, and thus to reduce greenhouse gas emissions. To cite only one example: If fuel costs were far higher than they are today, even sailing ships (of course in high-tech designs and configurations) might, once again, be seen plying the seas, bringing products, without any unnecessary negative climate effects, from remote regions of the world to customers in Europe. German engineering skills have set the stage for the use, today,

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of wind energy – based on fully automated towing kites ("skysails") – as a means of reducing the fuel consumption of modern cargo vessels by up to 30%, in this way further reducing the – already favourable – climate effect of seaborne transport.

But there is, finally, one other aspect that needs to be considered: Even if beans imported from Kenya had a larger greenhouse effect than beans grown in the region, buying European beans would still not automatically entail positive overall climate effects. What, after all, are African farmers, farm workers, and persons employed in the marketing chain to do if a climate-motivated consumer boycott in Europe costs them their livelihoods and jobs in the export sector? They would have to look for alternative sources of income or opt for a meagre subsistence in farming marginal soils and deforested land. The negative climate effect this entailed, however, might well be greater than the positive effect achieved by European consumers switching from imported to regional products. In other words, the "ecological opportunity costs" of every purchase decision need to be factored into the climate effect it entails. These opportunity costs are invariably in play whenever, and be it in the best of intentions, a chain reaction is triggered – possibly in remote regions of the world – that entails negative climate effects.

Climate change is forcing us, once and for all, to think in globally networked terms, to give due consideration to the implications of every act we engage in, and to realise that every inhabitant of the Earth has the same right to life, work, and a climate-compatible standard of living. In view of the looming threat to the global climate, Schiller's words "*alle Menschen werden Brüder*" ("All men become brothers") – often sung at New Year's eve concerts in Germany with Beethoven's Ninth Symphony – seem today to be taking on a new, and in many respects oppressive, relevance.

The present Column represents the author's personal opinion and therefore does not necessarily reflect the views of either the Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) or the Deutsches Institut für Entwicklungspolitik / German Development Institute (DIE).



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