Germany's Nitrofen Scandal and Food Safety in Ukraine

1. Introduction

Since the end of May of this year, Germany has been experiencing the so-called nitrofen scandal. Coming on the heels of the BSE and foot-and-mouth disease crisis, this scandal has fuelled consumers' doubts and worries about the safety of food and Germany's agricultural and food production system. While these developments may seem far away from Ukraine, and may even elicit smugness on the part of those who have always maintained that Ukrainian food is healthier, safer and better tasting, there are some lessons to be learned for Ukraine. These lessons involve the regulation of food safety and the checks and balances that the state must impose – on itself as well as on private firms and individuals – to ensure that this regulation is effective. They also involve the establishment of management procedures to be implemented in crisis situations in which food safety is somehow compromised. As Ukraine show signs of becoming a major food exporter, the issue of food safety takes on an important international dimension. In the following, we briefly outline the chronology of the nitrofen scandal. This enables us to then draw some conclusions regarding food safety risks facing Ukraine and policy responses for dealing with these risks.

2. Chronology

In January 2002, a baby-food producer in Bavaria found traces of nitrofen above the tolerated level of 0.01 mg/kg in a delivery of 83 tons of turkey meat. This contamination was found in the course of testing carried out as part of the baby-food producer's own, in-house quality control system. The turkey meat in question was destroyed and the producer of this meat, located in Lower Saxony, began its own investigation. Noteworthy in this case is the fact that the turkey meat in question was supposed to be 'organically produced'; in other words produced without artificial feed supplements or chemicals such as antibiotics and on the basis of grain and other feedstuffs that had been produced without the use of any chemical fertilizer, herbicides and pesticides whatsoever. In Germany, food produced in this way is generally referred to as

1 BSE = Bovine Spongiform Encephalopathy, also known as 'mad cow disease'.
'bio' (the English equivalent is 'organic') to distinguish it from so-called 'conventional' food products.

Box: What is nitrofen? (2,4-Dichlorophenyl-4'-nitrophenethylether, C₁₂H₇O₃Cl₂N)
Nitrofen was introduced in 1964 as a herbicide against mono- and dicotyledonous weeds. Included in many commercial preparations, nitrofen was mainly applied to winter wheat and in some countries rice. After it was found to cause cancer and birth defects, it was banned in Germany in 1988. The main producer of nitrofen, an American firm, had already taken nitrofen off the market in 1980. Production continued, however, in several countries including the German Democratic Republic, where it was not forbidden until 1990, and where significant unused stocks remained until their final destruction as late as 1995.

The turkey meat producer hired a private laboratory to test, among other things, samples of the feed it had used. In one of these samples a nitrofen contamination of 5.96 mg/kg was found. This test result became available on March 19, 2002, but the German Ministry of Consumer Protection, Food and Agriculture (BMVEL) was not informed of the contamination of feed and poultry meat until May 21, 2002. Following May 21, information accumulated rapidly, so that on May 23 the BMVEL informed its counterparts (provincial ministries) in the Länder Lower Saxony and Mecklenburg-Vorpommern – where the affected feed and turkey meat producers were located.

In the following weeks, extensive testing of feed and poultry products at various locations in Germany ensued. By June 1, the authorities had succeeded in locating what appears to have been the single source of the nitrofen contamination: a grain storage facility in the town of Malchin in Mecklenburg-Vorpommern. In dust samples taken from this facility, a nitrofen contamination of 2 g/kg (!) was measured. Subsequent research revealed that this facility had been used as a pesticide storage depot in the former German Democratic Republic. It was also revealed that this facility had been used to store grain by a company that mixes feed and sells it to producers of organic poultry products. It was determined that as early as July 2001, shipments of grain from this facility had been sold to poultry producers, thus entering the food chain. On May 24, 2002, the BMVEL had informed the European Commission in Brussels of the first findings of nitrofen contamination and of its measures to determine the sources and extent of this contamination. On June 11, the European Commission decided that the German government’s investigation had narrowed the contamination down to a unique, identifiable source and concluded that there was no grounds for imposing sanctions on the intra-EU trade of German organic food products.

3. Evaluation

Coming on the heels of the BSE and foot-and-mouth disease crises in the European Union, the nitrofen scandal has attracted a great deal of attention. At the height of the BSE-crisis in December 2000/Januar 2001, the former German Minister of Agriculture Karl-Heinz Funke was replaced by the current Minister Renate Künast. Ms. Künast is a member of the Green Party and upon
becoming Minister announced that she would be fighting for a major turnaround in agricultural policy (the so-called "Agrarwende") based on: 1) encouraging the production of organic food in Germany, and 2) placing a much stronger emphasis on consumer protection and food safety as opposed to the protection of farmer and farm industry interests.

Not surprisingly, the nitrofen scandal has proven to be somewhat inconvenient for Ms. Künast as it has: 1) demonstrated that organic food is also susceptible to contamination and is not per se immune to scandals, and 2) exposed weaknesses (delays and the withholding of information) in the 'early warning' system of testing for and reporting cases of food contamination that Ms. Künast had promised to improve upon taking office. Recall that the private firms first found evidence of contamination in January 2002, but Ms. Künast's ministry was not informed until May. This delay suggests that information was purposefully withheld from the BMVEL and the public – i.e. that the producers of organic food put their commercial interests before the public interest and therefore are, at least in this respect, no better than producers of conventional agricultural products.

The disturbing fact is that considerable amounts of nitrofen have already been ingested by final consumers of organic poultry products going back at least as far as mid-2001. Luckily, toxicologists have indicated that it is unlikely that individual consumers will have ingested critical dosages of nitrofen. To her credit, Ms. Künast's Ministry has, in the short time since it first received news of the possible contamination, acted very quickly and decisively to pinpoint the source and do everything possible (including temporarily closing farms that may still, unknowingly, be using contaminated feed) to contain the contamination.

4. Relevance for Ukraine

Some Ukrainians are fond of pointing out that food produced in Ukraine is by default – since the usage of chemical fertilizers, pesticides and herbicides has fallen so drastically – essentially organic and therefore safer and healthier than the food produced for example in the EU. This complacency may be misleading. There are a number of lessons that can be drawn from the recent experience with nitrofen in Germany.

1. The nitrofen scandal like the BSE-crisis before it, demonstrates just how important the strict control of food safety is. Whether or not food is contaminated is something that consumers can often not directly sense themselves; many important dimensions of food safety cannot be experienced but rather must be trusted. Consumers must be able to trust that a system of food quality control (for example toxicological testing) is in place and that negative test results will not be covered up to protect commercial interests but rather will lead to rapid action designed to minimise damage to consumers.

2. Food safety scandals such as the nitrofen scandal can have far-reaching economic consequences. Containing an epidemic such as BSE or tracing sources of contamination such as nitrofen costs a great deal of money. Farms have to be closed down, animals slaughtered and destroyed, exhaustive laboratory tests carried out etc. Food safety scandals also
lead to price reductions for farmers as consumer demand falls and – often – other countries stop importing food products from the country that is afflicted. As a result, farmers often demand expensive compensation. Scandals damage agriculture’s image, leading to reduced investment, higher costs of borrowing etc. Finally, if food safety problems actually lead to illness or even death, then costs of medical treatment and insurance claims must also be settled. Food safety is first and foremost a matter of consumer health, but its economic implications should not be underestimated.

3. The nitrofen experience in Germany has confirmed once more that food producers cannot be relied upon to carry out necessary food safety tests on their own. They must be subjected to thorough checks by independent institutions that are authorised to carry out tests whenever they want, unannounced and unhindered in their work. These institutions can be either public or privately operated. Private firms might be expected to be more efficient and innovative and, therefore, less expensive in the long run than corresponding public laboratories. It is imperative, however, that any private firms that are entrusted with monitoring food safety be: 1) completely independent of the farmers and food processors that they monitor, and 2) legally bound to report immediately any findings of contamination to public authorities. Regardless of whether food safety is monitored by private or public institutions (or some combination of both), it is important that the responsible employees be paid commensurate with their abilities and the heavy responsibility that they bear for consumer protection. Otherwise they will be susceptible to bribes and other forms of corruption. This is especially important in Ukraine, where public employees responsible for food safety are poorly paid and forced to work with out-dated equipment.

4. The nitrofen scandal has also demonstrated that food producers cannot be relied upon to go public with any information on food contamination. In the case of the nitrofen scandal, the baby-food producer that found traces of nitrofen in turkey meat in January 2002 informed the producer of this meat and saw to it that the contaminated shipment was destroyed. But it did not inform public authorities. Policy makers in Germany have reacted, after the fact, by making it mandatory that findings of contamination of food be reported to public authorities and by advocating the implementation of much stricter penalties for individuals and firms that knowingly withhold information.

5. The nitrofen scandal and other food safety crises in Germany and elsewhere have demonstrated that ministries of agriculture are not ideal guarantors of food safety. Ministries of agriculture tend to see themselves as protectors of agricultural interests first and consumer interests second. These interests often collide, and when they do, policy makers must make difficult choices. In the case of BSE, for example, the federal and provincial ministries of agriculture insisted for several years that there was no BSE whatsoever in Germany. There is even some indication that evidence of BSE in Germany may have been purposefully suppressed in the interests of avoiding a crisis and protecting German
farm interests. To underline her new emphasis on consumer interests, Ms. Künast renamed the former Federal Ministry of Food, Agriculture and Forestry (BMELF) to the Ministry of Consumer Protection, Food and Agriculture (BMVEL) upon succeeding her predecessor Funke at the height of the BSE crisis. Some have suggested, however, that this is not enough; i.e. that consumer protection on the one hand and agricultural policy on the other should be completely separated and entrusted to distinct ministries so as to avoid the inevitable conflicts of interest. This would be a wise course of action for Ukraine.

6. It is not unlikely that some agro-chemicals that had been banned for some time in the West continued to be used in the Soviet Union and later Ukraine. It is also safe to assume that some such chemicals were (and perhaps still are) stored in facilities under conditions that were (are) less than ideal from a technical standpoint. Hence, it is not possible to reject out of hand the possibility of food contamination such as occurred with nitrofen in Germany also occurring in Ukraine. Food industry insiders warn, in private, that a food safety time bomb is ticking in Ukraine.

7. In Ukraine, the issue of food safety takes on an important, international dimension. Ukraine is showing signs of becoming (once again) an important exporter of agricultural and food products. Unfortunately, in the eyes of many foreign consumers, Ukraine is identified with the Chernobyl catastrophe and possible food safety deficits. Confidence in the quality of Ukrainian food products has been slowly restored, but it is very fragile. If a shipment of Ukrainian food exports was ever found to be contaminated in some way (chemically or with radiation), Western media would jump upon this news and Ukraine's reputation as a supplier of safe food products would suffer a major blow. From a Ukrainian perspective this might seem unfair (and, in light of BSE and nitrofen etc., hypocritical), but as stated above, food quality is a question of trust and perception. Note as well that countries such as the EU that have recently felt the impact of Ukraine's highly competitive grain exports would gladly use any excuse (such as suspected contamination) for closing their borders to Ukrainian produce. For this reason, maintaining and strengthening Ukraine's reputation as a reliable supplier of safe food is vital to Ukraine's agricultural interests. By extension, it is also vital to Ukraine’s economic interests (see point 2 above). There can be no excuse for tolerating even the smallest laxity, and controls must be strict and completely impartial. Otherwise, one bad apple could easily spoil the whole barrel.

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