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KOSOVO'S MEAT MARKET POTENTIAL

KOSOVO CLUSTER AND BUSINESS SUPPORT PROJECT

September 26, 2005

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KOSOVO'S MEAT MARKET POTENTIAL

AN EVALUATION OF THE KOSOVO MEAT INDUSTRY AND RECOMMENDATIONS FOR IMPROVED SLAUGHTERING AND PROCESSING PRACTICES AND EQUIPMENT

Kosovo Cluster and Business Support project Kosovo's Meat Market Potential.
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PURPOSE OF ASSIGNMENT

The purpose of this assignment was to help Kosovo meat processors [poultry, sheep and lamb] develop a profitable industry by improving the functioning of their meat processing lines to produce the highest quality products for the least cost.

Currently, the processors are making mainly products like sausages, salamis, hot dogs, which are based on imported semi finished products. The consultant was asked to determine if there are new products lines that can be made using the existing equipment or minor changes in the equipment. He was asked to detail the types of raw products needed to make these products.

The consultant was asked to identify constraints in the functioning of the processing line. This included but was not limited to, functioning of the equipment currently being used, new equipment needs, equipment configuration, equipment calibration, new technologies for processing, and costs of the usage of the equipment.

Further, the consultant was asked to look at the use of labor in conjunction with the processing line to determine the best use of labor to produce the highest quality products. The consultant discussed effective labor training and education needs of the labor force.

BACKGROUND

Before the conflict, the poultry meat structure in Kosovo was characterized by a very distinct farming system. State-owned enterprises (SOEs) operated large-scale agricultural farms and big poultry complexes with capacities of 20,000 to 35,000 broilers per house. Historically, there was an integrated industry where all sectors worked together. Broiler parent farm and hatchery, growing facilities, feed production and two large slaughterhouses - meat processing facilities. The highest number ever produced in Kosovo was 15,000,000 broilers.

Currently there are five meat processors in Kosovo (LGB, Ben af, Meka, Mish Kosova, Koral). LGB and Ben af are also slaughterhouses and there is another company Agraria Commerce that owns a chicken slaughterhouse. At present all six producers produce 15-20% of the Kosovo consumption. Current processing capacity is able to absorb large number of chickens and large animals. However, there appears to be a lack of equipment and knowledge to complete the processing cycle. All meat processors declared that they imported at least 90% of the raw material for their production needs and almost 100% of the packaging material.

Generally most broilers grown in Kosovo can be profitable for the farmer when sold on the fresh market. For example the cost of producing broilers is estimated to be between €1.4 and €1.6 per bird (Source: Agraria Commerce). LGB earlier this year paid only €1.6 per bird delivered to the factory. As a result, farmers view the processing market as “the market of last resort”. From the processor’s point of view, the poultry price is a fair price given the world market price for chicken meat.

The Kosovo sheep industry dates back hundreds of years. Sheep became popular livestock item for Kosovo rural people because of natural climate conditions and topography supported sheep more profitable than other livestock types. Pastureland and meadows represent a major resource for the development of sheep sector. Sheep are mainly local breeds and they are kept almost entirely in the hill faming areas around the borders of Kosovo. The Kosovo hill pastures are said to be particularly suitable for meat production and they turn out high quality carcasses.

Up until 1991 the average herd size was in excess of 500,000. Since then there has been a significant decline in the herd size. The decline in the sheep flock size is because Kosovo lamb is prohibited from being exported into the EU. The domestic market will not support the higher price for lamb meat. In 2005, there were approximately 93,000 sheep in Kosovo. The average price was €1.50/kg live weight while at the same time in neighboring Macedonia they were receiving up to €4.00/kg live weight. Kosovo has a tradition of producing lambs for export to some of EU countries; lamb meat produced in Kosovo was marketed in EU countries mainly in Italy and Greece.

The goal is to renew the access to the EU market for lamb meat from Kosovo. Further, increase domestic lamb production through production efficiency.

Given this situation, the processor must increase efficiency of processing and the farmer must decrease production costs. Further, new products must be developed that meet the market demand for processed meat products and increase the use of the production line machinery and overhead. Decreasing the costs of production at the processor level can be done by improving processing line layout, using correct processing procedures, and improving the poultry breeds that the processors are buying from the farmer. To dramatically improve the profitability of the processor the machinery running the meat processing lines, the technologies used in processing and the use of labor must be analyzed to ensure least cost processing.

EXECUTIVE SUMMARY

A distinction needs to be made between the existing meat processing activity in Kosovo and the separate poultry sector here. It is very evident that, at present, one has very little to do with the other and it appears that fact will continue to be the case in the foreseeable future.

The meat processing activity in Kosovo cannot accurately be considered part of the domestic poultry sector in that:

- Imported Poultry Mechanically Deboned Meat [MDM] has simply been chosen by the processors as the primary ingredient in each of their sausage type products because of its very low price and as an effective cultural substitute for pork.
- MDM is a low cost by-product of the poultry industry worldwide which simply by nature of its cost cannot be replaced/substituted economically with any other boneless poultry product.

Conversely, the poultry sector here - in this case the broiler industry - is completely dependent economically on recouping its rightful share of the conventional consumer market for chicken in its traditional forms with a focus on factors that could add value. It should not consider the meat processing industry as a potential market for higher value products. Even the minimal amount of MDM they could eventually produce as a by-product themselves would require substantial investment in processing equipment which would be prohibitive for small to medium operations. The integrated broiler industry requires substantial intervention to again become anything more than a marginal factor in the overall agricultural economy here in Kosovo.

Ever since the export market for meat was lost after the conflict, Kosovar farmers simply did not have an adequate market for their livestock with the negative impact on the sheep/lamb sector most severe.

It is clear that the biggest initial obstacle to reopening the export market was the perceived absence in Kosovo of slaughter facilities that could meet export standards and it appeared there were none. As a result, the focused activity initially was to evaluate and assess several existing slaughter facilities to determine which ones might be most suitable to upgrade to the necessary standard. The only one that seemed to have any possibility at all was the former SOE in Prizren; but its large size and other complicating factors would require much time and money to upgrade. Even then, it was most likely a much larger facility than was economically feasible at this stage of the process.

The consultant met with an EU advance team (TAIEX) doing a veterinary evaluation of the present situation in Kosovo, and assessing the prospects/potential obstacles of future EU alignment. They had made a visit to a small slaughter facility in Ferizai which they indicated was a first rate new slaughter facility that appeared to both meet and exceed EU standards. A personal visit to the facility confirmed the information. There is, therefore, a slaughter facility in Kosovo that already meets the EU standards for export. We immediately started to formulate plans to utilize this facility to achieve the export objective. Recognizing that the process of gaining approval for export of meat to EU countries like Greece and Italy could still take considerable time and effort, it seemed prudent to utilize the facility for an easier first step of meat export to nearby non-EU countries like Albania, Montenegro, Bosnia, Croatia, and Turkey. We received assurances from the officials of the Kosovo Veterinary and Food Agency that this could indeed occur with the laws and procedures already in place. They even pledged to assist in any way necessary to help facilitate the export initiative as needed. KCBS needs immediately to focus on identifying market opportunities and specific customers who are willing and able to collaborate with us in those countries. Prompt market development efforts also need to be commenced to work toward the ultimate goal of including EU countries (especially Greece and Italy) as target markets as well.

FIELD ACTIVITIES TO ACHIEVE PURPOSES

During the assignment site visits were made to the following operations

LGB Meat Products, Gjilan

A visit to the meat-processing and slaughter facilities of LGB in Gjilan was quite an eye-opening surprise. The size and capacity of this extraordinary facility far exceeded expectations in every way. It became quite clear during our visit that the facility, when built, was truly a “state of the art” showplace and even today could easily be restored and utilized as a top notch “high volume” slaughter and meat processing facility.

While the size and capacity of the facility are quite impressive, those factors also cause the biggest challenges for LGB economically in today’s environment here in Kosovo. The limited livestock supply in Kosovo these days, even in a best case scenario for the next several years, will not come close to providing the volume necessary for the economic viability of this facility. Without a reasonable pre-requisite volume, the facility becomes a “white elephant” with the apparent extensive overhead costs becoming an albatross that could easily result in an inability for them to survive.

Unfortunately for LGB, any strategy to grow the livestock base and to create an export market will likely need to evolve step by step over a period of time and it is not realistic to expect that base to rise, anytime soon, to a level that would even come close to meeting the prerequisite needs of a facility of this size.

State Owned Enterprise/Slaughterhouse, Prizren

Another “state of the art” slaughter and meat-processing facility located in Prizren. It is apparent that the two separate facilities we visited (the one operated by LGB in Gjilan and the second in Prizren) were similarly built as state-owned enterprises in the late 80s. There are, however, several significant differences between the two. The facility in Prizren, while still quite large, is quite a bit smaller that the one located in Gjilan. Additionally, the Prizren facility does not have a poultry slaughter line nor does it include a hamburger/cevape line with freeze tunnel that is part of the Gjilan facility. It does appear like the Prizren facility may be in slightly better condition than the one in Gjilan even though it is not presently in operation.

The preceding factors may actually work in favor of the Prizren facility by comparison as it appears like overhead costs there could potentially be significantly less. This factor alone may substantially reduce the prerequisite volume necessary for the eventual economic viability of the Prizren facility. While there is still little doubt that the present limited livestock supply in Kosovo would not be even close to the level needed to make the smaller Prizren facility economically viable, it is also apparent that if and when livestock numbers were to increase in Kosovo, that the smaller facility could easily become economically viable much sooner than the larger.

During our preliminary research, we were also told that the Prizren facility had qualified during the 1990s for EU certification and our overview today seemed to confirm that only minimal repairs and restoration may be necessary to bring this fine facility back into compliance with EU standards. In fact, my personal observation is that the overall condition

of this Prizren facility is already superior to the overall conditions I found in the several EU approved slaughter operations I visited last year in Macedonia.

Sharrprodhimi Sheep Cooperative, Dragash

In the interest of assessing the actual and realistic capabilities of the Prizren region regarding future livestock and sheep supply, we also made a visit with the management team of the state-owned Sharrprodhimi sheep cooperative headquartered in Dragash. They strongly assured us that, even though the cooperative has only 400 sheep at present, they have facilities and resources that could still support up to 7000 sheep and would really welcome the opportunity to begin the process of reversing the disturbing trends of the recent very difficult years. They did confirm our own ongoing conclusions that the two most significant barriers to such a reversal are the lack of capital and the inability to gain access to export markets resulting from existing trade barriers and lack of EU approved slaughter plants.

"Koxha" Company, Kacinak

The combination sheep farm and restaurant facility provide an interesting mix of agricultural initiative and creative marketing. They presently have approximately 700 sheep that produce a regular supply of lambs that are slaughtered and marketed exclusively in their own strategically located restaurant on the well-traveled main route from Pristina to Skopje. We visited both the livestock facility and the attractive restaurant. We learned that the make up of their sheep flock presently includes over 400 ewes and 200 lambs. The restaurant has developed a superior reputation catering to a variety of clients including local individuals and families, travelers and tourists, groups and parties, and celebrities. We are told the Greek ambassador was a recent dining guest at the restaurant. Even though this is definitely a well-run and successful operation, it does appear that they could benefit from some upgrades in the slaughter process. It would definitely enhance their operation to have a sanitary slaughter facility included in the present integrated process. That observation again reinforced the urgent need in Kosovo for the establishment and certification of sanitary slaughter plants to be placed in operation ASAP---and the ultimate elimination of those that are not.

KVFA—Kosovo Veterinary Food Agency

Several contacts and meetings with the various officials of the KVFA resulted in significant developments in the process of carrying out this assignment.

- Ardian Purrini made an early request for assistance in establishing a checklist for the establishment of standard and effective GMPs for slaughterhouses---this was considered a prerequisite to an agency initiative to certify and enforce upgraded standards for sanitary slaughter in Kosovo. Considerable effort was extended to write an extensive draft of a document that not only provides checklists but outlines the basic GMPs covered by the checklist itself (see Annex I).
- Flamur Kadru introduced himself at the TAIEX seminar and provided assistance and helped facilitate our visit to the new "Lybetani" slaughterhouse in Ferizai
- I met with Dr. Kabashi to request his assistance in making sure we completely understood the regulatory process that would affect the export of sheep and lamb meat and to enlist his cooperation and support. He pledged his full support to the export initiative and referred my questions on regulations to Besfort Gunga

- Besfort Gunga indicated that the export of meat to Albania would be permitted and urged us to make sure that the exporting company was registered with the Ministry of Trade and the Customs office.

TAIEX--

Several breakfast meetings with the specialists who were in Kosovo as part of an EU advance team resulted in gaining knowledge of the slaughterhouse "Lybeteni" in Ferizai---and as a direct result of that contact I was invited to attend the seminar TAIEX conducted in Pristina reporting the results of their weeklong assessment. The information gained from these gentlemen was invaluable and the seminar was quite helpful and interesting as well.

Lybetani Therrtorja, Ferizai

The discovery of the existence of this new and extraordinary facility changed the whole focus, timeline and emphasis of my work and assignment. While somewhat small, it definitely meets or exceeds the standards required for EU and export certification. (We had assumed earlier that there were no slaughter facilities in Kosovo that even came close to meeting those standards). Our initial visit confirmed these facts and during a subsequent visit, we confirmed with Mr. Brahimi that he would be more than willing to collaborate with us in a prompt attempt to initiate and test opening the borders for export of lamb meat. We all agreed to immediately seek specific customers who would work with us and potential farmer suppliers to provide the needed livestock.

Kualiteni Slaughter facility, Pristina

A visit to this slaughter facility on the edge of Pristina was also facilitated by Veterinary Chief, Flamur Kadry. We all came away with a clear cut picture of the urgent need to upgrade and enforce sanitary slaughter procedures and my biggest concern is the overriding impression that this is only one of many slaughter facilities in Kosovo that just do not measure up to acceptable sanitary levels. They had no refrigeration capabilities at all in the facility, and no meat was being refrigerated on site.

"Qingli" Slaughterhouse, Lipjan

The Bahtiri family not only operates a slaughterhouse in Lipjan but also has a retail butcher shop in Pristina (across from the Baci Hotel) and maintains a farm on which are currently 1000 sheep. Our visit to both the retail butcher shop and the home base in Lipjan was quite cordial and we observed that they are currently in the process of building a new slaughter facility on the home site. They requested my assistance to make sure their new facility would meet required upgraded veterinary standards---I encouraged them to not only attempt to meet domestic standards but to consider a long-range plan that allowed them to meet export requirements as well. We offered to provide a translated copy of my draft "GMP" guidelines for slaughter facilities.

Norwegian Technical Education Project, Lipjan

Mr. Bahtiri made us aware of this unique initiative, which is due to commence this fall. A project funded by the Norwegian government in partnership with the Kosovo Ministry of Education. They have completely refurbished the local secondary school to serve as a

practical place of learning technical skills related to the agricultural/food industry. It includes a slaughter facility and meat processing as well as dairy, cheese, and other. We are invited to observe firsthand after it opens on October 1.

(SOE) Slaughterhouse, Fush Kosovo

I simply needed to assess whether there were any additional existing slaughter facilities in Kosava that may have possibilities to be restored to meet export standards---this one did not---it is quite apparent that this one that was still being operated one year ago, is not a candidate for restoration---it would be more economically feasible for it to be demolished and start fresh than to refurbish the existing one. It was very interesting and enlightening, however, to also visit the adjoining large freezer warehouse—where we observed massive quantities of frozen poultry and beef that had been imported primarily from Brazil and was being held there for use by the citizens of Kosovo.

Euro Sharri, Dragash

It is evident that the two competing meat processor/slaughterhouses in Dragash either are being motivated by each other or by some regulatory influence because both are in the process of building upgraded slaughter facilities. While this is encouraging, I am concerned that in both cases a significant amount of money is being spent and the final result, while a major improvement over existing facilities, may fall short of the needed levels to be involved in our export initiatives. Both of these operations could use some assistance and support, if they are open to receiving it.

Sharri, Dragash

This one seems to be the best candidate of the two to ultimately be an export factor. The slaughter facility is fairly new but would need some fine-tuning and upgrades to qualify for export regulations. They are in the process of building a modern cattle feeding facility—It appears like he wishes to integrate a bit---could use some support and assistance.

Luli Commerce, Gjilan

Surprised to find that this operation had a slaughterhouse in addition to their restaurant, catering business and grocery store. It is apparent that this operation is aggressively seeking ways to move forward---but I doubt if they have the resources to be a part of the export initiative.

Sheep farms, several locations

Numerous visits to several locations and discussions with farmers reveals that most farms have greatly cut back their sheep flock size largely because of the lack of markets for the lambs. The owners of the only larger flocks in Kosovo appear to have developed an integrated controlled market for their lambs---some by marketing them in their own restaurant, other waiting till the Muslim holidays arrive and the good chance they may actually get a premium price from the celebrants. One farmer provided me with the phone number of a trader that he indicated comes around every fall.

TASK FINDINGS

Meat Processing

The “Meat Processing Sector” is probably a term that more accurately reflects the present and future activity of the 5 major operations assessed than “poultry processing sector”---as we have learned that the only poultry ingredient used regularly is actually an imported poultry by-product and all of the operations also were heavily involved in producing products made of beef and beef ingredients.

It was quite apparent in all five operations that profitability and success were given factors.

- One operation (Mish Kosova) was a real showcase with all the latest equipment and an obvious commitment to growth and excellence.
- A second operation (Meka) was equally impressive in another manner with obvious growth, success, and commitment to excellence as well.
- In a third operation—(LGB)--excessive overhead costs because of the sheer size of the facility may indicate more challenges financially---but clearly doing well nonetheless.
- The processing facility of Ben Af reflected the apparent company strategy---it was a no frills/low cost operation that appeared quite efficient and effective.
- A visit to the Koral distribution facility revealed that their line of meat products are actually produced for them in Hungary by a large meat processor there.
- Every single one of these operations appear to be well run---adequately funded with an entrepreneurial spirit that leads me to conclude that they are quite capable and willing on their own initiative to creatively move forward as circumstances and opportunities emerge.
- While they may not need much technical support at present---it may be worth monitoring the manner in which this sector evolves to ensure that the sector stays on track in the best interests of the people of Kosovo---

Only after consumer income increases throughout the region---a market may begin to emerge for a wider variety of sausage products including those of higher quality---specialized technical support may be desirable at that time.

Concerns over Meat Processing

While each assessed operation had their own variations of the same themes---and slightly different approaches dictated by the size and layout of their respective operations---each had much in common.

- The product focus involved production of smoked sausage (kielbasa), smoked beef cuts, and a variety of Salami products made primarily with poultry ingredients and a minimal amount of ones made with beef.
- Almost all of the raw ingredients are the specialty poultry and beef ingredients that are imported from outside Kosovo.
- It appears that all finished products from all processors are sold only domestically.

These facts make it quite clear, however, that the nature of most of the meat processing activity in Kosovo today is totally counter-productive to the process of reversing the downward spiral occurring in the livestock sector There are 5 separate meat processing

companies who are actively importing major amounts of meat from foreign sources and then using those ingredients to meet the domestic needs of the population of Kosovo.

The whole situation is, however, quite complex and easy solutions are neither readily available nor viable:

- We cannot blame the meat processors: This whole situation is not the fault of the meat processors themselves----they are simply and effectively responding to the desire of the populace for low-cost and specialty meat products that meet the requirements of both their taste preferences and their religious practice. It is also apparent that these practices are dictated by the basic need to be profitable - even to survive - in the tough economic environment presently in Kosovo. In fact, the production of meat products from imported raw material appears to be one of the only practices that are generating consistent profits in the meat sector these days.
- Banning or restricting imported meat is not the answer! Since almost all of the meat imported into Kosovo these days is of a specialty nature----mostly limited to the low-cost MDM poultry ingredients and the individual special beef cuts needed for the production of the smoked beef items----it would cause undue hardship to restrict the use of these ingredients. The people themselves would experience a negative effect if these lower cost and specialty items were no longer available at affordable price levels. These low-cost specialty raw material items are not, and will not in the foreseeable future, be available from domestic sources in any quantity.

The reality of the situation is that there are only two very different approaches that may allow successful and profitable broiler production in Kosovo.

- Small-integrated operations that target a niche market for fresh product. There definitely appears to be a small segment of the population that has the resources and willingness to pay a premium for “fresh”
- Large, well-financed integrated operations that would have the resources and ability to fully restore the historical model of a large full-scale integrated operation. The daunting (maybe impossible) task of successfully competing with broiler meat imports (Brazil) can only be accomplished with operations that are large and efficient enough to compete on a cost level with those imports.

.KCBS has been and should continue to support the small operators who have the vision and desire to tap the “fresh” market. Agraria Commerce” is a good example of one operation that appears to be on the right track with their “Miss KoKo” marketing program.

The re-establishment of large integrated operations would require financial resources that are most likely well beyond the level presently available from private and existing entities. I suspect this option is only realistic if a deep pockets poultry conglomerate could be motivated or recruited to get involved here. The super-large former SOE slaughter facility in Gjilan that is being leased by LGB does have capability to process thousands of broilers per day—(as well as Beef and lamb) it is just not at all realistic to attempt to operate that facility without an integrated supply of broilers in the volume necessary to be economically feasible and efficient. The other large former SOE slaughterhouse located in Prizren does not include poultry slaughter---it is only equipped for beef and lamb.

CONCLUSIONS AND RECOMMENDATIONS

Meat Processing:
The “meat processors” in Kosovo do not need much help at this time. All five operations that were assessed appear to be profitable and well run by capable entrepreneurs. While it does appear that they have the present situation well under control, it may be advantageous to maintain a working relationship with them with the future possibility of integration and expansion. The lone exception to this would be if LGB were to also become a factor in the slaughter of poultry and sheep.

The imported meat to domestic consumption ratio in Kosovo is alarming!— but the present economic conditions and consumer demand for low cost meat items could make intervention counter-productive. The only feasible solution is to offset import costs with export income.

The export market for meat and/or livestock must be re-opened. This is the only reasonable and realistic solution of positive intervention on behalf of the agricultural sector.

There is a small niche market available for “fresh” broiler meat. There is definitely a place for several small-specialized integrated operations that are focused on targeting the “fresh” market for chicken.

The broiler industry could be restored in a big way if a large integrated operation could be established. It would not take much time to restore the broiler sector to pre-war levels if a large conglomerate could be convinced to establish a fully integrated broiler operation here---a large integrated operation is the only way that domestic production could compete with the imports and the positive impact would be immediate at all levels of the agricultural sector.

Recommendations

1. Maintain an open and collaborative relationship with the meat processors---these guys may not need much help right now but they could be of great assistance in the future to help support and facilitate ongoing initiatives.

2. The export market for meat must be re-opened. Initial efforts may be focused on beef and lamb (see below for comments on lamb exports) that may not impact the poultry sector but is the only feasible solution to the alarming import/consumption ratio caused by the poultry and meat imports.

3. Assist the small guys as much as possible. The small guys who target a niche market can survive and thrive but need assistance and support to overcome the inherent problems. A way needs to be figured out to pool resources and integrate as well.

4. Recruit a large conglomerate to enter the market with a strategy and commitment to re-establish the broiler industry in Kosovo. This may seem like a long shot but it is being done in Romania with Smithfield and the pork industry there.

Lamb and Sheep Industry:

My ongoing contact with farmers in this region of the world makes me aware that the process of re-opening the export market for lambs could have a series of challenges in addition to an available slaughter facility. It appears the farmers will have to be re-educated a bit regarding fair prices for sheep/livestock. They presently seem to have a "fixed price" mentality that is fixed at a higher level than is realistic for export. As a result, it may be imperative to offer support and assistance to guide the farmers through a learning curve of doing whatever it takes to meet the challenge of price competition from places like Australia and New Zealand.

Another challenge will be to do a better job of guiding the lambing process in order to have a maximum amount of lambs available at the right time with the right slaughter weight.

We all know there is a large market in neighboring countries for lamb meat. I am also aware of certain specific customer contacts that have interest in buying small and large quantities of "fresh" lamb. It is imperative to proceed ASAP with firming up that contact/customer base and to focus on identifying additional market opportunities and specific customers who are willing and able to collaborate with us in several of those countries.

The constraints are clear:

- the time and resources needed to build up the sheep population will be a challenge;
- the lower prices that will be required to compete in the world market;
- the management necessary to time the lambing schedule.

On the other hand, the experience of the Kosovar farmer and the resources are here, and Kosovo is surrounded by countries that consume much more sheep and lamb meat than they produce themselves.

Strategy to overcome constraints and capitalize on opportunities:

- Drastic measures need to be taken to "jump-start" the reversal of trends including loans and/or investment
- New and efficient farm/livestock procedures need to be implemented to be able to compete in the world markets - the fixed-price mindset of the communist era needs to be replaced by the reality of a market economy!
- Competent technical assistance needs to be offered in relation to breeding/lambing schedule management.
- The opportunities are many - it will take some time and effort to discover the specific ones that fit best and to capitalize on them

Action plan for implementation of KCBS assistance to the sheep industry in Kosovo:

- Firm up existing contacts and find additional customers and markets for lamb meat
- Evaluate logistical factors regarding the export of fresh meat.
- Continue dialog with management of the selected slaughter facility
- Facilitate several "test" shipments to several selected locations.
- Further pursue similar "test" shipments of live animals if warranted.
- Based on specific research and selected customer needs---develop a feasible plan regarding breeding/lambing schedules

- Based on price levels---demonstrate to and assist farmers to find ways to be profitable and efficient.
- Begin the process of gaining EU approval for the slaughter facility
- Follow up leads regarding potential customers in Italy and Greece

ANNEXES

Annex I Good Management Practices [GMPs] for Meat and Poultry Slaughtering and Processing

Annex II Poultry Mortality/Waste Composting Management Guide

Annex III Albanian Language Checklist for a Facility

Annex IV Albanian Language Introduction to GMPs

ANNEX I:
Good Management Practices [GMPs] for Poultry Slaughtering and Processing

1. Introduction
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1. Introduction

The purpose of this document is to provide comprehensive but uncomplicated guidelines and tools to assist the establishment and certification of sanitary facilities for the slaughter and processing of Beef, Lamb, and Poultry. It is of great importance to the health and welfare of the citizens of Kosovo not only that livestock is certified fit for human consumption but also that the ongoing practice of the slaughter of animals in non-hygienic facilities/areas be prohibited and eliminated. It will also be important for authorities to implement public education and information programs to encourage consumers to purchase only certified safe meat products.

2. Certification

The prerequisite to prohibition and elimination of these uncontrolled and unsanitary slaughter practices is the establishment of a facility certification and inspection process. The approval process needs to include consideration of multiple factors including potable water supply, liquid and solid waste disposal, effective sanitary refrigeration and transport, as well as the ability to insure basic animal health and the hygiene of personnel, equipment, and slaughter methods.

3. Design and Facilities

There are some basic requirements regarding location and facility design that are prerequisites to certifiability.

- An establishment must be located on land that is free of conditions that might interfere with a sanitary operation.
    - Be separate from and have no access to living quarters or any other separate activity that is not compatible with the hygienic production, handling and storage of meat products.
    - Must be large enough to have sufficient space and number of rooms to allow separation of incompatible activities to permit good manufacturing practices and protection against contamination and cross-contamination.
- An establishment must be constructed of materials that are conducive to hygienic meat production.
    - Free of contaminants and those materials that will deteriorate over time causing contamination
    - Has walls, ceilings, and floors that are hard, smooth and impervious to moisture and that will permit effective cleaning.
    - Has adequate and secure lighting with covers and safeguards to contain any broken bulbs and glass contamination.
- An establishment must be constructed to meet basic requirements
    - Has adequate ventilation, heating, and plumbing.
    - Has effective drainage and provision for waste disposal---water and solids.
    - Has adequate and appropriate toilet, sanitation and hygienic facilities that are separate from any processing areas.
    - Has adequate provision for refrigeration both in meat storage and processing areas.
    - Loading and unloading capability that insures complete separation of incoming livestock from outgoing meat.
    - Adequate and separate dry storage areas to avoid clutter and contamination.

4. Equipment

All equipment used must be designed, constructed, operated and maintained in a manner that maintains and insures the hygienic production of sanitary meat products.

- Constructed of materials that are resistant to corrosion
- Do not emit grease, oil or cause potential contamination in any other way.
- Accessible for inspection, cleaning and sanitizing or easily disassembled for those purposes.

Equipment that is used to cook, heat, treat, cool, store or freeze products must be reliable and capable of achieving and maintaining proper temperatures required for the hygienic and safe production of meat products.

5. Maintenance and Sanitation

Written policies must established and maintained for separate maintenance, sanitation and cleaning programs for each and all areas of the operation to insure and prevent any and all contamination of property, facilities, personnel, equipment, and meat products.

- These policies must include programs to control rodents and insects and to manage waste and refuse.
- Policies need to ensure that meat products are never contaminated by cleaning chemicals, pesticides, lubricants or any other toxic or noxious substances.
- The effectiveness of the sanitation, maintenance and cleaning programs need to be efficiently monitored in a way (HACCP) that corrects problems before they occur.

6. Water supply

The establishment shall have an ample supply of potable hot and cold water available in all parts of the operation that is adequate in quantity and pressure to serve all the needs of the operation.

7. Personnel

All persons employed in the manufacture or processing of food must be certified as to their satisfactory health prior to employment.

Procedures need to be established, posted and enforced that ensure that every person who enters an area where animals are being slaughtered, meat is being processed and/or being packaged eliminate the possibility of contamination by:

- Washing hands, wearing sanitary clothing and hair covering (cap or safety helmet), and having clean footwear.
- Not wearing or carrying anything (jewelry, tobacco products) that may be dropped or otherwise contaminate a meat product.
- Use of tobacco and consummation of any food or drinks (other than potable water from a drinking fountain) in a slaughter or processing area must be prohibited.
- Any person who has, is suspected to have, or could be a carrier of any disease or illness that is contagious or result in any contamination of edible meat products must not enter or work in any area where that contamination could occur.

- Spontaneous and any normal sneezing, nose blowing, and coughing that occurs must be contained in a manner that insures that contamination of edible meat is avoided and hands must be washed following all such occasions. Disposable facemasks should be made available if needed.
- Extensive coughing and sneezing symptoms are cause for assumption that illness is present and that person should be kept out of all processing areas.

A training program needs to be established and implemented for all employees that includes sanitizing techniques and food protection principles for hygienic handling of edible products.

8. Ante-Mortem—Slaughter and Dressing---Post Mortem

Ante-Mortem----examination of animals and livestock prior to slaughter

- Animals presented for slaughter shall be held in clean secure pens with a adequate supply of clean water.
- A system must be in place that insures that no animal is ever slaughtered in an establishment unless it is first examined by an accredited approved second party inspector “examiner” to verify it’s condition and health.
- Slaughter must occur within 24 hours of the health examination or the examination process needs to be repeated.
- Provision needs to be made to separate and segregate animals that have been examined from those that have not and procedures also need to be in effect to effectively handle those that are rejected by means of disposal, removal or treatment.
- Certain animal health conditions may allow an animal to be slaughtered as a “suspect”. In this case, special conditions prevail that withhold approval for edible use until certain internal organs are examined----all items harvested from any “suspect” that do not ultimately meet acceptable criteria must be moved to the inedible area and disposed of or treated/marked in a manner that confirms the inedible nature of the product.
- An operator of a plant shall ensure that no carcass of an animal that has been slaughtered at another location without having been inspected before slaughter or that has died is brought into the plant at any time.

Slaughter and Dressing

- All animals shall be presented for slaughter, handled and presented, restrained, stunned and bled in a humane manner that minimizes pain and distress and ensures a rapid bleeding process.
- Procedures must implemented and maintained to ensure that every animal is slaughtered under conditions that facilitate the hygienic production of meat products.
    - An animal must be dressed and eviscerated in a timely manner to prevent deterioration of the carcass
    - Every part removed from each carcass before post-mortem examination that is intended for edible use of any kind must continue to be identified in a manner that indicates from which specific animal it was taken.
    - Special care needs to be taken to ensure that all edible parts remain free of contamination from any internal or external fecal material or any other foreign material----immediate trimming and washing shall done if necessary.

Post Mortem

- Every carcass being dressed and every part of that carcass and all blood taken from an animal for processing as a meat product must be subjected to a post mortem examination.
- The person performing post mortem examination or inspection shall be an inspector or a certified examiner.
- Any carcass, viscera or part which is diseased or suspected of being diseased must be handled in a manner that ensures that other potential edible meat product is not contaminated, and minimizes contamination of the establishment, equipment and personnel.
- The following options for dispositions shall be applied to a carcass, its parts, blood, head and/or viscera (including kidneys) after post-mortem inspection:
  (a) passed for human consumption;
  (b) held pending corrective treatment, laboratory findings or other examination before final disposition;
  (c) salvaged as animal food or for pharmaceutical purposes; or
  (d) referred to an official veterinarian for disposition.
    - If an official veterinarian determines that a carcass, part of a carcass, or blood from an animal is affected by a disease or abnormal condition that might render a meat product unfit for human consumption, the carcass, part of the carcass or the blood must be condemned and disposed of in a manner that permanently identifies and separates it from all edible products.
- Every half carcass, as a result of post-mortem inspection, and identified as edible and fit for human consumption, shall be stamped with the meat inspection legend before being removed from the slaughter area into refrigeration.
  - Those carcasses and it's parts that pass post mortem inspection and are deemed fit for human consumption must be kept in separate identified containers but can only now be mixed, packaged, and processed with other edible product.

9. Inedibles

- An operator shall ensure that there are sufficient separate and appropriate facilities, equipment and personnel for the hygienic handling, storage and disposition of all inedible meat products.
- Inedible meat products must be removed in a timely manner from the slaughter area to a separate inedible products area that must have it's own shipping area for the ultimate disposal or transporting of those inedible meat products that is separate from the shipping area used for edible meat products.
- The only exception is that any inedible meat product, other than a condemned meat product, that has been packaged, sealed and clearly identified for use as animal food may then be admitted to another part of the establishment for freezing. It may remain in storage, and be shipped along with edible products only if the sealed package remains in that frozen state.
  - An inedible meat product may be used for animal food if the animal from which it was derived from was slaughtered in an establishment; and the carcass from which it was derived from is edible or;
  - if an official veterinarian determines that the meat product will not create a risk to the health of any other animal that consumes it; and then only
  - if it is denatured, or is otherwise identified making it impossible to be mistaken for an edible meat product
- Any meat product that is condemned in an establishment must be clearly identified as condemned and disposed of with accepted procedures.

10. Waste management

The results of good waste management are usually quite apparent by visual observation---outside the facility and inside----with a rule of thumb that neither solid nor liquid waste should be visible at any time in and around a sanitary operation.

- All solid waste including inedible slaughter waste and other trash must be placed in leak-proof containers equipped with lids that can and will be kept closed.
    - These containers must be emptied regularly and as often as needed to ensure lack of odor and other negative factors.
    - The area under and around these containers must have a surface that effectively resists contamination and can easily be kept clean.
    - Overflowing containers and loose trash is not to be tolerated in and around a sanitary meat facility.
- Plumbing and drainage must be sufficient and operational to ensure that all liquid waste flows without restriction to an adequate treatment or disposal point
    - Proper provisions need to be made for the handling and or disposal of blood
    - Excavation around the facility should be appropriate to ensure that run off of any kind including rainwater does not accumulate.
- Livestock areas must be free of accumulated waste and be cleaned regularly as needed.

11. Contamination/cross-contamination

Contamination means the introduction or occurrence in food of, or the exposure of food to any biological or chemical agent, foreign matter or other substance that is not allowed in edible meat products or could cause harm to those who consume those products.

Cross-contamination is the process whereby bacteria or germs are transferred from one person or object to another causing an undesirable or hazardous food condition.

- Chemicals and pests
    - Provisions must be made to ensure that all chemicals, pesticides, and any other foreign matter that could contaminate edible food is properly placed in leak-proof containers and stored separate from edible storage and processing areas.
    - Insecticides and rodenticides must be certified safe for food operations and be used properly.
    - Effective measures must be taken for control of animals, birds, insects and vermin.

Sanitation principles/regarding potential contamination

- Facilities and equipment in an area where animals are slaughtered or meat products are processed, handled or stored must be thoroughly cleaned and, where appropriate, sanitized as often as necessary to maintain a hygienic environment and prevent food contamination;
- Equipment used to collect or convey inedible meat products within an establishment must be clearly identified, cleaned and sanitized before re-entering the slaughter area?
    - Cleaning and sanitizing must not be performed in an area of an establishment if there is any risk that a meat product will be contaminated as a result.
- Product contact surfaces of equipment and utensils must be cleaned and sanitized on schedule using adequate methods?

    - Where necessary, product contact equipment must be cleaned and sanitized prior to use following an interruption?
- Cleaned and sanitized equipment must be properly stored.
- Non-product-contact surfaces in all slaughter and operational areas must also be cleaned on schedule using adequate methods
- Use of chemicals in cleaning operations must be done safely and effectively?

Slaughter operations procedures/regarding cross-contamination

- Inedible and condemned meat must be separated from the edible as soon as possible and kept in a separate area for shipment or disposal
- A person/persons must be designated to handle inedible product and shall not handle edible product unless specific sanitation measures have been taken to eliminate possible cross-contamination.
- Slaughter personnel who by the nature of their work handle both edible and inedible products must take special measures to regularly sanitize their apron, boots and equipment
    - Similar sanitation procedures must be exercised by the slaughter personnel who come in contact with livestock
- Special care must be taken to avoid any contamination of edible meat with fecal material or any other contaminant during evisceration and hide removal---trimming and washing to correct any instance must be done thoroughly and immediately if necessary
- There shall be separate toilet and locker facilities for slaughter workers from those handling and packing edible meat.
    - No slaughter worker or anyone who is handling inedible product or livestock is permitted to enter the edible processing area unless they change/remove or sanitize and cover their outer clothes.
    - Any non-slaughter floor person who enters the slaughter area must wear protective clothing and take steps to sanitize footwear and otherwise ensure that contamination of any kind is not carried back into the edible area if and when they return.

Processing, Packaging, and Shipping operations

- If at any time edible meat or ingredients falls on the floor or is exposed to any non-sanitary surface----immediate steps must be taken to wash, trim or dispose the product.
- Anyone who sneezes, coughs, blows their nose, or any other spontaneous activity that has the likelihood of spreading germs or cross-contamination shall do so in a manner to avoid contamination of the edible product and their protective clothing.
    - Hands must be washed and any other necessary sanitizing measures must be taken immediately thereafter.

12. Temperature standards and control

Written standards shall be established and monitored for all areas of the facility requiring temperature control including coolers, freezers, refrigerated product storage areas, processing and shipping areas.

Steps must be taken in processing areas where fresh meat is being cut and packaged to do so in a refrigerated room or to otherwise ensure that edible meat is not exposed to conditions/temperatures that will cause bacteria growth or deterioration.

Written standards shall also be established and monitored regarding the temperatures required for the effective cooking, smoking, and processing of edible meat products and steps need to be taken to ensure those standards.

13. Processing and Meat Standards

Meat Processing

- Any establishment that engages in meat processing shall implement and maintain procedures to:
  (a) establish a current written recipe, product description and intended use, for every prepared meat product.
  (b) ensure that the process used in manufacturing a meat product is designed and implemented to ensure a safe product;
  (c) identify and control biological, physical and chemical factors in production processes that are critical to delivering or manufacturing a safe product;
  (d) control and monitor the critical factors in the production process during all preparation and processing steps to minimize risk and ensure accuracy and consistency of product composition;
  (e) identify, isolate, evaluate and correct any deviations from established procedures and any defects that might affect product safety; and
  (f) evaluate and verify the effectiveness of controls affecting product safety through sampling and testing and other accepted procedures.
  (g) ensure that accurate records are kept of all steps taken through subsections (a) to (f).
- Any meat products, ingredients, food additives and packaging materials used in the manufacturing and packaging of all meat products must be handled and stored in a manner that avoids contamination of meat products.

Meat Product Standards

Processing operations must be performed in a manner that produces meat products that are safe to eat when prepared and eaten in accordance with their intended use.

- Meat products must be treated and handled in a manner that ensure that they are not and do not become contaminated; and kept or stored under conditions that avoid contamination
- Processing must be performed in a timely manner that prevents microbial contamination.
- Meat products produced must be derived only from the meat of animals that have been examined, inspected and slaughtered in accordance with these regulations.
- Procedures and steps must be taken to ensure that meat products are not adulterated in any way by containing or having been treated with
  (i) ingredients that exceed the maximum level of use prescribed by accepted Food and Drug Regulations
  (ii) an ingredient a food additive or any source of ionizing radiation not permitted by or in an amount in excess of limits prescribed
  (iii) any decomposed substance or other contamination.
- Any adulterated meat product must not be identified as edible.
  - If an adulterated meat product in an establishment cannot be made to conform to the standards prescribed for an edible meat product, the meat product must be condemned and disposed of.
  - If an adulterated meat product in an establishment can be made to conform to the standard prescribed regulations for an edible meat product, the meat product should be separated, identified and detained by an inspector until:

(i) it conforms to prescribed standards; or
(ii) it is disposed of as a condemned meat product.

14. Sampling and Testing Procedures

Sampling and testing procedures must be established and maintained that verify existing production controls result in meat products that comply with prescribed quality and microbiological standards.

- An operator must provide to an inspector, upon request and free of charge, samples of any meat product, ingredient, additive or other material used or to be used in the preparation of or in connection with a meat product.

15. Identification and Labeling

All meat products must be marked or labeled in accordance with applicable regulations.

- in a manner that allows for accurate and rapid identification of the meat product; and
- in a manner that provides adequate and accurate information to the next person in the food production chain to enable that recipient to handle the meat products safely and correctly.

Material used to label meat products that comes in contact with a meat product must be durable, free of contaminants and suitable for its intended purpose.

- No material may be used to label a meat product if use of the material might increase the risk of contaminating the meat product
- Only edible ink may be used to mark a meat product.

Use of an inspection legend

- Before being shipped from an establishment, an edible meat product must be marked, or otherwise identified, with an inspection legend or seal that clearly indicates that the meat product has been produced in accordance with these regulations.
- Alternatively to stamping, the meat inspection legend or seal may be applied to the packaging of the product, or to a tag or label attached to the product.
- An inspection legend or seal must be applied only in the establishment and only to a meat product that has been approved and certified for human consumption.

16. Packaging

- An establishment must use packaging materials and procedures that:
  (a) protect meat products from physical damage;
  (b) prevent contamination of meat products; and
  (c) promote the safety of meat products.
- Packaging material must be durable, free of contaminants and suitable for its intended purpose;
- Bulk containers may only be re-used for meat products if they are corrosion-resistant, sanitized after each use and capable of withstanding repeated cleaning; and can be stored in a hygienic manner that prevents contamination.

17. Storage, Shipping and Transport

All meat products must be stored in a manner that consistently protects products from physical damage likely to render the product unsuitable for consumption in any way.

- An establishment must have: separate and adequate storage facilities for all edible meat products and where appropriate the storage facilities shall be refrigerated;
- Must have separate and adequate storage facilities for inedible meat products where inedible meat products are stored; and
- Separate and adequate storage facilities for materials used in the activities performed in the establishment.
- An operator must ensure that:
  (a) ingredients used in the preparation of meat products are stored in a manner that prevents their contamination; and
  (b) chemicals and other materials not used in the preparation or packaging of meat products are stored separately in clearly identified containers in a manner that prevents contamination of meat products, packaging materials, ingredients used in the preparation of meat products and food contact surfaces.

Shipping and Transport

Loading docks and shipping areas must be fully enclosed providing protection from any external or internal conditions that could cause damage or contamination to the edible products

- Perishable refrigerated products must be loaded directly from one refrigerated area to a similar refrigerated transportation vehicle.
- During the shipping process, all edible product and fresh meat must never be exposed to the environment or be staged in unsuitable areas where deterioration and contamination could occur.

Each transport container must be examined prior to use to ensure that it is clean, free of contaminants and suitable for the purpose for which it is intended.

- A vehicle or container used for transporting meat products must be capable of protecting meat products and their packaging from physical damage, deterioration and contamination;
- Is equipped, where applicable, with adequate controls to ensure that meat products are transported at the appropriate temperature and humidity and any other conditions necessary for the product being transported.

18. Records and Recall

Any establishment who has processed, packaged, labeled, stored or distributed a meat product must prepare written procedures for the recall of those meat products.

- All product distribution records that are necessary to facilitate the location of products in the event of a product recall must be retained and maintained in a manner that provides for efficient recall procedures.
- In order to evaluate the effectiveness of the product recall procedures, those recall procedures should be simulated periodically to verify traceablity.

Any meat processor who receives information that queries the safety of that meat product shall investigate the information.

- If the results of the investigation indicate that the meat product may constitute a hazard to the public, the operator shall immediately notify the Regulatory Authorities and promptly initiate the established recall procedure.

Every operator shall also prepare written procedures and maintain records for receiving, investigating and responding to product complaints.

- Incident records need to be kept and evaluated regularly to preclude continuation of problems and incidents.

19. HACCP

HACCP (Hazard Analysis at Critical Control Points) programs are very effective to curtail, resolve and eliminate problems before they become issues that could result in poor quality, damaged reputations, product loss, harm to consumers, and product recall.

- The HACCP process simply establishes a specific program that components---adding others as they become apparent and necessary.
    - An effective HACCP program/plan needs to be individually designed and implemented for each separate operation----
    - It must not be a duplication of someone else's plan
    -

20. Training

Good management practices are only valid if they are known, understood, monitored and enforced. Specific training must be done not only to make all personnel aware of the GMPs, but also to enlist their support and enthusiastic compliance.

- All new workers must be trained regarding sanitizing techniques, food protection principles, and personal hygienic procedures prior to beginning work and be provided with written documentation of them as enforced policy as well.
    - Sanitary uniforms and dress requirements
    - Rules regarding tobacco use, food and drink
    - Hand washing procedures
    - Sneezing, coughing, etc. procedures
    - Sickness and other health issues
- General training sessions need to be organized and held periodically as needed for all workers.
- Follow up of policy with signs, postings and other visual reminders

Training sessions need to validate and support ongoing practice that confirms the fact that GMPs are not optional but are required and will be enforced.

- Competent supervisory personnel need to be assigned responsibility for assuring compliance with GMP`s by all personnel?

21. GMP checklists

Checklist for the facility

1. Is the facility located on land that is appropriate for this kind of operation?

1. 2. Is there adequate room on the property to respond to all present and future hygienic needs---especially those dealing with solid and liquid waste?

2. Are grounds litter-free and is grass properly cut?

3. Is drainage adequate?

4. Are areas sufficiently dust free?

5. Is there sufficient space to allow adequate sanitary practices?

6. Are floors, walls, and ceilings constructed to allow adequate cleaning and repair?

7. Are fixtures, ducts, and overhead pipes installed to prevent drippage into product and materials?

8. Are aisles between equipment and walls unobstructed?

9. Are processing areas so arranged as to prevent contamination?

10. Is adequate lighting throughout and are safety fixtures used in all areas?

11. Is there adequate protection and screening against birds, animals and vermin?

12. Is there adequate ventilation?

13. Is water supply adequate in quality, quantity and temperature in areas where needed?

14. Is the sewage disposal system adequate?

15. Is plumbing of adequate size to carry sufficient water to all required locations?

16. Is plumbing of adequate size and design to convey sewage from plant?

17. Is plumbing of adequate size and design not to create an unsanitary condition?

18. Is there adequate drainage where needed?

19. Are toilets properly located, designed, sanitary and adequately equipped?

20. Are the toilet room doors self-closing and do not open to crucial areas?

21. Are hand-washing signs posted in toilet facilities?

22. Are adequate and convenient hand-washing facilities in appropriate locations and properly furnished with sterilizers throughout the operation?

23. Are equipment and utensils made of proper materials and of sanitary design to facilitate cleaning and sanitary maintenance?

24. Is there adequate and separate dry storage area?

Standard Operational Checklist

1. General maintenance: Are physical facilities maintained in good repair and sanitary condition?

2. Is there any evidence of malfunctioning plumbing and/or drainage systems?

3. Is overall sanitation responsibility assigned to an individual?

4. Are there separate written policies for maintenance and sanitation?

5. Are non-product-contact surfaces cleaned on schedule using adequate methods?

6. Are product contact surfaces of equipment and utensils cleaned and sanitized on schedule using adequate methods?

7. Are cleaning operations appropriate and chemicals used safely and effectively?

8. Is cleaned and sanitized equipment properly stored?

9. Is sanitation inspection performed pre-op daily?

10. Are effective measures taken for control of animals, birds and vermin?

11. Are insecticides and rodenticides safe for food operations and properly used?

12. Are insecticides and rodenticides stored in a proper location away from edible ingredients?

13. Are warehouse and stockroom storage conditions satisfactory?

14. Is all equipment constructed of materials that are resistant to corrosion?

15. Does any equipment show signs of rust or corrosion?

16. Is there any evidence that any equipment is emitting grease, oil, or any other contamination?

17. Is all equipment accessible for inspection, cleaning and sanitizing?

18. Are all production personnel certified as to health?

19. Is proper action taken when undesirable health conditions occur?

20. Does management promote and enforce hand washing by production personnel?

21. Is clean and proper attire worn by plant personnel?

22. Are workers free of jewelry and any other loose items?

23. Is the use of tobacco and food and the storage of personal belongings prohibited in processing areas?

24. Is effective hair restraint practiced and head covering worn?

25. Do production personnel take all necessary precautions to prevent product contamination?

26. Is there a formal training program in place to train all workers proper sanitizing techniques and food protection principles including coughing and sneezing?

27. Are there written standards that are monitored and documented regarding all areas of the facility requiring temperature control?

28. Are the loading docks and shipping areas fully enclosed or adequately separated to provide protection from any internal or external condition that could cause damage or deterioration to the product or it's package?

29. Are all trucks and transport containers examined prior to loading to ensure that they are clean, free of contaminants and suitable for the purpose?

30. Are competent supervisory personnel assigned responsibility for assuring knowledge and compliance with GMP`s by all personnel?

31. Is there a HACCP program in place and is it implemented, monitored, and documented?

Checklist specific for slaughter operation

1. Is there adequate loading and unloading capability that insures complete separation of incoming livestock from outgoing meat.

2. Is the receiving area secure---fences and locks?

3. Is the incoming livestock area well managed showing evidence of proper cleaning practices?

4. Are the animals to be presented for slaughter held in a secure location with an adequate supply of clean water?

5. Is there adequate provision to separate animals that have been accepted for slaughter from those that have not and are there proper procedures in place to handle those that are rejected?

6. Is a separate worker responsible for handling livestock and stunning and if not, does that worker take proper steps to sanitize clothing and equipment to avoid cross-contamination?

7. Are all animals handled, restrained, stunned, and bled in a humane manner?

8. Are there proper procedures in place to assure that every part removed from an animal is properly identified to indicate from which animal it came prior to ante-mortem?

9. Is proper care being exercised to avoid and correct fecal contamination or that of any other foreign material?

10. Is there a clear understanding and policy regarding separate handling of a carcass and it's parts after ante-mortem?

11. Are those carcasses and it's parts passed for human consumption clearly identified as such?

12. Are those carcasses and it's parts rejected (condemned) for human consumption handled and immediately clearly identified in such a manner as not to confuse them with edible?

13. Is there an adequate provision to hold "suspect" carcasses and it's parts for veterinary determination

14. Are all inedibles conveyed to a separate room from those eligible to be edible promptly and efficiently?

15. Is a separate worker responsible for handling inedibles and if not, does that worker take proper steps to sanitize clothing and equipment to avoid cross-contamination?

16. Are there separate toilet and locker facilities for those working in slaughter areas from those working in processing areas?

17. Is equipment or containers used to hold or convey inedibles within an establishment clearly identified and are they cleaned and sanitized each time they re-enter the slaughter area?

18. Is there a clear enforced policy that prohibits workers from moving from one area of an operation to another without taking steps to avoid any potential of cross-contamination?

19. Are all animals dressed and eviscerated in a timely manner?

20. Are equipment and utensils mechanically maintained?

21. Is all processing equipment maintained in sanitary condition?

22. Where necessary, is product contact equipment cleaned and sanitized prior to use following an interruption?

23. Is condemned meat disposed of properly?

24. Are production records kept?

25. Is rubbish disposed of properly?

Checklist specific for meat processing operation

1. Are equipment and utensils mechanically maintained?

2. Is all equipment maintained in sanitary condition?

3. Where necessary, is product contact equipment cleaned and sanitized prior to use following an interruption?

4. Are areas where fresh meat is being cut or handled refrigerated and, if not, are steps being taken to minimize the time of non-refrigerated exposure?

5. Is all equipment used to cook, heat, treat, or cool reliable and capable of achieving necessary parameters?

6. Are there separate written standards that are monitored and documented regarding the temperatures necessary for effective cooking, smoking, and processing of the edible meat products?

7. Are raw materials and ingredients inspected and stored to minimize deterioration and protected against contamination?

8. Is it clear that all meat ingredients have come from sources and animals that have been examined, inspected, and slaughtered in accordance with these standards?

9. Is any ice used in food products from potable water and manufactured and handled in a sanitary manner?

10. Are there appropriate sampling and testing procedures in place?

11. Are both raw material ingredients and finished products identified and labeled properly clearly displaying an inspection legend?

12. Is there any evidence that packaging and labeling procedures could in any way increase the risk of contaminating the edible meat product?

13. Are boxes and containers durable enough, free of contamination, and otherwise suitable for their intended purpose?

14. Is adequate coding of products used?

15. Are adequate production records kept?

16. Is there a recall procedure in place?

17. Have they ever simulated a recall?

18. Are incidents recorded and kept?

19. Is rejected or contaminated product disposed of properly?

20. Is rubbish disposed of properly?

Definition of terms

"adulterated" means, in respect of a meat product intended for sale, use or consumption as an edible meat product,

(a) containing or having been treated with

(i) ingredients that exceed the maximum level of use prescribed by accepted Food and Drug Regulations

(ii) an ingredient a food additive or any source of ionizing radiation not permitted by or in an amount in excess of limits prescribed

(iii) any poison, decomposed substance or other contamination.

"animal" means a food animal or a bird;

"animal food" means a meat product identified "not for human consumption" for use as food for an animal

animal;

"bird" means a bird that is farmed to produce food for human consumption;

"cleaning" means removing soil, food residue, dirt, grease or other objectionable matter;

"code" means a specific Meat and Poultry Code that is the interpretive guidelines or the manual of procedures that explains how to meet the objectives of these regulations.

"condemn" means to determine that an animal or a meat product is unfit for human consumption;

"contamination" means the introduction or occurrence in food of, or the exposure of food to any biological or chemical agent, foreign matter or other substance that is not allowed by these regulations;

"critical control point" means a point or procedure at which control can be applied and a food safety hazard can be eliminated or reduced to acceptable levels;

"denature" means to clearly identify/mark a meat product to:

(a) change the appearance of the meat product so that it cannot be mistaken for an edible meat product; or

(b) make it unfit for human consumption;

"Acceptable denaturing agents": Charcoal or another accepted denaturing agent found acceptable by the Regulatory Agency;

"dress" means to progressively separate a slaughtered animal into parts, including both edible and inedible parts;

"edible" means fit for human consumption;

"establishment" means any premises in or on which animals are slaughtered or meat products are prepared, processed, packaged and stored;

"eviscerate" means:

(a) in respect of a bird other than a chicken 2 kilograms live weight or less, to remove the respiratory, digestive, reproductive and urinary systems and the other thoracic and abdominal organs; and

(b) in respect of any other animal, to remove the respiratory, digestive, reproductive and, except for the kidneys, urinary systems and the other thoracic and abdominal organs;

“examiner” means a person who is:

(a) approved by the regulatory authority as qualified to perform an examination; and

(b) familiar with the Process Control Based Program in effect in the establishment where an examination is being performed;

(c) accredited in a training arrangement approved by the Regulatory Authority.

“food” means : any product manufactured, sold or represented for use as food or drink for human beings, chewing gum, and any ingredient that may be mixed with food for any purpose whatever.

“food animal” means an animal that is farmed to produce food for human consumption as authorized by the Regulatory Authority, but does not include fish;

“hazard analysis critical control point (HACCP)” means a system implemented in a Process Control Based Program in which critical control points in the processing of food are identified and control is applied to ensure food safety;

“hazard” means a biological, chemical or physical agent in, or condition of, food with the potential to cause an adverse health effect in consumers;

“hygienic” means designed to attain and preserve health;

“Inedible” meat products can be grouped into two categories:

“Condemned”: means to determine that an animal or a meat product is unfit for human consumption;

and

“ Non-condemned”

a) salvaged for animal food

b) salvaged for medicinal purposes

c) treated by the operator as a condemned meat products

d) which are by their nature not edible (hides, hair, feathers etc).

“Inedible” terminology also could include waste products such as manure from animals, paunch content, contents of intestines, etc.

“inedible products area” means that part of an establishment in which meat products unfit for human consumption are received, held, processed, shipped or otherwise handled;

“ingredient” means an individual unit of food that is combined with one or more other individual units of food to form an integral unit of food;

“inspection legend” means the identification mark approved by the regulatory authority and applied to an edible meat product in an establishment;

“inspector” means a person who is appointed and certified by the Regulatory Authority;

“meat product” means:

(a) the edible part of a carcass;

(b) the blood of an animal or a by-product of a carcass; or

(c) a product containing anything described in paragraph (b);, but does not include the muscle associated with the lips, snout, scalp or ears;

(d) mechanically separated meat.

“mechanically separated meat” means an edible meat product that does not contain more than 0.027 per cent of calcium for every one per cent protein in the product or any bone particles larger than 2 mm in size and that was obtained by removing most of the bone and

cartilage from a comminuted meat product from which the bone and cartilage had not been previously removed;

“official veterinarian” means a veterinarian appointed or designated as an inspector by the regulatory authority;

“operator” means a person who is authorized by license to operate an establishment;

“pest” means any animal including an arthropod that might contaminate a meat product;

“premises” means the buildings and surrounding areas of an establishment;

“process” means the operations conducted in an establishment to prepare raw foods for consumption, and includes but is not limited to washing, rinsing, thawing, heating, cutting, cooking, smoking, salting, canning, freezing, pasteurizing and reprocessing of previously processed food;

“process control based program” means a written verification and documentation program that:

(a) is approved by the Regulatory Authority;

(b) is under the supervision of an inspector;

(c) ensures compliance with these Regulations; and

(d) ensures effective implementation of the guidelines contained in the Codex Alimentarius General Principles of Food Hygiene, as modified from time to time.

“recipe” means a description of the ingredients and food additives contained in a meat product, their relative quantities and proportions and the method of combining them to produce a meat product;

“refrigerate” means to, maintain a temperature of 4°C or lower, but does not include to freeze;

“regulatory authority” means a government enforcement body having jurisdiction over an establishment for the purposes of these regulations, or any agency or authorized representative of that government;

“risk” or means a function of the probability of an adverse health effect and the severity of that

effect, consequential to a hazard(s) in food;

“safety” means, in reference to a meat product, that the product will not cause harm to the consumer when it is prepared and eaten in accordance with its intended use;

“sanitize” means to reduce the level of microorganisms present to a level that will not compromise the safety of a meat product;

“storage container” means a container that is or is intended to be used to store meat products in an establishment;

“transport container” means any container used or intended to be used to transport animals or meat products to, within or from an establishment;

ANNEX II:
Poultry Mortality/Waste Composting Management Guide

Composting is considered a positive alternative method of processing dead birds and slaughter waste in an environmentally sound manner. The composting process converts dead birds and slaughter waste into a useful, inoffensive, stable end product that can be field-applied for crop use and soil improvement.

Principles of Composting

Composting is a natural, biological process by which organic material is broken down and decomposed into a stable end product. The composting process is carried out by bacteria, fungi and other microorganisms which digest the organic material and reduce it to humus. The principles of composting are quite simple — provide the microorganisms with an environment conducive to their growth — a balanced diet, water and oxygen.

The essential elements for the microorganisms involved in composting are carbon (C), nitrogen (N), oxygen (O2) and moisture (H2O). If any of these elements are lacking, or if they are not provided in the proper proportion to one another, the microorganisms will not flourish and generate adequate heat for decomposition. These nutrients are best supplied from an ingredient profile that has a carbon to nitrogen ratio of approximately 30:1. Birds have a C:N ratio of 5:1, litter ranges from 7:1 to 25:1, straw 80:1, peanut hulls 50:1, and wood shavings are 300-700:1. A good carbon source will perform two functions: provide carbon and act as a bulking agent that creates pores within the pile, allowing oxygen to flow through the material. If 2 parts by volume of litter and 1 volume of dead birds/slaughter waste along with adequate bulking agent is contained in the litter or added prior to the carcasses, the C:N ratio should be adequate for the composting process to proceed.

The microorganisms best at composting are aerobic; that is, they require oxygen to live. During the composting process oxygen is used up quickly by microorganisms inside the compost pile. Aerating the compost by turning re-supplies it with oxygen and allows the microorganisms to continue the composting process at a rapid rate.

Water is essential to the growth of all living organisms. Composting microorganisms thrive best in moist conditions. Desirable moisture levels in the composting materials should be 40 to 60 percent. Too much water can cause the compost pile to become soggy and anaerobic; too little water will prevent microorganisms from reproducing to adequately high numbers. The amount of water needed depends on the size of birds/amount of slaughter waste being composted and the moisture content of the litter and/or carbon bulking material. As a rule of thumb regarding proper moisture content, well-watered compost when squeezed into a ball will not drip water and will retain its shape when released.

Composter Construction and Layout

When siting a composter, choose a well-drained, graded and elevated location so ground water and surface runoff cannot enter the facility. The composter must also be located and graded such that it is accessible year round.

The size of a composter is typically based on the size of the operation. For every 16 kilos of

dead bird/slaughter waste, 1 cubic meter of primary compost space is needed. An equal amount of space is required for the secondary stage.

A typical poultry mortality composter consists of various sized bins constructed of treated lumber set on a concrete slab with a roof overhead. The roof helps maintain appropriate moisture levels within the compost. The concrete slab helps prevent leaching of nutrients into the soil, prevents vermin and pests from burrowing under the compost, and makes cleanup of the facility easier.

Normally these small bin composters will be at least 2 meters wide by 1.5 meters high and 1.5 meters deep. It may be advantageous to construct the secondary bin behind or aside of the primary bin to enable easy movement of the composted material into the secondary bin. Moving the material from the primary bin to the secondary bin after 10 to 21 days is common for small bin type composters to mix in oxygen in the mass to promote additional heating. The oxygen is added to the mixture as it is moved from the primary bin to the secondary bin.

Figure 1: Bin composting on an angle can reduce time spent handling materials.

A modification to the small bin composter that is gaining in popularity is the use of a primary bin that is 1 to 3 meters deeper and with a front that is totally open. The compost material slopes back from the front of the composter at about a 45 degree angle (Figure 1). This design allows improved ingredient layering using a tractor or machine, so it requires less hand work.

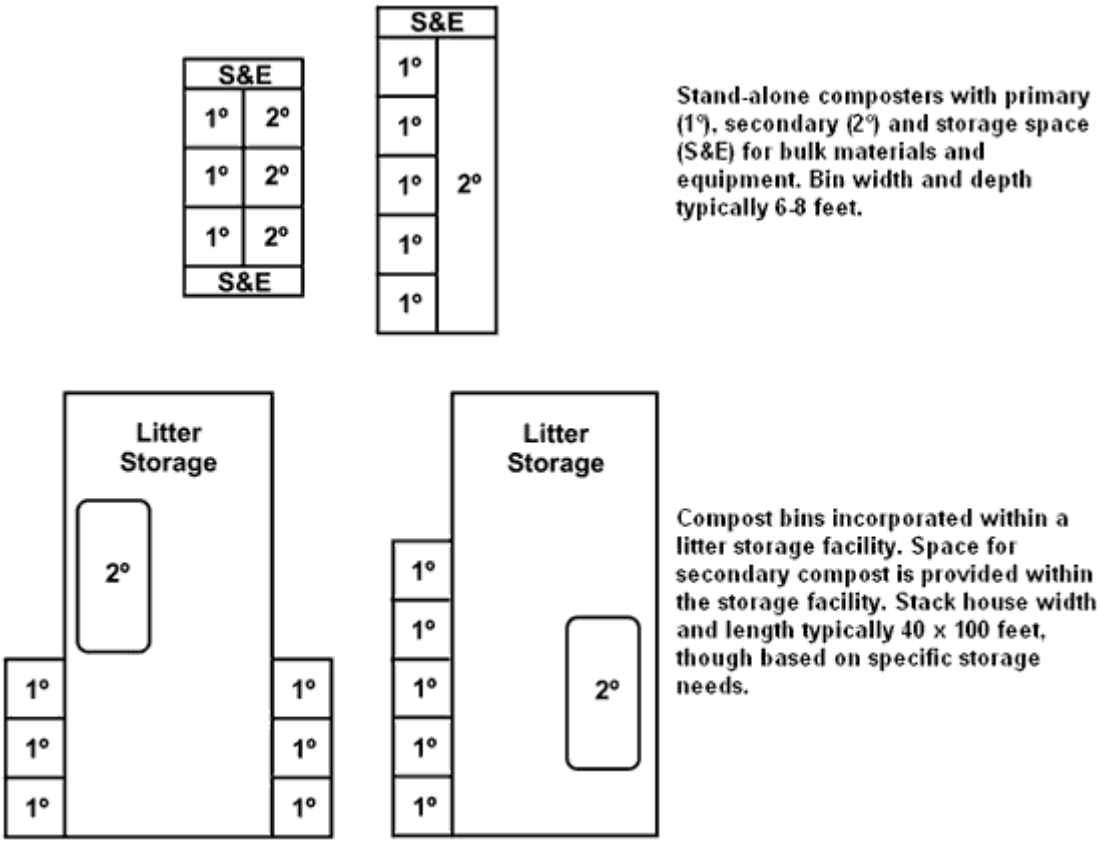

Figure 2. Example composter floor plan designs.

Composter Operation and Management

The requirements for proper and complete decomposition of dead carcasses/slaughter waste are reasonably simple and inexpensive. Careful attention to proper management, however, is essential for successful composting. Failure to manage the system will result in an odorous situation that attracts flies, scavengers and other vermin to the site. Proper management is vital for avoiding nuisance complaints.

Decomposition of the dead carcasses/slaughter waste and litter depends upon microbial activity. The greater the microbial growth, the faster the carcasses decompose. Anything that slows down microbial growth lowers the temperature of the composting material and slows the composting process. The more rapid the microbial growth, the greater the heat output within the composting mass and the more rapidly the mass breaks down. The microorganisms responsible for composting are initially supplied by active or fresh litter material. The microbes in the litter used in the composting process need to be kept alive and in sufficient numbers so the composting process can begin immediately to break down the carcasses and the litter. Litter that is too dry and too long removed from the house will contain lower numbers of microorganisms and its use slows the process of carcass decomposition. Keeping a small amount of active compost on hand to seed new compost bins is an excellent compost management strategy and efficient way to use finished compost.

Oxygen is initially supplied when the carcasses and litter are placed within the composter. If all the necessary requirements for composting are in the correct proportion, composting will begin immediately with a corresponding rise in temperature of between 55 to 65 degrees C within a few days (Figure 3). Temperatures that exceed 65 degrees C will eliminate pathogenic microorganisms and insect pests present within the compost. As oxygen

becomes limited, the composting process and the temperature of the mass will decrease. The composting process can be sustained at higher temperatures by using a bulking agent which creates air pockets in the compost pile and thus supplies more oxygen to the composting process. A coarse material, such as wood shavings or straw will ensure more oxygen, allowing higher composting temperatures for an extended time before it begins to drop. Adding more litter increases heating. Finished compost can be used as the bulking material in place of new carbon-containing material up to 50 percent of the mix.

If the litter is too fine, oxygen will be limited to the microorganisms, slowing their growth. Slower microbial growth causes a lower composting temperature with slower digestion of the birds. If the temperature of the compost does not reach at least 55 degrees C, birds nearer the walls where it is cooler will decompose very slowly. Proper management and operation of the composter is relatively easy when the basic principles are followed. The amount of labor required to compost birds is reasonably low.

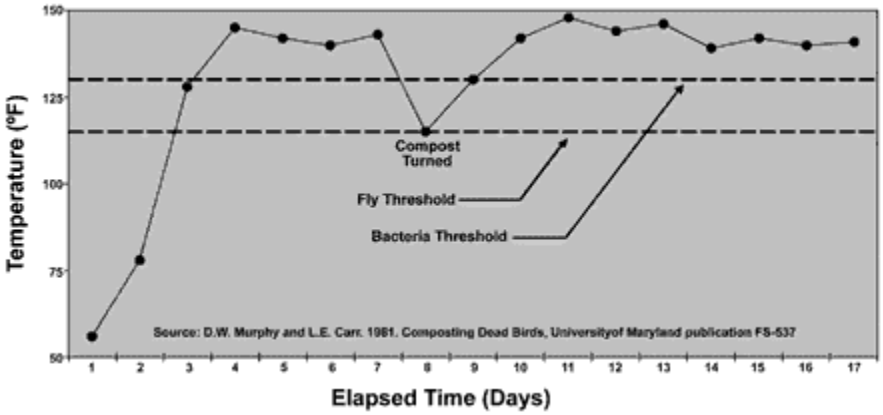

Figure 3: Typical temperature profile of a two-stage composter.
Note the pest and microbial threshold limits.

Two-Stage System

In two-stage composting, the first stage generates heat and major tissue breakdown. The second stage after turning continues the process and homogenizes the material. Orderly loading of ingredients is necessary for efficient compost activity. Layer ingredients into the composter as illustrated in Figure 4.

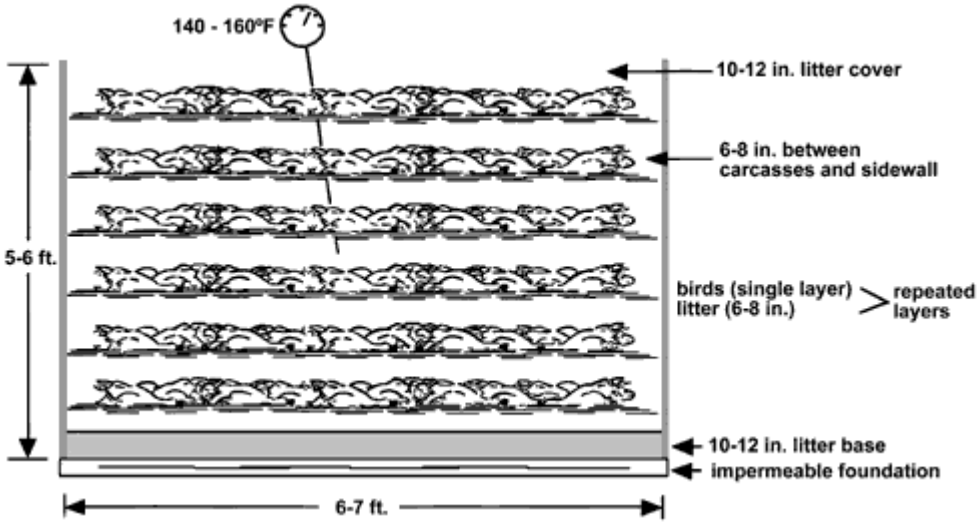

Figure 4: Mortality composter profile.

- Place an initial layer of 20 to 30 cm of fresh litter on the floor. This litter will supply bacteria to start the process and will also help absorb carcass fluids or excess water that may be added to the composter.

- Next add a thin layer of bulking material such as peanut hulls, coarse shavings or straw. Litter cake, if used in the composter, can replace the need for adding this layer of bulking material.

- Now add a layer of bird carcasses/slaughter waste. Arrange the carcasses/waste in a single layer side by side, touching each other. Place carcasses/material no closer than 15 cm from the walls of the composter. Material placed too near the walls will not compost as rapidly due to lower temperatures there and may cause in odorous liquids to seep from the compost pile.

- A small amount of water may be needed after each layer. Typically, thoroughly wetting the carcasses will add sufficient water to the mix to achieve the needed moisture level. If much water is needed, the litter is likely too dry and low in live bacteria. Using finished compost material or fresh litter directly out of the chicken house can prevent this situation.

- Next, add a layer of litter. This layer should be twice as thick (at least 20 cm) as the layer of material underneath. If only a partial layer is needed for a day's material, the portion used must still be covered with litter. The rest of that layer can be used with subsequent material.

- After completing the initial layer, add subsequent layers of carcasses/slaughter waste, bulky ingredient and litter until a height not exceeding 5 to 6 feet is reached. The last layer will be a cap of 20-22 cm of litter. Compost piles limited to 2 meters in depth, with adequate porosity and moisture levels, do not pose a fire hazard. Keep in mind, however, the potential for spontaneous combustion as temperatures are monitored throughout the composting process. Excessive height could induce higher compost temperatures that exceed 75 degrees C and increase the chance of spontaneous combustion.

Temperature

Temperature in the range of 55 to 65 degrees C inside the compost pile is evidence that a composter is working well and that the composter environment is suitable. These high temperatures are produced by the biological activity of the microorganisms that are breaking down the organic material in the pile. High temperatures enhance the growth and reproduction of thermophilic (heat-loving) bacteria that are especially good at digesting organic material.

The heat produced by the microorganisms not only contributes to their own growth, but also speeds up the decomposition process and helps kill pathogenic microorganisms that may be present. For the composter to work properly, temperatures need to be higher than 55 degrees C. When oxygen becomes limited, the temperature of the compost will begin falling. By the time it drops under 55 degrees C (about 7 to 21 days after capping), the compost can be turned. Moving the material aerates the mixture and revives the microorganisms so another heat cycle can occur, leading to a more complete breakdown of the compost.

The compost temperature should again rise to 65 degrees C within days. Delayed movement, poor aeration, poor mixing, or moisture above 60 percent or below 40 percent

will prevent the mass from heating properly.

Once the temperature determined by daily monitoring drops from 65 to 55 degrees C (7 to 21 days), the product can be moved again to await its use as a fertilizer and soil amendment in the same manner as poultry litter. Do not store finished compost with dry litter. The interface between the moist and dry material is an ideal location for spontaneous combustion to occur.

Pests and Pathogens

Fly larvae, pathogenic bacteria and viruses are destroyed through the combined effects of time and temperature during composting. Because biocidal temperatures are not reached at the outer edges of the primary compost bins, turning and mixing the compost at least once is needed to ensure the destruction of pathogens and nuisance insects. Monitoring compost temperatures and maintaining good management practices throughout the entire process helps ensure the elimination of insect larvae and pathogens in the final product.

Rodents, scavenging animals and other pests are seldom a problem with a properly managed composter. The solid construction and concrete floor of the composter will discourage ground level entry. Habitual raiders can be kept from the compost with fencing or some other building material.

Compost Use

Well composted mortality can be used as a soil conditioner and nutrient source for crops just as fresh poultry litter. Compost is typically lower in nitrogen and slightly higher in phosphorus and potassium than manure and is thought to release nitrogen at a slower rate and over a longer period of time than fresh manure. The soil-amending and plant food properties of compost make it a valuable byproduct of poultry production. Marketing the compost can provide producers with an additional income stream to their operations.

Users of compost are encouraged to obtain a nutrient analysis of the product prior to its use. If analysis data is not obtained or is not available at time of use, the following average values may be used as a reasonable estimate of the available nutrient content of dead bird compost:

Total Nitrogen (N):	44 lbs/ton
Phosphorus (P2O5)	65 lbs/ton
Potassium (K2O)	48 lbs/ton

We recommend that mortality compost not be spread on active pastureland or home gardens because of the potential for botulism poisoning in grazing animals or humans. Botulinum bacteria can survive for long periods of time, especially in bones. If bones have been successfully decomposed by the composting process, the threat of botulism is decreased. As a general rule, mortality compost should be spread on hay fields or cropland where grazing animals will have no opportunity to consume the material.

Land Application
Well composted material can be transported and used off-site just as with poultry house litter. In order to be "well composted," the material should have undergone at least two heat cycles and be devoid of flesh.

Troubleshooting Guide

Problem/Symptom	Probable Cause	Suggestions
Improper temperature	Too dry (less than 40% moisture).	Add water.
	Too wet (more than 60% moisture).	Add bulking material and turn pile.
	Improper C:N ratio.	Evaluate bulking material and adjust as necessary.
	Improper mixing of ingredients.	Layer ingredients appropriately.
	Adverse Environment.	Ensure adequate cover.
Failure to decompose	Improper C:N ratio	Evaluate bulking material and adjust as necessary.
	Carcasses layered too thickly.	Single layer the carcasses.
	Carcasses on outside edges.	Maintain 6-10 inches between carcasses and edges.
Odor	Too wet.	Add bulking material and turn.
	Too low C:N ratio.	Evaluate bulking material and adjust as necessary.
	Inadequate cover over carcasses.	Cover with 10-12 inches of bulking material.
Flies	Inadequate cover over carcasses.	Cover with 10-12 inches of bulking material.

	Poor sanitation conditions.	Avoid leaching from pile.
	Too wet.	Turn pile and add bulking material.
	Failure to reach proper temperature.	Assess C:N ratio, layering.
Scavenging animals	Inadequate cover over carcasses.	Maintain 10-12 inch cover. Avoid initial entry with fence or barrier.

ANNEX III:
Albanian Language Checklist for a Facility

Listë vërtetuese për objektin

1. A është objekti i vendosur në tokë që është e përshtatshme për këtë lloj operimi?

2. A ka hapësirë adekuate në pronë për të plotësuar të gjitha nevojat aktuale dhe të ardhshme higjienike-sidomos ato që kanë të bëjnë me mbeturina të lëngshme dhe të ngurta?

3. A është rrethina e pastruar nga mbeturinat dhe a është bari i prerë si duhet?

4. A është sistemi i drenazhës adekuat?

5. A është hapësira pa pluhur?

6. A ka hapësirë të mjaftueshme për të lejuar praktika sanitare?

7. A janë dyshemeja, muret dhe tavanet të ndërtuara ashtu që të lejojnë pastrim dhe riparim adekuat?

8. A janë instalimet, tubat dhe gypat e sipërm të instaluar në mënyrë që të parandalojnë pikjen në produkte dhe materiale?

9. A janë të lira shtigjet ndërmjet pajisjeve dhe mureve?

10. A janë hapësirat për përpunim të rregulluara ashtu që të parandalojnë ndotjen?

11. A ka kudo ndriçim adekuat dhe a ka instalime sigurimi që përdoren në të gjitha hapësirat?

12. A ka mbrojtje adekuate dhe kontroll kundër zogjve, kafshëve dhe parazitëve?

13. A ka ventilim adekuat?

14. A është ujësjellësi adekuat në kualitet, kuantitet dhe temperature në hapësira ku ka nevojë?

15. A është kanalizimi i përshtatshëm?

16. A është sistemi hidraulik i madhësisë adekuate për të bartur sasi të mjaftueshme të ujit në të gjitha lokacionet ku ka nevojë?

17. A është sistemi hidraulik i madhësisë dhe dizajnit adekuat për të bartur ujërat e zeza prej objektit?

18. A është sistemi hidraulik i madhësisë dhe dizajnit adekuat për të mos krijuar kushte jo-higjienike?

19. A ka sistem adekuat të drenazhës kur është e nevojshme?

20. A janë tualetet të vendosura, dizajnuara, me sistem sanitar dhe me pajisje adekuate?

21. A janë dyert e tualeteve me mbyllje automatike dhe a ka bllokim të hapjes në hapësirat kryesore?

22. A janë shenjat për larje të duarve të vendosura në tualete?

23. A janë adekuate dhe favorshme mjetet për larje të duarve dhe a janë në hapësira të përshtatshme si dhe a kanë sterilizatorë përgjatë operimit?

24. A janë pajisjet dhe mjetet nga materialet e përshtatshme dhe me plan bazuar në kushte higjienike për të ndihmuar gjatë pastrimit dhe mirëmbajtjes higjienike?

25. A ka hapësirë adekuate pa lagështi dhe të veçantë për ruajtje të produkteve?

ANNEX IV:
Albanian Language Introduction to GMPs

Plan i GMP të propozuara për Therrje/ Përpunim të Mishit dhe Shpezëve

1. Hyrje
2. Certifikimi
3. Dizajni dhe Objektet
4. Pajisjet
5. Mirëmbajtja dhe Higjiena
6. Ujësjellësi
7. Stafi

Veni re!!! Kjo është skicë .--------e krijuar vetëm për të shërbyer si udhëzues/ bazë për vendosje eventuale dhe implementim të rregullave, ligjeve dhe udhëzimeve të përhershme dhe zyrtare të veterinarëve.

1. Hyrje

Qëllimi i këtij dokumenti është të ofrojë udhëzime gjithëpërfshirëse të thjeshta dhe mjete për të ndihmuar vendosjen dhe certifikimin e pajisjeve sanitare për therje dhe përpunim të mishit të Lopës, Deles dhe Shpezëve. Për shëndetin dhe mirëqenien e qytetarëve të Kosovës rëndësi të madhe ka jo vetëm fakti që kafshët e gjalla janë të certifikuara për konsumim mirëpo rëndësi të madh ka që praktika e therjes së kafshëve në objekte/ hapësira jo-higjienike të ndalohet dhe eliminohet. Gjithashtu do të jetë e rëndësishme për autoritetet të zbatojnë edukimin publik dhe programet informative për të inkurajuar konsumatorët të blejnë vetëm produkte mishi të sigurta dhe të certifikuara.

2. Certifikimi

Parakusht për ndalim dhe eliminim të këtyre praktikave të pakontrolluara dhe jo-higjienike është vendosja e certifikimit të objektit dhe procesit të inspektimit. Procesi i aprovimit ka nevojë të përfshijë elementet e faktorëve të shumëfishtë duke përfshirë furnizimin me ujë të pijshëm, hedhjen e mbeturinave të lëngshme dhe të ngurta, ftohje dhe transport efektiv higjienik , si dhe aftësinë për të siguruar shëndetin bazë të kafshëve dhe higjienën e stafit, pajisjeve dhe metodave të therjes.

3. Dizajni dhe Objektet

Ekzistojnë disa kërkesa bazë sa i përket lokacionit dhe dizajnit të objektit që janë parakushte për certifikimit.

- Objekti duhet të jetë i vendosur në tokë e cila nuk ka kushte që mund të ndërhyjnë në operime sanitare.
    - Të jetë i vendosur ndaras prej dhe mos të ketë qasje në objekte banimi ose ndonjë aktivitet tjetër të veçantë që nuk është në pajtim me prodhimin higjienik, trajtimin dhe ruajtjen e produkteve të mishit.
    - Objekti duhet të jetë mjaft i madh, të ketë hapësirë të mjaftueshme dhe numër të dhomave për të mundësuar ndarjen e aktiviteteve që nuk përputhen për të lejuar zbatimin e praktikave të mira të prodhimit dhe eliminimin e ndotjes.
- Objekti duhet të jetë i ndërtuar nga materialet që janë të favorshme për prodhim higjienik të mishit.

Duhet të jetë pa faktorë ndotës dhe ato materiale që gjatë kohës shkaktojnë ndotje.
    - Duhet të ketë mure, tavan dhe dysheme të forta, të lëmuara dhe rezistente ndaj lagështisë; gjithashtu duhet të jenë të përshtatshme për pastrim efektiv.
    - Duhet të ketë ndriçim adekuat dhe të sigurt me mbrojtje dhe sigurim që do të mbajë çfarëdo poçi te thyer dhe ndotje prej xhamit.
- Objekti duhet të jetë i ndërtuar për të plotësuar kërkesat bazë.
    - Të ketë ventilim adekuat, nxemje dhe sistem hidraulik.
    - Të ketë sistem efektiv drenazhe dhe kushte për hedhje të mbeturinave—ujëra dhe mbeturina të ngurta.
    - Duhet të ketë tualet adekuat dhe të përshtatshëm, sistem sanitar dhe mjete higjienike që janë të veçanta për çfarëdo hapësire të përpunimit.
    - Duhet të ketë kushte adekuate për ftohje në depon e mishit dhe hapësirat e përpunimit.
    - Kushtet për ngarkim dhe shkarkim ku sigurohet ndarja komplete e kafshëve të gjalla që vijnë në objekt dhe daljes së mishit.
    - Hapësira adekuate dhe të veçanta që nuk kanë lagështi me qëllim të shmangies së rrëmujës dhe ndotjes.

4. Pajisjet

Të gjitha pajisjet duhet të dizajnohen, konstruktohen, të operojnë dhe mirëmbahen në mënyrë që mirëmban dhe siguron prodhimin higjienik të produkteve higjienike të mishit.

- Duhet të jetë e ndërtuar me materiale që janë rezistuese ndaj korrozionit
- Nuk duhet të lëshojë vaj ose të shkaktojë ndotje potenciale në çfarëdo mënyre tjetër.
- Duhet të ketë qasje të lirë për inspektim, pastrim dhe higjienë për ato qëllime.

Pajisjet që përdoren për zierje, nxemje, trajtim, ftohje ose ngrirje të produkteve duhet të jenë të besueshme dhe në gjendje për arritje dhe mirëmbajtje të temperaturave të përshtatshme të kërkuara për prodhim higjienik dhe të sigurt të produkteve të mishit.

5. Mirëmbajtja dhe Higjiena

Politikat me shkrim duhet të shkruhen dhe mirëmbahen për mirëmbajtje të veçantë, higjienë dhe programe pastrimi për secilën dhe çdo hapësirë të operimeve për të siguruar dhe parandaluar çdo lloj ndotjeje të pronës, objektit, stafit, pajisjeve dhe produkteve të mishit.

- Këto politika duhet të përmbajnë programe për kontroll të dëmtuesve dhe insekteve dhe për menaxhim të mbeturinave dhe plehrave.
- Politikat duhet të vërtetojnë se produktet e mishit nuk janë ndotur kurrë nga kemikalet, pesticidet, lubrifikantët ose ndonjë substancë tjetër toksike ose helmuese.
- Efektiviteti i programeve sanitare, mirëmbajtjes dhe pastrimit duhet të monitorohen me efikasitet në një mënyrë (HACCP) e cila i korrigjon problemet para se të shfaqen.

6. Ujësjellësi

Objekti duhet të ketë furnizim me ujë të pijshëm të nxehtë dhe të ftohtë në të gjitha pjesët e operimeve, gjithashtu duhet të jetë adekuat në sasi dhe presion dhe t'i shërbejë të gjitha nevojave të operimeve.

7. Stafi

Të gjithë personat e përfshirë në prodhimin ose përpunimin e ushqimit duhet të jenë të certifikuar se janë më shëndet të mirë para punësimit.

Procedurat duhet të vendosen, të shënohen dhe të zbatohen ashtu që çdo person i cili hyn në objekt ku theren kafshët, ku përpunohet mishi dhe /ose paketohet eliminon edhe mundësinë për ndotje me anë të:

- Larjes së duarve, veshjes së rrobave higjienike dhe kapelës (kapelë ose helmetë sigurie), si dhe mbathjes së këpucëve të pastra.
- Nuk duhet të mbajë ose bart çfarëdo (stoli të çmuara, duhan) që mund të bien ose përndryshe të ndotin produktin e mishit.
- Duhet të ndalohen përdorimi i duhanit dhe konsumimi i ushqimit ose pijeve (tjera nga uji i pijshëm prej burimit të ujit) në thertore ose hapësirën për përpunim.
- Çdo person i cili ka, ose dyshohet të ketë, ose do të mund të ishte bartës i ndonjë sëmundjeje që është ngjitëse ose rezultat i papastërtisë së produkteve të mishit nuk guxon të hyjë ose të punojë në çfarëdo hapësire ku mund të paraqitet ndotja.
- Teshtima spontane dhe normale, fryrja e hundës dhe kollitja duhet të bëhen në mënyrë që siguron se ndotja e mishit është shmangur dhe duart duhet të lahen pas këtyre rasteve. Nëse ka nevojë duhet të përdoren maskat për fytyrë.
- Kollitja e shpeshtë dhe simptomet e teshtimës janë shkak për supozim dhe sëmundja është prezente dhe se personi duhet të mbahet larg prej këtyre hapësirave të përpunimit.

Programi për trajnim duhet të themelohet dhe zbatohet për të gjithë punëtorët ku përfshihen teknikat sanitare dhe parimet e mbrojtjes së ushqimit për trajnim higjienik të produkteve konsumuese.