

Twinning-Project Bosnia and Herzegovina

Project title: Support to the State Veterinary Office

EU-Project number: BA05 IB/AG/01

Short-Term Mission on

Activity 3.1 “Analysis and support of veterinary inspections”

-On-site Visit 1/3 -

Mission report

1. Names of experts

1. Dr. Hans- Herbert Kornau, Senatsrat a. D., Bremen, Germany
2. Dr. Daniela Türnau, Veterinäramt Landkreis Rotenburg (Wümme), Germany
3. Dr. Jörg Pfeiffer, Veterinär- und Lebensmittelüberwachungsamt Landkreis Uelzen, Germany

2. Objective and task of the mission:

The objective of the activity is to carry out a gap analysis of the regulatory and institutional framework of Bosnia and Herzegovina (BiH) for acquis alignment in the veterinary sector regarding the analysis of present organisation, structure, capacity, implementation and enforcement of legal requirements of the milk processing and inspection service.

Date of visit: 07.05 - 10.05.2007

3. Identification and description of activities during the visit

Introduction:

International/world wide trade with food and animals has a tendency for globalisation. All foodstuffs are available around the year world wide.

This trade attitude has a high potential for internationalisation of pathogens and a risk of spread for residues and contaminants.

Many international organisations like OIE, WHO, FAO, Codex Alimentarius work on security of global trade in animals and animal products together with surveillance and control of animal diseases and food safety. Harmonisation of health standards for international trade concerning animals and products can be found in the International Animal Health Code of the OIE to assist the development of health regulations in Member states.

The EU follows their principle „Safe food from healthy animals“ and transparency of the manufacturing processes “from stable to table”. This principle includes measures on the whole food chain, beginning at the animal health status, including the hygiene of milk, staff, process und product, the production of milk and milk products.

It can be summarised that Global trade increases tremendously and food safety aspects are of high concern (FAO, WHO, OIE). Regulations regarding the global trade and food safety aspects are implemented by WTO, Codex Alimentarius Commission, OIE.

Monday, 07.05.2007

Meeting with representatives of SVO in BiH and German short term experts in the office of SVO Sarajevo

- Presentation „Organisation and structure of veterinary service of Bosnia i Herzegovina“
by **Slaviša Kreštalica, dr.vet.med.**
Deputy head SVO

- Presentation „Premises registration procedure and issuing export certificates“
by **Željko Kovač dr vet.med.**
State veterinary inspector

- Presentation „Performing veterinary-health inspection and control of milk and dairy products
by **Slobodanka Čekić dr vet.med.**
Senior associate for veterinary medicines

Short presentation of the STEs und discussion of the veterinary administration in the two entities and Brčko District in BiH

To evaluate the current situation concerning key factors for veterinary organisation and assuring quality for consumer safety and export chances of milk and milkproducts with regard to the hygiene standards two milks processing plants were visited.

In the afternoon departure for Tuzla.

Tuesday 08.05.2007

Visit of the milk processing plant “PPM Tuzla” in the suburb of Tuzla.
Meeting with the general director, the technical director, the quality manager and the veterinary inspector in charge Dr. Faruk Isović. After the introduction of the participants and the history of the establishment and explanation of processing concepts and future plans for

the development of the production facility the technical director assisted by the quality manager led us through the plant and explained the manufacturing processes.

/ A report of this visit see “Special remarks for the milk processing establishments”.

After the visit we compared and discussed the Bosnian law with regard to milk production with is still in force since the 80ties of the last century with the former German and new European hygienic package.

In the afternoon departure for Teslić.

Wednesday, 09.05.2007

Visit of the milk processing plant “Natura Vita” in Teslic.

Meeting with the general director, the technical director, quality manager and the veterinary inspector Dr. Ljiliana Gojić. After the introduction of the participants and the history of the establishment the future visions the leading staff led us through the plant and explained the production processes .

/ A report of this visit see “Special remarks for the milk processing establishments”.

In the followed discussion the quality manager explained the own control system and the inspection system in accordance to the national legislation. The STEs explained the new approach in the EU-hygiene package.

In the afternoon departure for Sarajevo.

Thursday, 10.05.2007

Meeting in the parliament building in Sarajevo with representatives of SVO, the veterinary inspectors of the visited establishments in Tuzla and Teslić, and other veterinary inspectors of BiH.

The STEs presented their work in food establishment in Germany and the recommendations and conclusions of the visit were presented to the veterinary inspectors.

Afterwards the practical conversion of some specifications of the EU – hygiene package was discussed with the participants.

4. Summary of the results of the mission

General conclusions/recommendations:

Legal basis

Legal base for the whole food chain in equivalence to the EU-legislation especially with regard to feed is not complete. There are gaps according to the regulations (EC) 178/2002 (the basic regulation), 852/2004 and 853/2004. The competence of SVO in matters of food hygiene is not given. The Food Safety Agency (FSA), which was founded in 2006, is responsible for matters of food hygiene. In our opinion there is no cooperation established between SVO and FSA.

Recommendations concerning the legal basis

Legal base for the whole food chain has to be completed. Coordination between SVO, FSA, entities and Brčko District to determine tasks, resources and strategies are to be necessary. One central organisation should be responsible for legislation in veterinary matters and food safety.

Administration/Organisation

Chain of command for enforcement in the food inspection service is not clear. The local veterinary officers are employed by the local administration. A system of control concerning veterinary administration staff seems to be only established in Republika Srpska. The SVO itself has no competence to discipline officers if there is a need too. The competences between SVO and FSA are not defined. The number of employees seems to be not adequate to the tasks. A legal base for charging wasn't found. Not all veterinary officers seem to be adequately familiar with the structure and requirements of HACCP-systems.

Charging or sanctions? Fees?

Recommendations concerning the administration and organisation

Similar to the legislation the enforcement should be coordinated and executed by a central organisation. There are at least two ways to organize the enforcement: either the official veterinaries should be employed at a central organisation (i.e. for example the SVO) or establishing a strict chain of command with transparent disciplinary measures.

It should be checked that the number of employees is sufficient according to the number of tasks.

A regulation for charging with defined fees should be established.

The veterinary officers should be intensively trained on HACCP- systems and their control.

Enforcement

It is not clear if there are defined measures for those establishments or workers, which or who fail.

Recommendations concerning the enforcement

Food business operators of all steps of the food chain must be informed that the registration of their establishments is their duty. The named rules must be enforced by the officials so that all establishments are registered.

Measures to enforce the law must be clearly defined.

Self-responsibility/self-control systems

There are no rules laid down in the food hygiene law of BiH dealing with the self-responsibility of the food business operators according to those of the regulation (EC) 178/2002.

The existing plans are not in all cases implemented exactly. There is a lack of documentation.

Recommendations concerning self-responsibility/self-control systems

Food business operators are primary self responsible for the safety of their operations and products. Corresponding rules must be defined in the law.

Food business operators must develop detailed plans covering all aspects concerning food hygiene of their self-control system. They have to follow those plans exactly and document their operations accurately. The documentation has to be available to the veterinary officers without delay.

Special remarks for the milk processing establishments:

Protocol of On-Site Visits to dairies in Bosnia and Herzegovina

Structure of control:

Daily checks on hygiene and processing are carried out by the local state veterinary officers. Milk collection points are also regularly checked by the local veterinary administration. The farms and herds are supervised by local veterinarians according to national law. Annual blood testing is carried out for leucosis, brucellosis, leptospirosis and also, intracutaneously, tuberculosis.

1. First Dairy: "PPM Tuzla" (Registration code: ML 13)

The third biggest dairy processing plant in Bosnia and Herzegovina, was privatised five years ago. The plant is owned by a Slovenian consortium.

The dairy's collection area spans a range of ca. 300 km, it contains 2600 farms with 6000 cows and 120 collection points.

The average size of the farms is 2,2 cows per farm, with only a very few larger farms. The fleet of milk transporters is sourced out, collecting milk from the dairy farms daily.

Production 2006: 22 million litres

Target for 2007: 25 million litres

Product range:

65 % UHT products

15 % fermented products and cream cheese

20 % butter and spray-dried milk

Staff comprises 120 employees

Energy supply and water supply is currently provided by public power authorities, it is aimed to build an own water supply.

Products are exported to Serbia and Montenegro, deliveries also inland, to the local and national markets.

The establishment is certified by ISO 2001 ff.

HACCP-system is established

Ultra heat treatment is carried out at a temperature of 141 °C for a duration of 4 seconds, pasteurisation at least 73 °C, for a duration of 15 seconds. During the visit, it was processed at 80 °C for 16 seconds.

Unfortunately milk collection lorries could not be inspected, since at the time of the visit they were all abroad.

Delivery zone (raw milk):

Roofing is missing. A drive-through hall is planned.

Storage of hoses outside promotes negative influence on the hygienic status of the hoses, since no protective caps are available for the hose ends.

Disinfection with an ethanol based disinfectant before connection is recommended.

Cleaning facilities for the dairy vans were not presented to us.

Testing for residues/Incoming components inspection:

Raw milk is tested for physical and chemical residues and antibiotic substances. In the case of a positive result, the milk is returned to the farmer, who is responsible for rendering.

The dairy processing company does not take any responsibility for a professional waste disposal according to the rules.

Disposal in a biogas plant is recommended.

Waste disposal according to the rules must be subject of official check-ups.

Cleaning of raw milk

Raw milk is neither filtered nor centrifuged; therefore somatic cells and other impurities remain in the milk.

The dairy has recognised the problem and two centrifuges from Slovenia will be installed.

Pasteurisation:

Simulation of loss of pressure: a check-up concerning the functioning of the change-over valve should be undertaken and documented every day before and after production. Testing with hot water is a possibility.

Frequency of testing the plate heaters for leaks: one annual check-up is not considered to be sufficient

Line of production No. 1:

UHT.

Without complains.

Packaging:

New Tetrapackmachine.

Without complains.

Line of production No. 2:

Cream cheese dairy, butter production, fermentation:

At the time of the visit no production took place so evaluation was not possible.

It is recommended, that establishments should be operating during on-site visits.

Line of production No. 3:

Production of spray-dried milk powder.

Not operating, but the installation matches today's technological standard.

Cooling facilities:

Temperature observation and control via a central display, documentation by hand-written check-lists.

Automatisation is recommended.

If surveillance by automatic, computerised documentation is possible, daily print-outs are considered dispensable.

Constructural condition:

In several areas the building was not efficiently sealed, so that access of unwelcome rodents and insects is possible. Dead flies were observed in quite noticeable numbers on the wet floors of the establishment.

Changing rooms and sanitary rooms were in poor condition. New buildings are planned, which immediate realisation is highly recommended.

It was remarked that a high number of sinks in different locations were in various ways (drains, no water, only cold water) out of order. Disinfectant was not refilled.

The floor was damaged in several places, walls and skirting boards were damaged as well.

Missing hygiene lock in the production entry area. It is recommended that a guided route for personnel should be installed. An opportunity for staff and guests to clean their shoes before entering the production is regarded as highly important. As an alternative disposable plastic shoe covers could be used or shoes must be changed inside the hygiene lock.

The existing solution with disinfectant-saturated foam was not convincing and is regarded as insufficient. No removing of watches and jewellery by staff and veterinary administration was observed.

Clean-unclean scheme (Flow control):

No separated routes for incoming raw milk lorries and outgoing products. Yard and incoming roads are not paved.

There are no predetermined staff or visitor paths inside the production building.

Documentation:

Labelling and sign-posting of production areas is comprehensible and clearly laid out, as are building plans and process diagrams.

HACCP-concept is well structured, documented and plausible. The number of CCPs seems to be too high though and should be reduced. Revision is already intended.

Pest control: We were shown a contract with an external service company, which contained only control of mice and rats.

Documentation concerning a systematic pest control of insects were not presented, although we asked for them. It is highly recommended, that pest control should contain systematic monitoring of insects, too. Dead flies could be seen everywhere on the floors in the production facility.

During the discussion on the last day, the responsible veterinary state officer maintained, that an insect monitoring is already installed in the dairy. However, we did not see any documentation, even though we had asked for it.

The staff of the technical and quality management of this first establishment impressed us with their professional competence and dedication to their business.

Work hygiene:

Watches and jewellery were worn by staff (physical risk), cleaning of hands is not obligatory when entering the production rooms.

On the plus side it was noted that staff health documents were registered available for the entire staff. Their validity is only six month, which is a good regulation. Health documents are issued only after a medical check including a test for salmonella.

Control of products:

Final inspection of products is sourced out to a private laboratory in Ljubljana. Physical, chemical and microbiological testing is undertaken in house.

2. Second Dairy “Natura Vita”

Modern dairy, built in 2002, moved and rebuilt 2006.

The collection area of this dairy is regional, it contains 2200 farms, whereas app.

100 farms produce more than 300 litres per day. The dairy processing company runs its own farm with 80 cows and 1000 sheep.

Sheep milk has not yet been integrated in the production process. A test production is however planned after the lambing season.

Production:

Production 2006: 21-26 tons of milk per day.

Target for 2007: 50 –70 tons, estimated 7.5 million litres.

Product range:

Fermentation: yoghurt, whey, cream cheese, bread spread, cream, sour cream.

Natura Vita: It is intended to achieve a higher ecological standard, i.e. no feeding of animal protein to the herds, no carcass meal.

Staff comprises 75 employees, thereof 18 workers are in the production, the others are administration and drivers.

The dairy processing plant is ISO 2001 ff certified by TÜV Rheinland.

Energy supply is provided by public power authorities, water supply is provided by a well on the premises. Testing of water quality is undertaken regularly. Watersamples are tested twice a month. Sampling is carried out by a neutral official institute.

Delivery zone (raw milk):

The lorry fleet comprises 30 dairy collecting lorries. The collection of dairy from 170 collection points is organised on daily basis. At the collecting points the raw milk is chilled to a temperature of +4 °C. The delivery of the milk to the collection points is done by the farmers themselves.

The delivery area and docking station of the dairy is roofed. Hose openings are protected by end cap closures. Hoses were stored inside the room which also contained the raw milk tanks.

There was a separate facility for cleaning and disinfecting the raw milk lorries as well as separated routes for incoming raw milk lorries and outgoing products. The yard and incoming roads are paved.

Cleaning of raw milk

Raw milk is filtered before being pumped into the raw milk tanks and centrifuged before pasteurisation; therefore somatic cells and other impurities are removed. The centrifuge effluent (somatic cells, gems, etc.) is disposed via sewage system.

Pasteurisation:

Temperatures are between 75 until 95 °C (yoghurt), for 180 seconds, guarantees a storage duration for yoghurt for three weeks.

Registration of temperature occurs centrally. Since surveillance by automatic, computerised documentation is possible, daily print-outs are considered dispensable.

Fermentation:

Two methods:

Use of a fermenter and fermentation inside the sales package (beaker).

Chilling facilities are multifunctional: cooling and fermentation is possible.

Distribution:

regional, national

Packaging:

Registration code was missing on various articles

Cheese production:

Cream cheese is produced from pasteurised milk, salted and unsalted, lab-ferment is gained from microbiological production, no production of raw milk cheese.

The cheese is decanted manually, packed manually in plastic packaging and directly vacuum-packed.

Constructural condition:

Generally without complains, except for a flaking paint on the ceiling in the raw milk storage room

Work hygiene:

Visitors have to sign a form, stating their sanity and that they will follow the hygiene rules.

This is considered very state-of-the-art and effective.

A hygiene lock is to be found, protective-clothing is offered to visitors, including disposable plastic shoe-covers.

There are no predetermined paths for staff or visitors inside the production area.

Before access to production, staff and visitors are not forced to wash and disinfect their hands. Hand-washing facilities in the toilets do not have contact-free taps, there were no soap or disinfectant dispensers.

HACCP:

For each product, an own risk analysis was presented. This resulted in different numbers of CCPs. There were up to 6 CCPs determined, some were not health relevant, but relevant for the product quality.

The concept was well structured and plausible.

Staff health-certificates could not be presented. However, according to the state veterinary officer they do exist.

Pest control: Contract with external service company, which contained control of mice, rats and flies.

Checking of bait boxes every 7 days, however no procedural guidelines were available should infestation occur. No bait boxes for cockroaches were established. Insect control consists of fly nets in front of the windows and UV-fly traps.

Ants were detected in the ladies changing room.

Staff training is out-sourced.

It is highly recommended that the quality management should ensure immediate access to documentation.

Control of products:

Final inspection of products and all official samplings are tested in the state laboratory in Banja Luka

Conclusion:

Due to poorly conditions of the buildings, the first dairy is not EU-certifiable. Nevertheless, taking the closed system of milk product production into account, the dairy products are safe as far as consumer protection is concerned.

The second dairy could be certified in principle, but a more effective access to documents is absolutely necessary.

05.06.2007

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