

Report on
the Assessment of
the Geographical BSE-Risk
(GBR) of
ALBANIA
MARCH 2001

NOTE TO THE READER

Independent experts have produced this report, applying an innovative methodology by a complex process to data that were voluntarily supplied by the responsible country authorities. Both, the methodology and the process are described in detail in the final opinion of the SSC on "the Geographical Risk of Bovine Spongiform Encephalopathy (GBR)", 6 July 2000. This opinion is available at the following Internet address:

<http://europa.eu.int/comm/food/fs/sc/ssc/outcome_en.html>

In order to understand the rationale of the report leading to its conclusions and the terminology used in the report, it is highly advisable to have read the opinion before reading the report. The opinion also provides an overview of the assessments for other countries.

FULL REPORT

1. DATA

- The information available was sufficient to carry out a qualitative assessment of the GBR.

Sources of data

- Country dossier, consisting of the completed questionnaire for the assessment of the Geographical BSE risk and annex, provided by the country on 19/10/2000.
- Comments on initial draft report received from country authorities on 20 February 2001.

Other data

- EUROSTAT export data on "live bovine animals" and on "flour, meal and pellets of meat or offal, unfit for human consumption; greaves", covering the period 1988 to 1999
- UK-export data on "live bovine animals" and on "Mammalian Flours, Meals and Pellets", 1980-1996. As it was illegal to export mammalian meat meal, bone meal and MBM from UK since 27/03/1996, exports indicated after that date may have included non-mammalian MBM.

2. EXTERNAL CHALLENGES

2.1 **Import of cattle from BSE affected countries**

Table 1 provides an overview of the import of live cattle into Albania, as provided in the country dossier (CD) and compares this with the exports from BSE-affected countries, as indicated in Eurostat and UK export statistics.

Veterinary inspectors of the Ministry of Agriculture and Food Veterinary Directorate are carrying out controls at border inspection posts. They work together with Customs and Public Order staff. According to the country dossier, all imported cattle have certificates of origin and animal-health certificates (both "commercial" cattle and in context of international co-operation programs).

According to the country dossier, Albania has not imported any cattle from the UK since 1980. It was explained that Albania had no diplomatic relations with the UK and therefore no trade took place. However, it is noted that diplomatic relations with UK were officially resumed in 1991.

According to Eurostat, since 1990 a small number of breeding cattle (635 in total) were exported to Albania from BSE affected countries other than UK, such as Ireland (112), France (147), Germany (145), the Netherlands (172) and Italy (12).

According to the country dossier, the total imports of cattle for the same period were 468, from FR (146), NL (138), IRL (74) and DK (65). All cattle imported for breeding were younger than 24 months. As their age at slaughter is reported to be 9 years most of the cattle should still be alive. Apparently no cattle were imported for immediate slaughter or fattening purposes.

Import of live cattle (n/period) into <u>ALBANIA</u> from BSE-affected countries															
Period	UK			FR		IRE		NL		DE	IT	DK		Non-UK	
Source:	CD	EU	UK	CD	EU	CD	EU	CD	EU	EU	EU	CD	EU	CD	EU
80-87:	<i>No data</i>														
1988															
1989															
1990					27					145					172
1991															
1992					20										20
1993															
88-93:	0	0	0	45	47					145				45	192
1994															
1995					73						9				82
1996					26				35						61
1997											3				3
1998									67						67
1999					48		112		70						230
94-99:	0	0	0	146	147	74	112	138	172	0	12	65	0	423	443

Table 1: Live Cattle imports. Shading indicates period of different risk that UK-exports carried the BSE agent, 1988-93 being the period of highest risk. Imports are normally for breeding. Sources of data: CD=Country Dossier, EU = EUROSTAT (1988-99), UK=UK statistics (1980-96).

2.2 Import of MBM or MBM-containing feedstuffs from BSE affected countries

Table 2 gives an overview about the MBM-imports into Albania, as provided in the country dossier and compares it with the Eurostat and UK-export statistics.

Import of MBM, MM, BM or greaves (tonnes/year) into <u>ALBANIA</u> from BSE-affected countries									
Period	UK			IT		BE		Non-UK	
Source:	CD	EU	UK	CD	EU	CD	EU	CD	EU
1980-85	0	0	0						
1986									
1987									
1988									
1989									
1990					1,880				1,880
1986-90	0	0	0		1,880				1,880
1991					1,130				1,130
1992					1,315				1,315
1993									
81-93	0	0	0		2,445				2,445
1994					82				82
1995					135				135
1996					4,458				4,458
1997					70				70
1998					24		10		34
1999					16				16
94-99:	0	0	0	0	4,785	0	10		4,795

Table 2: MBM-imports. Shading indicates periods of different risk that UK-exports carried the agent, 1986-90 being the period of highest risk for UK exports while 1994-99 UK-exports are assumed to have been safer than exports from other BSE-affected countries. Sources: CD = Country Dossier, EU = EUROSTAT, UK = UK-Export statistics.

Albania states that there were no imports of MBM (Meat and Bone Meal), BM (Bone Meal), MM (Meat Meal), greaves and or feedstuff containing any of these from UK since 1980. This is confirmed by UK figures.

According to the country dossier, Albania also did not import any MBM or MBM containing feedstuffs from any other BSE affected country. However, according to Eurostat about 9,000 tons of MBM were exported from Italy to Albania in the period 1990-1999. This import is not contested by the country authorities that declared who these MBM were for poultry feed only.

It appears that the poultry population (and more specifically the population of laying hens) is increasing, which makes it likely that the primary use of the imported MBM was for this industry. However, as no evidence of any controls is provided with regard to the use made of the imported MBM, it cannot be excluded that at least parts of these imports reached domestic cattle.

2.3 Overall assessment of the external challenge

The level of the external challenge that has to be met by the BSE/cattle system is estimated according to the guidance given by the SSC in its final opinion on the GBR of July 2000.

For Albania data are only available from 1988 onwards. They indicate that cattle imports posed only a negligible external challenge while imports of more than 9,000 tons of MBM (mainly from IT) represented a high external challenge, making the introduction of the BSE-agent likely.

External Challenge experienced by <u>ALBANIA</u>				
External challenge		Reason for this external challenge		
Period	Level	Cattle imports	MBM imports	Comment
1980-87	<i>Not addressed</i>	<i>No data</i>	<i>No data</i>	
1988- At current	High	Negligible	High	

Table 3: External Challenge resulting from live cattle and/or MBM imports from the UK and other BSE-affected countries. The Challenge level is determined according to the SSC-opinion on the GBR of July 2000.

3. STABILITY

3.1 Overall appreciation of the ability to avoid recycling of BSE infectivity, should it enter processing.

Feeding:

There is no official ban on feeding MBM to ruminants in Albania.

According to the information provided by Albania, MBM has not been included in animal / cattle feeding because of economic reasons, and cattle are only fed with vegetable feed or feedstuffs made of vegetables.

It is not clear if there are any feed mills in the country and if so for which species they are producing feedingstuff. Somehow the 9,000 tons of imported MBM must have been processed, either in feed mills or at farms.

As no measures were taken to avoid it, a reasonable worst case assumption is that some of the imported MBM has reached domestic cattle.

Rendering:

Albania states that since 1980 rendering has not been applied to feed production, and that all raw materials that are not consumed by the human population are treated as "waste" and disposed off and/or burned.

SRM and fallen stock:

There is no SRM-ban and brains and spinal cord of animals fit for human consumption are considered edible and are consumed by the human population. Fallen stock is "mostly submitted to incineration". It is not clear what happens to the rest.

Cross-contamination:

Given the fact that no feed-ban exists in Albania and MBM is rarely present (only imports), avoiding cross-contamination of cattle feed with MBM is not an issue. It is therefore assumed that no measures exist to prevent cross-contamination and cattle feed would be contaminated with MBM, should it be available.

Conclusion on the ability to avoid recycling

Given the assessment of feeding, rendering and SRM, it has to be assumed that the BSE agent, should it have entered the Albanian territory, could have reached domestic cattle. Due to the apparent absence of rendering it could, however, not have been recycled and amplified.

3.2 Overall appreciation of the ability to identify BSE-cases and to eliminate animals at risk of being infected before they are processed

Cattle population structure

Albania has a cattle population of about 720,000 heads of which dairy cattle count for about 469.000 heads. There are some water buffaloes but the population decreased from 450 buffalo cows in 1996 to about 70 at present.

In 1998 agricultural production reached a share of about 50% of the Albanian GDP, of which about 48% was generated by animal production. Most (about 450,000) farms are small with about 1 to 1.5 hectare per holding. This is also reflected in the structure of cattle farms (Table 4 below).

Herd size (heads)	Number of Farms with cows	%
1-5	247,802	99.8
6-10	381	0.015
11-50	39	
51-100	1	
> 100	0	

Table 4: Structure of the farms with cows

Between 1995 and 1998, the average annual milk yield was in the range of 1,700 kg per cow. However, on the basis of the available information it is noted that a very limited fraction (less than 0.1%) of the cattle population (i.e. 150 Holstein cows) reached an annual milk yield of 5,800 kg per cow on average and around 80% of the dairy cattle population produced more than the national average. Therefore it is not totally excluded that more intensive feeding practices might have occurred for some cattle (estimated to around 6% of the total dairy cattle population on the basis of the detailed information provided on composition of cattle population and milk yield).

Cattle for meat supply are normally slaughtered between 10-12 months. Male breeding cattle are slaughtered at around 6 years of age, whereas female breeding cattle and dairy cattle reach an age of 9 years. Only male working cattle become older and are slaughtered at the age of about 10 years.

Surveillance and culling

BSE has been a notifiable disease since 02.08.2000 and there is no compensation foreseen for BSE cases.

Awareness raising and training measures are said to be in place since 1999. Some personnel have been trained in the UK but the mentioned laboratory (Pirbright), is not specialised in BSE.

No cattle brains have been analysed for BSE so far.

It is concluded that no specific BSE surveillance took place in the past and it remains unclear if a specific BSE surveillance system has been established since August 2000, when BSE became compulsory notifiable.

3.3 Overall assessment of the stability

For the overall assessment of "stability" the impact of the three main stability factors (feeding, rendering and SRM removal) and of the additional stability factors, mainly cross-contamination and surveillance plus culling, has to be estimated. Again the guidance provided by the SSC in its opinion on the GBR of July 2000 are applied.

As regards the three main stability factors the assessment can be summarised as follows:

- **Feeding:** Feeding of MBM to cattle was and is not forbidden. However it is assumed to be unlikely that MBM would reach domestic cattle whenever it is available. Feeding is therefore "not OK".

- **Rendering:** There is apparently no rendering industry in the country. Rendering is assessed as "OK".
- **SRM:** There is no SRM ban and most, if not all, SRM are regarded edible and are apparently consumed by the human population. If in fallen stock SRM will be incinerated. SRM-removal is assessed as "reasonably OK".

Stability of the BSE/cattle system in ALBANIA over time					
Stability		Reasons			
Period	Level	Feeding	Rendering	SRM	Other*
1980 - At current	Neutrally Stable	Not OK	OK	Reasonably OK	

Table 5: Stability resulting from the interaction of the three main stability factors and other factors. The Stability level is determined according to the SSC-opinion on the GBR of July 2000. *Other refers to the impact on the stability of other factors than the three main stability factors.

Concerning the other stability factors (surveillance and cross-contamination), it is concluded that they have always reduced stability to some extent ().

On the basis of the available information it is concluded that the country's BSE/cattle system has been neutrally stable since 1980. This indicates that BSE infectivity, should it have entered the country, would not have been recycled or amplified. It could, however, have reached cattle due to the inappropriate feeding system.

4. CONCLUSION ON THE RESULTING RISKS

4.1 Interaction of stability and challenges

The conclusion on the stability of the Albania BSE/cattle system over time and on the external challenges the system had to cope with are summarised in the table below. From the interaction of the two parameters "stability" and "external challenge" a conclusion is drawn on the level of "internal challenge" that may have emerged and that had to be met by the system, in addition to external challenges that occurred.

INTERACTION OF STABILITY AND EXTERNAL CHALLENGE IN ALBANIA			
Period	Stability Level	External Challenge	Internal challenge
1980-1987	Neutrally Stable	<i>Not addressed</i>	<i>Not addressed</i>
1988- At current		High	Likely present and growing

Table 6: Internal challenge resulting from the interaction of the external challenge and stability. The internal challenge level is determined according to guidance given in the SSC-opinion on the GBR of July 2000.

Assuming that MBM imported after 1990 could have carried BSE-infectivity and could have reached domestic cattle, an internal challenge is likely to have developed since then.

As long as recycling can be excluded and without further imports, BSE infectivity will not have continued to exist. However, as the imports continued until recently, it is likely that an internal challenge is present in the country.

4.2 Risk that BSE infectivity entered processing

Assuming that a high external challenge occurred since 1990 due to MBM imports, it cannot be excluded that there was a risk that BSE infected cattle entered processing since the mid 90s.

4.3 Risk that BSE infectivity was recycled and propagated

The neutrally stable system would have recycled but not amplified BSE-infectivity, had it been present. However, a risk that BSE-infectivity was recycled has existed since the mid 90s, assuming that non-edible offal were indeed undergoing a process that resulted in (by-)products that could have been ingested by cattle.

5. CONCLUSION ON THE GEOGRAPHICAL BSE-RISK

5.1 The current GBR as function of the past stability and challenge

- The current geographical BSE-risk (GBR) level is *III*, *i.e. it is likely but not confirmed* that domestic cattle are (clinically or pre-clinically) infected with the BSE-agent.

5.2 The expected development of the GBR as a function of the past and present stability and challenge

- From the neutral stability of the system and the fact that the BSE-agent is likely to be already present in the country, it would follow that the GBR remains as it is as long as no new external challenges appear.
- However, due to the apparent absence of rendering, recycling of the agent is highly unlikely and the GBR would decrease over time if no contaminated feed is imported. Should this happen, however, new domestic cases are likely to result.

5.3 Recommendations for influencing the future GBR

- The stability of the system would be improved if a feed ban, including appropriate controls, were introduced. It should also be clarified whether SRM could be recycled into feedstuffs for cattle or not.
- Reduce the external challenge the system has to cope with, in particular with regard to feedstuffs would be important.
- Already imported cattle could be tested when slaughtered or found dead.
- Improved BSE-surveillance, ideally including active testing of at-risk animals would provide a better picture of the BSE-situation in Albania. In view of the exceptionally large imports of MBM in 1996, animals testing could also be targeted towards domestic animals born in 1996/97.