

AASF is supported by the EBRD and the Government of Albania



MEAT SECTOR STUDY

This study report provides information and recommendations which can be useful to orient entry strategies for financial institutions or for the preparation of financial services

MEAT SECTOR STUDY

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EXECUTIVE SUMMARY

Livestock is the leading agrifood sector in Albania. Meat is one of the main food items of the Albanian household consumption basket. Meat consumption basket is by far dominated by beef meat (which is also far more expensive when compared to poultry or pork meat), which makes about ½ of total meat supply consumption (very different picture when compared to EU, where beef has much smaller share). Imports represent a significant share of local consumption for all main types of meat. The meat value chain is considered a priority sector considering import substitution potential.

Since the early 2000's, there has been an increase trend in the production of meat (all types of meat, eg. beef, poultry, small ruminant and pork). Overall, meat production is destined to the domestic markets, thus the production increase is mainly triggered by increase in the domestic demand. Despite the increase in production, imports have remained high – thus any investments or business developments should consider import substitution as a priority, while exports are not feasible in the near future (except for small ruminant). One major concern is lack of compliance with standards, which also bans Albania from exporting livestock (meat) products to EU markets.

The objective of this study report is to provide an overview of the livestock sector in Albania, with focus on meat, by analysing recent developments and the current state, including opportunities, constraints and challenges, with special focus on investments needs/potentials. This study report provides information and recommendations which can be useful to orient entry strategies for financial institutions or for the preparation of financial services. But potential users of the current study findings and recommendations can be also government institutions, business associations, development agencies, academia and other interested stakeholders.

This study is developed from the technical expertise of the Albania Agribusiness Support Facility (AASF). AASF is a financing framework developed by EBRD in cooperation with and with support from the Government of Albania which started its activities in 2016.

The objective of the facility is to motivate Albanian financial institutions to support a vital sector of the Albanian economy with widely untapped potential - agriculture and agribusinesses. AASF provides access to finance for the agribusiness sector in two ways: senior loans and / or portfolio risk sharing to both MFIs and banks. The institutions benefit from a first loss risk cover that was made available by the Government of Albania. AASF therefore represents an innovative financial instrument to encourage lending by financial institutions to the whole agribusiness value chain.

The final beneficiaries of AASF are farmers, entrepreneurs and companies that are engaged in primary agriculture, agricultural equipment production and trade, logistics, agribusiness service providers, agricultural processing, wholesale as well as retail traders. Agribusinesses may also benefit from the EBRD Advice for Small Businesses program, which provides consultancy on strategy development, marketing, technical restructuring and other key institutional development areas by international and local experts.

Both secondary and primary information/data sources have been used to meet the study objectives; semi-structured interviews with value chain actors and sector experts were used as a primary source of data collection. Data were analysed using various techniques including descriptive analysis, trend analysis, text analysis, SWOT analysis strategy. Combination of qualitative and quantitative analysis has been crucial to identify/understand trends, gaps and needs for investments.

The current study informs the financial institutions and other interested parties in supporting the meat sector about the main opportunities to finance the sector. Some of the most important financing opportunities are investment in improved livestock breeding (cattle, goats, sheep and pigs), improved stable (shelter) conditions and animal feeding. While investment in new slaughterhouses are hardly needed, technology improvement of existing slaughter houses represents a financing opportunity. Other opportunities in terms of financing include construction and/or renovation of feed storage buildings, transportation equipment compatible with EU animal welfare standards, improvement of current meat processing enterprises, cold storage equipment and refrigerated transport means of carcass and meat products, waste treatment investment at farming and processing level.

Establishing a working relationship between large poultry and farmers interested in chicken raising may represent an important opportunity for value chain financing.

When designing interventions or finance new investments in the sector, the financial institutions should consider (i) support to investment is critically dependent on developments of the safety standards enforcements (which is a prerequisite for new investments in the livestock sector – the most classical example is the slaughterhouses) and (ii) use investment co-financing: bank financing combined with public financial support using government support scheme or IPARD schemes. The current partial grant policy has important implications for financial institutions - they have the opportunity to co-finance the investment (stables, cooling chain, milk processing, etc. for 100% of investment amount out of which at least 50% short term loan (the part to be reimbursed by the grant after the investment implementation) and 50% loan term loan for the part to be paid by the beneficiary).

1. INTRODUCTION

Agriculture is one of the main sectors of the Albanian economy in terms of employment and contribution to GDP and it is considered a priority sector by the government of Albania. Despite recent growth, Albanian agriculture still faces various challenges including difficult access to credit; agricultural sector receives only 2% of total credit for the economy.

Livestock is the leading agrifood sector in Albania, including both meat and dairy production (the later analysed in a separate study report). Since the early 2000's, there has been an increase in production of meat. Overall, meat production is destined to the domestic market, thus the production increase is mainly triggered by increase in the domestic demand. About 1/3 of the domestic demand is still met by imports (which takes forms of live animals and frozen meat) – thus any investments or business developments should consider import substitution context rather than export (which is not promising (or feasible), at least in the near future).

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The final beneficiaries of AASF are farmers, entrepreneurs and companies that are engaged in primary agriculture, agricultural equipment production and trade, logistics, agribusiness service providers, agricultural processing, wholesale as well as retail traders. Agribusinesses may also benefit from the EBRD Advice for Small Businesses program, which provides consultancy on strategy development, marketing, technical restructuring and other key institutional development areas by international and local experts.

The study objectives

The general objective of this study is to provide an overview of the selected value chain in Albania by analysing recent developments and the current state, including opportunities, constraints and challenges, with special focus on investments needs/potentials.

More specifically, the study

- provides an overview of the main production trends, international trade trends and market trends;
- provides a 'snapshot' of value chain structure, flows and value chain governances with special focus on 'leaders in the value chain'
- synthesizes the main points in a value chain through a SWOT analysis strategy, and

- recommend the main opportunity for (investment financing, working capital financing, and value chain financing) the banking system.

This study report provides information and recommendations which can be useful to orient entry strategies for financial institutions or for the preparation of financial services.

Methodology and approach

Both secondary and primary information/data sources have been used to meet the study objectives; semi-structured interviews with value chain actors and sector experts were used as a primary source of data collection. Data were analysed using various techniques including descriptive analysis, trend analysis, text analysis, SWOT analysis strategy. Value chain analysis was adopted as general framework for the analysis. Methodology is described in more details in the following section.

The targeted users

The value chain study is primarily designed for the Financial Institutions, but this study report can serve as a useful background in the decision-making process of other relevant stakeholders such as Ministry of Agriculture (MARD), development agencies, and private sector actors (eg. companies, associations).

What the study is and is not

The report is a rapid appraisal and, considering the limited available resources and time, it deals particularly with the value chain financing need and hence financing opportunities for the bankers. The study is designed in such a way that it is easy to read in terms of structure/flow and level of information details, suiting to the needs of the reading decision-making (eg. bankers). The study is designed to serve as an 'tool' for executive staff rather than a research study per se.

The report is not a full sector study or value chain study which typically provide a detailed analysis of actors in the value chain, supporting services (business services, banking services and other services or embedded services) and global, national and local economic environment.

The report structure

The report is structured as follows: the second section consists of the description of the methodology. The third section provides an extensive analysis of production and international trade trends. Section four describes the value chain structure, flows and actors profile. Section five consists of production technology processes overview to make the reader familiar with main technological processes and relevant costs highlighting timing when such processes/costs occur, as well as production (proxy for the timing of sales). Section six provides SWOT analysis with focus on investments needs/potentials, whereas the last section consists of conclusions.

2. METHODOLOGY

Sector selection

The meat value chain study is part of a 'set of sector studies' on all most important agricultural sectors in Albanian agriculture. Therefore, the first stage consisted of the prioritization of the sectors or subsectors or (group of) products for which there is the biggest demand/potential for growth and investments – considering export market potential or import substitution potential. Two groups of factors were considered when designing the list of products to be analysed, namely market potential and other factors leading to product competitive advantages. Market potential is examined in two angles, export potential and import substitution potentials. Export potential considers revealed export performance combined with international demand for the given product - when exports grow over time and this coincides with increasing international demand this product is said to have export potentials. Import substitution potentials considers potentials to meet domestic demand. Other consideration leading to competitive advantage include supply side factors, such as labour to land ration, tradition and skills also established linkages among actors on the value chain, including also well-established linkages between Albanian actors and international buyers.

The meat value chain is considered a priority sector considering import substitution potential.

Data collection

The study is partly qualitative and partly quantitative. This allows better understanding of the status and dynamics of the relevant product chain. The study combines analysis of secondary and primary data. For various issues/indicators, analysis was based on the secondary data (including sectoral/ structural data).

The secondary data were retrieved from MARD (Ministry of Agriculture and Rural Development), INSTAT (Albanian Institute of Statistics), UNSTAT COMTRADE (for international trade), FAOSTAT (for production and consumption) and EUROSTAT (for production and international trade), etc. In addition, a review of other relevant studies and reports was carried out. The constraint faced is that for some indicators (related to domestic production and trade) there are no available statistics, while for some others there are no recent statistics. However, regarding international trade, latest data are available and were analyzed. When applicable data from other countries or regions were collected for comparative analysis purpose.

The primary data were collected through semi structured in-depth interviews carried out with key informants, representing value chain actors and sector experts. A snowball survey was used to identify the main actors and experts for each value chain for the semi-structured interviews (part of the primary qualitative research). In depth interviews with key informed stakeholders (alongside desk research), enabled the obtaining of up-to-date understanding about the main patterns for the key sectors. In the context of limited resource and time availability, only a limited number of interviews with key informed value chain players / stakeholders was carried out.

Data analysis

Regarding data/information **analysis**, secondary statistical data has been subject of standard descriptive analysis including tables and graphs depicting historical trends. Comparison of production and consumption trends with world, European and some cases with neighbouring countries was done, when applicable/necessary. Regarding VC expert/actors interviews, notes are analyzed by using simple content summarizing approach and qualitative content analysis techniques, with the aim to sum up the most relevant and interesting topics emerged from the interviews. Value chain analysis was adopted as general framework for analysis of value chain structure and (products, financial, and information) flows.

3. TRENDS AND PROSPECTS OF THE IDENTIFIED VC

3.1. PRODUCTION TRENDS

3.1.1. Primary production

Production and consumption of meat has marked a strong decline during early transition followed by an increase in the following years. The increase in the production of meat was triggered primarily from the increase of local demand, which soon exceeded significantly pre-transition levels.

After an initial increase during early transition, the number of cattle and small ruminants has been decreasing since 2000 (Table 1). However the production of meat has increased, caused by investments in breeds and improved management (the latter, typical for the growing number of larger farms). In the case of poultry, broiler production increased fourfold over the same period (see Table 1). Overall, meat production is still destined almost entirely for the domestic market, thus the production increase remains dependent on the domestic demand.

Table 1: Evolution in livestock number 2000 to 2016

Category	2000	2005	2010	2014	2015	2016
<i>000 heads</i>						
Cattle	728	655	493	500	504	492
Sheep & goat	3,045	2,701	2,581	2,804	2,850	2,911
Pig	103	147	164	172	171	181
Poultry	5,291	6,432	8,437	9,493	8,558	8,326
<i>000 ton meat production</i>						
Cattle	62	68	68	71	71	72
Sheep & goat	37	41	44	50	53	51
Pig	10	15	16	18	17	17
Poultry	4	9	17	17	17	20
Total	113	133	145	155	158	160

Source: INSTAT (2017)

Regional distribution

Cattle meat production is more dispersed regionally when compared to poultry or pork production. However, there is higher production in Fier, followed by Elbasan, Korce and Vlora, which all together cover more than ½ of the total meat production.

Table 2: Regional distribution of cattle meat production in 2016 (live weight)

Prefecture	Ton	Share	Cumulative
Fier	13,012	18.0%	18.0%
Elbasan	10,020	13.9%	31.9%
Korce	7,699	10.7%	42.6%
Vlore	6,544	9.1%	51.7%
Diber	5,597	7.8%	59.4%
Kukes	5,141	7.1%	66.6%
Durres	4,868	6.7%	73.3%
Tirane	4,868	6.7%	80.1%
Shkoder	4,849	6.7%	86.8%
Berat	4,159	5.8%	92.5%
Lezhe	3,501	4.9%	97.4%
Gjirokaster	1,879	2.6%	100.0%
Total	72,137	100.0%	

Source: INSTAT (2017)

There is a strong tradition of production of small ruminant (meat) in Vlore, Korce and Gjirokaster, which together cover 42% of the total (meat) production.

Table 3: Regional distribution of small ruminants meat production in 2016 (live weight)

Prefecture	Sheep	Goats	Total S.R	Share	Cumulative
Vlore	7,010	1,216	8,226	16.2%	16.2%
Korce	5,039	2,005	7,044	13.9%	30.2%
Gjirokaster	4,148	1,880	6,028	11.9%	42.1%
Elbasan	3,561	2,388	5,949	11.7%	53.8%
Fier	4,579	850	5,429	10.7%	64.5%
Berat	2,765	1,287	4,052	8.0%	72.5%
Diber	2,382	959	3,341	6.6%	79.1%
Shkoder	1,442	1,370	2,812	5.6%	84.7%
Tirane	1,557	1,074	2,631	5.2%	89.9%
Kukes	1,634	625	2,259	4.5%	94.4%
Durres	1,028	488	1,516	3.0%	97.4%
Lezhe	527	813	1,340	2.6%	100.0%
Total	35,672	14,955	50,627	100.0%	

Source: INSTAT (2017)

Lezha is traditionally the main area for pig breeding. A relatively high concentration of pig breeding farms is also recorded in Shkoder and Lushnje (where also was placed the largest pig breeding facility in planned economy) – these 3 regions make up for ca 77% of the total production of pork meat.

Table 4: Regional distribution of pork in 2016 (live weight)

Prefecture	Ton	Share	Cumulative
Lezhe	6,001	34.6%	34.6%
Shkoder	4,408	25.4%	60.1%
Fier	2,954	17.0%	77.1%
Vlore	1,000	5.8%	82.9%
Durres	725	4.2%	87.1%
Korce	706	4.1%	91.1%
Elbasan	497	2.9%	94.0%
Berat	297	1.7%	95.7%
Diber	294	1.7%	97.4%
Tirane	212	1.2%	98.6%
Kukes	166	1.0%	99.6%
Gjirokaster	71	0.4%	100.0%
Total	17,331	100.0%	

Source: INSTAT (2017)

Poultry production is highly concentrated in the region of Fier corresponding to more than 1/3 of total production. Fier, Vlore, Tirane and Berat make up more than ¾ of the total production of poultry meat.

Table 5: Regional distribution of poultry in 2016 (live weight)

Prefecture	Ton	Share	Cumulative
Fier	7,091	36.0%	36.0%
Vlore	3,000	15.2%	51.2%
Tirane	2,664	13.5%	64.7%
Berat	2,154	10.9%	75.6%
Elbasan	1,345	6.8%	82.4%
Durres	777	3.9%	86.3%
Korce	776	3.9%	90.3%
Shkoder	677	3.4%	93.7%
Diber	465	2.4%	96.1%
Lezhe	437	2.2%	98.3%
Kukes	179	0.9%	99.2%
Gjirokaster	159	0.8%	100.0%
Total	19,724	100.0%	

Source: INSTAT (2017)

3.1.2. Processing

There are no statistics available for meat processing. However, it is estimated that production of salami and other meat byproducts could be ca 20 thousand ton¹.

A specific weakness is the waste disposal for processors, traders and slaughterhouses; often the leftovers are dumped into illegal landfills representing a serious danger to the soil and underground water contamination. Law enforcement regarding waste disposal, is expected to result in new investments.

3.2. INTERNATIONAL TRADE TRENDS

In the last years, the import of live animals has slightly decreased, while exports are negligible (Table 6). Import of live animals represents 3% of total imports of agrifood products.

Table 6: Albanian international trade of live animals (HS 1)

Year	Exports 000 \$	Imports 000 \$	Export/ Import
2000	31	1,220	2.6%
2005	955	11,168	8.5%
2010	610	34,578	1.8%
2014	742	32,975	2.3%
2015	717	28,223	2.5%
2016	672	23,162	2.9%

Source: UNSTAT (2018)

There is observed an even larger decrease in the import of meat (mostly frozen meat) – more than 20% in 2016 in comparison to 2015. Despite the decrease, there is still a huge deficit in the trade of meat (while exports are negligible both due to constraints in standards and structural limitation of the livestock sector). Import of meat makes up 5-10% of the value of total import of agrifood products, depending on the year (increase in weight is observed over the years).

Table 7: Albanian international trade of meat (HS 2)

Year	Exports 000 \$	Imports 000 \$	Export/ Import
2000	231	18,860	1.2%
2005	337	42,420	0.8%
2010	1,386	70,172	2.0%
2014	658	61,746	1.1%
2015	1,039	57,379	1.8%
2016	1,072	39,272	2.7%

Source: UNSTAT (2018)

¹ FAO (2014). Meat Sector Study

Table 8: Import of main types of meat

Year	Beef (HS 0201 and 0202)		Pork (HS0203)		Chicken (HS0207)	
	Imports 000 \$	Imports ton	Imports 000 \$	Imports ton	Imports 000 \$	Imports ton
2000	1,195	1,250	6,475	8,444	6,475	8,444
2005	6,800	5,669	12,600	11,401	12,600	11,401
2010	5,796	2,558	19,943	10,352	19,943	10,352
2014	1,598	692	9,738	5,020	9,738	5,020
2015	2,205	1,029	10,932	5,847	10,932	5,847
2016	1,787	997	9,776	5,781	9,776	5,781

Source: UNSTAT (2018)

Import of processed meat is negligible when compared to the import of meat and live animals - as mentioned earlier, the Albanian meat processing industry has demonstrated to be competitive in the local market. Exports are negligible also for this category of products.

Table 9: Albanian international trade of Sausages and similar products (HS 1601)

Year	Trade Flow	Ton	Mill USD
2005	Import	512.7	0.9
2010	Import	1,340.6	3.9
2014	Import	472.2	2.2
2015	Import	848.2	2.8
2016	Import	933.4	2.8

Source: UNSTAT (2018)

International trade by partner countries

Imports of live bovines is spread along the year, but the imports tend to be slightly higher during summer. Most imports come from Romania and Bulgaria, although the structure of imports differs from month to month.

Table 10: Imports of live bovine animals 2017

	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Quantity (ton)	194	343	364	334	278	537	384	548	409	435	393	444
Value(000Euro)	430	905	1,035	873	520	1,403	1,031	1,009	758	804	718	824
Price (Euro/kg)	2.22	2.64	2.84	2.62	1.87	2.61	2.69	1.84	1.85	1.85	1.83	1.85
Import structure by countries												
Romania	60%	54%	46%	55%	56%	22%	26%	35%	19%	20%	9%	19%
Bulgaria					18%	25%	22%	30%	60%	53%	56%	41%
FYROM	23%	20%	22%	20%	26%	22%	27%	34%	20%	28%	35%	35%

Source: EUROSTAT (2018)

Imports of live swine is spread along the year, but the imports tend to be slightly higher during summer and December. Imports of live swine is dominated by Greece and Hungary. Below is provided also the average price of live weight of imported swine.

Table 11: Imports of live swine 2017

Live Swine	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Quantity (ton)	628	674	723	975	853	729	934	1,263	840	875	764	1,148
Value(000Euro)	854	905	965	1,306	1,196	994	1,318	1,740	1,171	1,196	1,043	1,566
Price (Euro/kg)	1.36	1.34	1.33	1.34	1.40	1.36	1.41	1.38	1.39	1.37	1.37	1.36
Import structure by countries												
Greece	64%	91%	94%	93%	76%	76%	68%	59%	59%	71%	70%	74%
Hungary	6%	9%	6%	7%	18%	24%	31%	26%	34%	27%	23%	22%

Source: EUROSTAT (2018)

Import of fresh (not frozen) bovine meat is low, mounting to few tones per month – coming primarily from Holland. Thus, the imported meat is mainly frozen. Import of frozen bovine meat mounts to ca 100 ton per month on average – the average price is below 2 EUR/kg. Frozen bovine meat is mainly sourced from Italy, Poland and Brazil.

Table 12: Imports of meat of bovine, frozen 2017

Category	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Quantity (ton)	60	160	141	123	102	72	127	190	101	85	66	124
Value(000Euro)	94	256	236	183	160	89	169	425	145	103	90	197
Price (Euro/kg)	1.56	1.61	1.68	1.48	1.57	1.24	1.33	2.23	1.43	1.21	1.36	1.59
Import structure by countries												
Italy	34%	35%	58%	62%	28%	67%	55%	14%	50%	40%	61%	50%
Poland	46%	16%	42%	16%	18%	28%	40%		40%	59%		38%
Brazil		17%		21%	27%			72%			38%	

Source: EUROSTAT (2018)

The import of poultry meat is significant, exceeding 2000 ton/month during most months. Imports are at low prices, on average below 1 EUR/kg. Poultry meat is imported mainly from Greece, Brazil and US.

Table 13: Imports of poultry meat 2017

Poultry meat	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Quantity (ton)	1,835	1,940	2,126	1,616	2,253	1,849	2,297	2,086	1,816	1,955	2,314	2,750
Value(000Euro)	1,368	1,585	1,730	1,411	1,846	1,453	2,079	1,862	1,462	1,862	2,191	2,494
Price (Euro/kg)	0.75	0.82	0.81	0.87	0.82	0.79	0.90	0.89	0.80	0.95	0.95	0.91
Import structure by countries												
Greece	11%	30%	32%	26%	18%	20%	17%	21%	21%	17%	18%	18%
Brazil	14%	20%	18%	27%	12%	10%	26%	27%	13%	26%	24%	18%
US	38%	12%	15%	8%	18%	19%	10%	13%	12%	18%	12%	20%
Germany	8%	9%	6%	9%	11%	11%	15%	17%	15%	9%	13%	9%

Source: EUROSTAT (2018)

Also import of swine meat is significant – average price is about 1.5 EUR/kg. Most swine meat is sourced from Brazil, Canada and USA.

Table 14: Imports of swine meat 2017

Meat of Swine	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Quantity (ton)	724	558	534	589	785	695	911	1,697	1,179	713	593	623
Value(000Euro)	978	892	756	761	1,202	1,028	1,300	2,338	1,718	1,142	957	856
Price (Euro/kg)	1.35	1.60	1.42	1.29	1.53	1.48	1.43	1.38	1.46	1.60	1.61	1.37
Import structure by countries												
Brazil	26%	56%	25%	18%	26%	19%	6%	26%	27%	40%	41%	35%
Canada	4%						23%	50%	47%	40%	8%	34%
United States	24%	5%	5%	9%	25%	36%	44%	4%	4%		12%	4%
Italy	12%	11%	18%	33%	11%	8%	12%	6%	10%	8%	17%	8%
Netherlands	17%	12%	25%	27%	16%	15%	7%	7%	5%	3%	7%	10%

Source: EUROSTAT (2018)

3.3. MARKET

3.3.1 International market

International production and trade trends with focus on EU ²

World meat consumption has been increasing in the last years and is expected to increase by 1 % per year on average between 2017 and 2030 (at a bit lower pace when compared to the last years). Important growing markets are in Asia, sub-Saharan Africa and the Middle East (mainly for poultry). In EU, meat production is expected to continue to increase as demand within EU and outside EU (for exports) is expected to increase.

EU production of poultry is expanding, pushed by a favourable domestic market. Pig meat production is expected to increase slightly in the next few years, but decline by 2030 to today's level. After the restructuring of the milk sector, beef production is expected to return to its downward trend. By contrast, production of sheep and goat meat is likely to grow by 4 % by 2030 after years of decline.

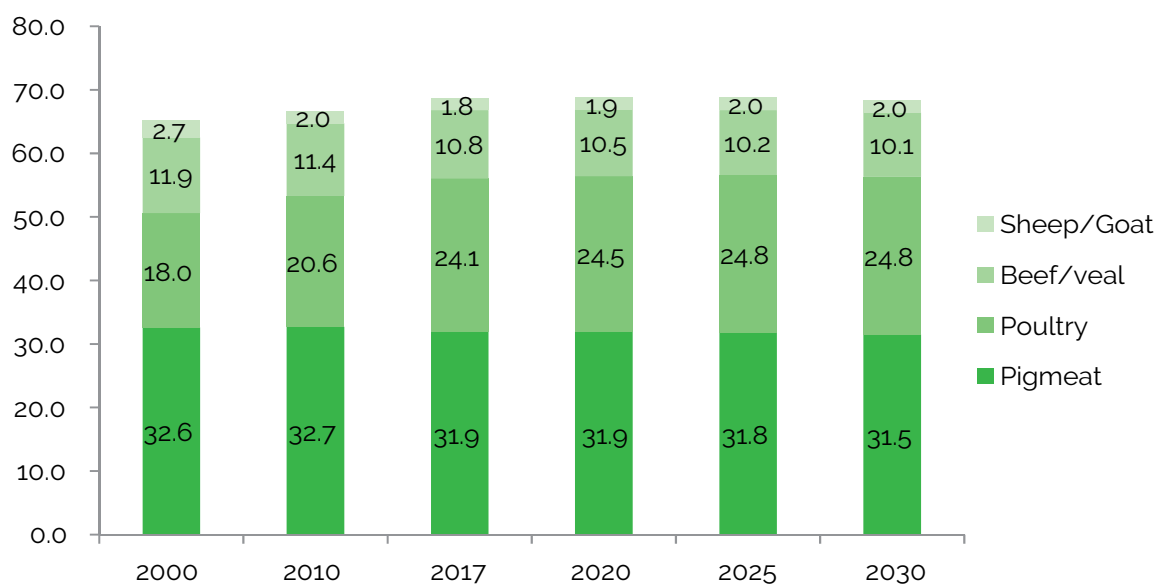
EU livestock farmers might face lower prices in the first years of the outlook due to increased competition but also relatively low feed prices – this trend has direct implications for Albanian farmers, whose production costs are significantly higher when compared to EU farmers.

² This section is partially based on EC (2017). EU AGRICULTURAL OUTLOOK FOR THE AGRICULTURAL MARKETS AND INCOME 2017-2030

By 2030, EU-28 per capita consumption of meat products is expected to stabilize or decline slightly. However, as population growth also determines total meat consumption (not only per capita), the picture of meat consumption is reversed.

Pig meat and beef continue to follow the declining trend of the last ten years in EU, giving way to increased poultry consumption. Sheep and goat meat is expected to increase its share slightly, contrary to the trend in the previous decade.

Figure 1: EU total meat consumption (kg per capita)



Source: EC (2017)

According to the expert interviews, the only type of meat, for which Albania represents potential to export (assuming the ban on exports to EU will be removed), is that of small ruminants, considering also the expected increase in consumption of small ruminant meat in the EU market.

3.3.2. Domestic market

Albanian meat consumption basket is dominated by beef meat, which makes about $\frac{1}{2}$ of total meat supply consumption – this is a very different picture when compared to EU where beef consumption makes up much smaller share (less than $\frac{1}{5}$) of total meat consumption. EU meat consumption is dominated by pork and chicken meat – which are also the lowest cost meat. Consumption of small ruminant meat is negligible when compared to other types of meat (although that is more common among Albanians when compared to EU consumer pattern).

Market supply structure

Domestic supply/consumption of beef is dominated by the domestic production – the share of import is low and has been decreasing.

Table 15: Supply of beef meat (000 ton)

Category	2005	2010	2015	2016
Production	63.2	68.0	71.4	72.1
Import / fresh and frozen	5.7	2.6	1.0	1.0
Import /live animal	5.0	8.7	3.5	1.1
Import live equiv. (slaughtered)	2.6	4.5	1.8	0.6
Import total	8.3	7.1	2.8	1.6
Export	:	:	:	:
Supply	71.5	75.1	74.2	73.7
Import/supply	11.6%	9.5%	3.8%	2.2%

Source: INSTAT (2017) for production, UNSTAT (2018) for trade

In the case of pork and poultry, import plays a far more important role in meeting domestic demand, when compared to beef.

Table 16: Supply of pig meat (000 ton) HS-0203

Category	2005	2010	2015	2016
Production	9.5	16.0	16.8	17.3
Import/ fresh and frozen	11.4	10.4	5.8	5.8
Import /live animal	0.003	6.0	9.5	9.5
Import live equiv.	0.002	4.2	6.6	6.6
Import total	11.4	14.6	12.4	12.4
Export	:	:	:	:
Supply	20.9	30.6	29.2	29.7
Import/supply	55%	48%	42%	42%

Source: INSTAT (2017) for production, UNSTAT (2018) for trade

Table 17: Supply of poultry meat (000 ton) HS-0207

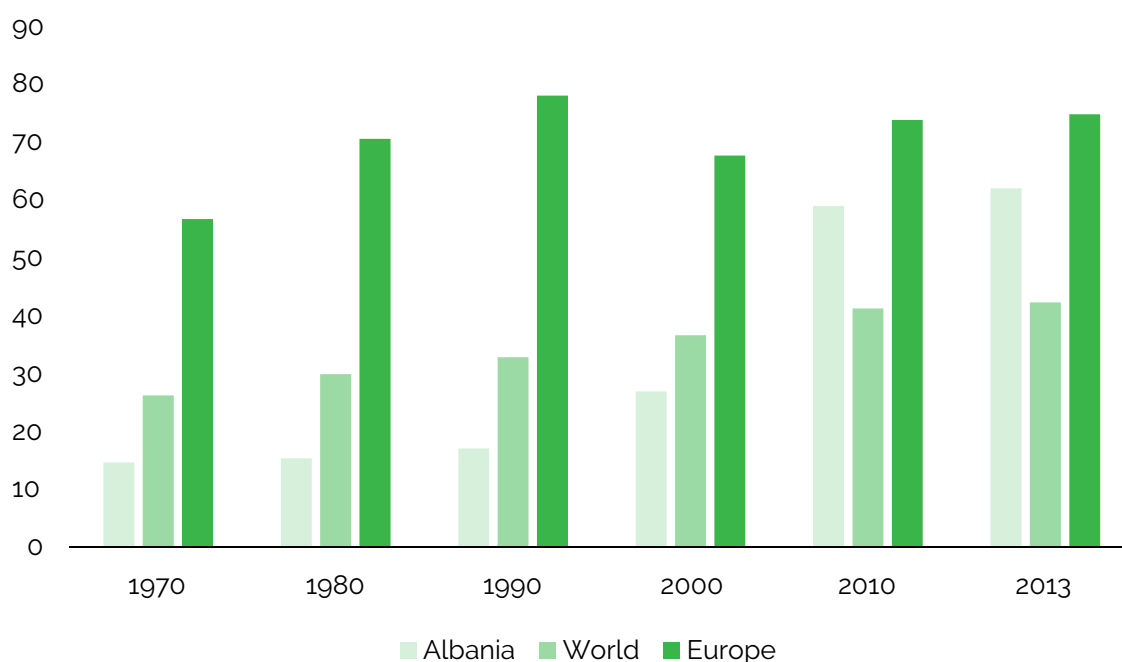
Category	2005	2010	2015	2016
Production	4.4	17	17.3	19.7
Import	18.4	20.0	21.4	24.2
Export	:	:	:	0.003
Supply	22.8	37	38.7	43.9
Import/supply	80.7%	54.1%	55.3%	55.1%
Export/production	:	:	:	0.02%

Source: INSTAT (2017) for production, UNSTAT (2018) for trade

Consumer demand and preferences

After the transition into the market economy, which began in early 1990ies, Albanian consumers shifted consumption from mainly cereals-based foods, to more meat, resulting substantially from higher income per capita, on one hand, and market liberalization on the other hand. By the late 2000ies per capita consumption of meat was 3 times higher than during the pre-transition period. Despite the increase in consumption of meat, it still remains significantly lower when compared to Europe in general and EU specifically³.

Figure 2: Apparent consumption of meat in Albania and other countries and world regions (Kg/capita)



Source: FAOSTAT (2018)

The origin of production tends to be quite an important factor for most Albanian consumers. According to various studies about consumer preferences for food in Albania, most consumers choose their products based on origin (domestic versus imports). Also, within the domestic product group, there are significant differences in perceptions based on the region of production within Albania. Most consumers view the region/area of origin is either important or very important when deciding to buy food including meat⁴. According to a previous study⁵ consumer prefer domestic lamb meat, and moreover, domestic highland lamb meat is strongly preferred over domestic plain/lowland meat.

3 Zhllima, E., Imami, D., & Merkaj, E. (2012). Food consumer trends in post socialist countries: the case of Albania. *Economia agro-alimentare*.

4 Imami, D., Skreli, E., Zhllima, E., Cela, A., & Sokoli, O. (2015). Consumer preferences for typical local products in Albania. *Economia agro-alimentare*.

5 Imami, D., Chan-Halbrendt, C., Zhang, Q., & Zhllima, E. (2011). Conjoint analysis of consumer preferences for lamb meat in central and southwest urban Albania. *International Food and Agribusiness Management Review*, 14(3).

Thus, investments which result in improved marketable standards and territorial certification represent a potential considering the market demand/preferences.

Despite the increase in consumption of meat, it still remains significantly lower when compared to EU. This gap indicates that, as Albanian income is expected to further increase in the future, the meat consumption per capita is likely to increase in resemblance to its richer neighbours.

Safety standards

There are gaps in food safety standards throughout the downstream food value chain. Albania faces serious problems with the national food safety control system in terms of legislation, infrastructure, institutional capacity, control and enforcement, which affect real and perceived safety risks for consumers. The problems in the Agricultural Health and Food Safety System have been identified by several studies⁶. Food safety standard is a major concern perceived by Albanian consumers. Several studies^{7,8} document/highlight the concerns of average consumers about food safety.

The Albanian Government considers food safety and consumer's health protection a policy priority in its EU approximation agenda. The main law in Albania on food safety is Food Law No 9863⁹, (dated 28.01.2008). It sets requirements for production and circulation of safe food and feed to some extent in line with EU provisions.

MARD has introduced National Minimum Standards (NMS) in accordance with EU practices. Good Agricultural Practice (GAP) should correspond to the type of farming that a farmer would follow in the region concerned, entailing at minimum, compliance with general statutory environmental requirements. During recent years, food safety, animal welfare, and the NMS have been reformed through amendments and new laws; as well as through the Minister of Agriculture's Orders applying to such issues such as animal and farm registration, business licensure, collection of milk collection and transport, animal health etc. Compliance with NMS is a requirement also to access specific support grants, most notably IPARD II.

Despite legal and institutional changes, many farmers still lack information or awareness related to standards. According to a previous study¹⁰ most farmers do not know which institutions are in charge of food safety, animal health, or stable standards control. Although most farmers state that they have a farm livestock book/register, they are not aware of the institution responsible for controlling them. Lack of awareness about standards results in standards non-compliance, which implies lower market access (especially in the case of exports) and constraints in access of funds whose access is conditioned by meeting certain standards in a documented way (e.g. IPARD).

6 Verçuni, A., Zhllima, E., Imami, D., Bijo, B., Hamiti, X., & Bicoku, Y. (2016). Analysis of consumer awareness and perceptions about food safety in Tirana, Albania. *Albanian Journal of Agricultural Sciences*, 15(1), 19.

7 Imami, D., Chan-Halbrendt, C., Zhang, Q., & Zhllima, E. (2011). Conjoint analysis of consumer preferences for lamb meat in central and southwest urban Albania. *International Food and Agribusiness Management Review*, 14(3).

8 Zhllima, E., Imami, D., & Canavari, M. (2015). Consumer perceptions of food safety risk: Evidence from a segmentation study in Albania. *Journal of Integrative Agriculture*, 14(6), 1142-1152.

9 All Albanian legislation can be found (in Albanian) in <http://ligjet.org>.

10 Gjeci, G., Bicoku, Y., & Imami, D., (2016). Awareness about food safety and animal health standards – the case of dairy cattle in Albania. *Bulgarian Journal of Agricultural Science*, 22(2), 339-345.

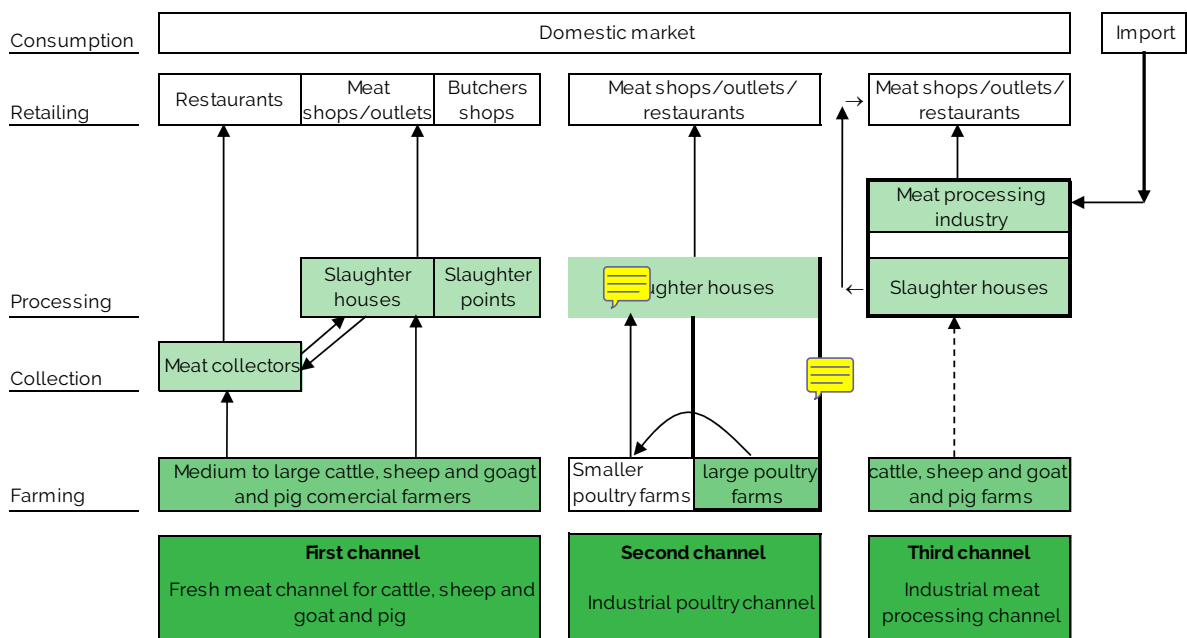
The growing pressure from the EU approximation to improve standards, will imply growing demand significant investments along the value chain to meet the standards. Awareness campaigns, combined with stronger law enforcement effort and availability of financial incentives would highly influence likelihood to increase such investments at farm, trader and processor level.

4. VALUE CHAIN STRUCTURE AND KEY ACTORS

4.1. VALUE CHAIN STRUCTURE AND ACTORS' PROFILE

The figure 3 below maps the meat value chain actors and the main channels through which meat flows from farmers to end use consumer.

Figure 3: Meat value chain map



Source: Authors' own design

There are three distinct channels in meat value chain, namely fresh meat channel for cattle, sheep and goat and pig (first channel in the figure 3), industrial poultry channel (second channel in the figure 2), and industrial meat processing channel (third channel in Figure 3). Meat produced and consumed on farm is not object of this analysis.

The main actors in meat value chain are (cattle, sheep and goat and pig) farmers, large poultry farmers, meat collectors (operational mainly in first channel), slaughterhouse operators, slaughter-point operators, and industrial meat processors. We first give a short profile for the main actors in the value chain and then proceeded with value chain flows and value chain governance.

Farmers

Meat production from cattle and small ruminants is not a separate activity - farmers produce both milk and meat. Hence the discussion regarding milk farmers is also valid for meat farmers.

Most farms with cows are very small with 1 cow per farm, typically oriented towards meeting self-consumption needs. Namely, 59% of the cattle farms have only 1 cow –thus most cattle farms are subsistence farms. About 1/3 of the cattle farms have 2-3 cows, which can be considered semi-subsistence. About 8%, or almost 13,000 farms have 5 or more cows, of which those with 11 or more make up 1,748 or 1% of the cattle farms, which have a stronger market orientation and potential and might invest in the future (table 18).

Table 18: Distribution of dairy cattle farm by size

	Cattle	% to total
Number of farms		
Size category		
1 head	94,481	59.2
Between 2 and 3 heads	52,155	32.7
Between 4 and 5 heads	7,756	4.9
Between 6 and 10 heads	3,328	2.1
Above 11 heads	1,748	1.1
Total	159,468	100
Number of heads		
Size category		
1 head	94,481	28.8
Between 2 and 3 heads	115,869	35.3
Between 4 and 5 heads	33,273	10.1
Between 6 and 10 heads	24,287	7.4
Above 11 heads	60,187	18.3
Total	328,097	100

Source: INSTAT (2017 – published agriculture census data)

Table 19 below depicts the largest cattle farms – namely those with 21-50 cows and those with above 50 heads – which can be considered large farms in the Albanian context.

Table 19: Distribution of larger dairy cattle farm by size

Cows	Number
Between 21 and 50 heads	213
Over 50 heads (51 and above)	58
Total cow farms over 21 cows	281

Source: Authors' processed data. Raw data from MARD

In terms of regional distribution, commercial farms are mainly found in low areas of Albania, namely Fier, Shkoder, Vlore and Durres, where there is also an overall bigger concentration of all types of cattle farms.

Dairy cows are typically kept in simple stables, fed mainly on forage and grazed on grasslands and meadows, supplemented by concentrate feed and minerals. In only few cases, professional farmers have invested in modern stables and started to implement mainly stable production regime.

Only a handful of farms deal with cattle meat production as a separate activity.

Most sheep and goat units are also very small; the sheep average flock size averages less close to 30 milking sheep and the average goat flock size averages close to 25 milk goats.

There are about 40,000 farmers that have sheep, and 22,000 with goat. Many small ruminant flocks have mixed flocks (combining both types). Most small ruminants' farms have up to 10 heads. Namely, 43% of farmers with sheep and 33% of farmers with goats have more than 10 heads. In most cases, small ruminants are grown in pastures – however recently there have been reported cases of intensive breeding for some larger goat farms.

Table 20: Distribution of small ruminant farms by size

Size	Sheep	% total	Goat	% total
	Number of farms			
Total	39,532	100	21,738	100
1	2,065	5	3,717	17
2-3	6,866	17	5,532	25
4-5	5,845	15	2,375	11
6-10	7,912	20	2,845	13
11 and above	16,844	43	7,269	33
Number of heads				
Total	1,179,540	100	496,102	100
1	2,065	0	3,717	1
2-3	16,580	1	12,873	3
4-5	27,163	2	10,837	2
6-10	65,677	6	23,279	5
11 and above	1,068,055	91	445,396	90

Source: INSTAT (2017 – published agriculture census data)

There are only 5 thousand (5% percent of all SR farms) larger commercial small ruminant's farms which could be of interest for the banking system (Table 21). Modal value for larger farms seems to be the size between 101 and 200 heads.

Table 21: Small ruminants (sheep and goats) commercial farms for 2017

Size categorizes	Number	%
Between 51 and 100 heads	546	10.9
Between 101 and 200 heads	2704	54.0
Between 201 and 300 heads	1506	30.1
Over 300 heads	251	5.0
Total sheep and goat farms	5007	100.0

Source: Data from MARD processed by the authors.

So all in all, most flocks are small. There are some common reasons for the prevalence of small flocks, including also the decrease in the number of small ruminants:

- Scarcity of feed, especially during winter;
- Lack of milk collection/processing capacities in some areas. This is most evident in the region of Kukes where, despite the large area of pastures/grasslands, flocks are small and production is low;
- Ownership problems related to pastures;
- Lack of manpower: young people have migrated or do not want to work with livestock;
- Small ruminant breeders are mostly individuals who are typically middle-aged or elderly;
- Lack of financial resources to buy animals, feed, etc. in all districts.

In terms of regional distribution, sheep and goat commercial farms are mainly found in mountainous areas of Albania, namely Gjirokaster, Vlore, Berat and Korçe.

The production system is pasture based. Sheep and goats depend nearly entirely on grazing to feed, especially in pastures, both in winter and summer. In summer they also use arable land after harvest.

The largest small ruminant farms have invested in improving stables, and many produce their own feed by cultivating forages and cereals. The lamb and goat kid fattening is very rarely a separate business.

However, the low capital intensity of production for both cow and small ruminant farms has resulted in low productivity, relatively high production costs and low profitability, which in turn prevent the accumulation of capital for financial investment, thus perpetuating the low production and productivity levels on many dairy farms.

Poultry farms. Small farmers normally have just 5-10 chickens and grow their own feed (such as maize). Chickens are usually kept in small premises or together with the other farm animals. Productivity is low and only surpluses are sold to final consumers or nearby restaurants. There are more than 40 meat-oriented poultry farms. There are about 5-6 larger poultry meat-oriented farms (eg. Chicken Farm, Tik-Tik, Driza, Radoshtina, Shehu),

with a production range of 500.000 chicken per year. These are modern and have their own slaughterhouses, packaging, storage etc. There are about 20 farms with up to or around 100,000 chicken/year.

Pig farms. Most pig farms are small, growing pigs on extensive basis. There are very few intensive farms in Albania, namely one located in Mamurras, one in Fier and one in Korçe.

Slaughterhouses and slaughtering points

Slaughterhouses supply the domestic market of fresh meat, as raw material for processing industries is mostly imported as frozen meat. Some are public owned and some other private – most are under-utilized (if operating), as law enforcement on animal slaughtering is difficult to apply and anyhow not regularly enforced. Despite the efforts of the government to enforce slaughter of animals in slaughterhouses, according to estimates based on interviews, it appears that less than 20% of the cattle are slaughtered in slaughterhouses even in some larger regions/ municipalities, such as the region of Korça (while according to the interviews, the situation is far better in other municipalities such as Tirana).

Those slaughter houses that perform better are those run by major processors and traders (importers), that deal with large volumes of animals, in the context of their trade/processing business.

Some of the slaughterhouses are modern. Investments in new slaughter houses, or in modernizing existing ones (those which do not fully meet the standard) will become viable only when there will be stronger law enforcement related to animal slaughtering – otherwise, financing new investments without such a pre-requisite in place, implies exposure to a high risk.

In addition to slaughter houses, there exist also slaughtering points which represent slaughtering facilities with basic slaughtering tools and operate in critical hygienic conditions. While the government has decided to shut them down – and manage to do so for some time in major cities – slaughtering point are widespread.

Thus, there is a potential to have new investments in modernizing existing slaughterhouses or in new ones, but that only upon condition of having law enforcement, which is a prerequisite to ensure proper utilization of such capacities.

Meat processors

Meat processing industry in Albania was the first agro industrial sector to consolidate and now is by far the most efficient segment of the value chain. It can be also considered as the most advanced sub-sector within agro-industry. The reason for this early development was the availability of cheap imported frozen meat and the presence of a few large importers having major deep-freezing facilities, which allowed the meat processing companies to rely on a reliable flow of quality-controlled meat, bypassing domestic production of fresh meat.

The main products of this industry are sausages and other cold-cuts, mostly based on pork meat. However, also poultry and beef are processed. Companies use modern technology in processing frozen meat but face limited know-how in processing fresh meat. According to data provided by MARD, there are located at least 2 meat processors in the region of Durrës (including Kaziu), around 5 in Fier, 4 in Korça (including Fix and Tona which are strong players at national level), 2

in Lezha (including INCA, which is export oriented), 3 in Shkoder including Kimca and 6 in Vlora. Tirana hosts 2 of the biggest meat processors: EHW and KMY.

The leading companies have a sound documentation of their production including traceability and applied HACCP. Albanian standards according to Food Law and orders of Ministry of Agriculture (MARD) are often applied; even EU standards on hygiene, traceability and HACCP are in place at big companies. Major processors such as EHW and KMY have invested in their own distribution and retail networks.

There appears that the largest meat processors have already invested in modern technology – thus, considering also the lack of further domestic market growth, it is not very likely to have investments to increase production capacities.

In summary, in the meat sector, investments might be needed from smaller processors to meet the standards (in terms of modernizing production facilities, processing lines and storage). However, they face strong and growing competition in the local market from both major local producers and importers, who are advantaged by formalization and improvements in standards control (when compared to smaller processors).

Box 1: Tona SHPK: meat processing and slaughterhouse

Introduction. Tona Company SHPK/LTD is a meat processing company located in the city of Korça. It started its activity in 1992, thus since early transition. In 1998 it invested in the construction of a modern factory in the city of Korca with a space of 2,800 m². Recently it has invested also in a modern slaughterhouse. The company is engaged in direct import of live cattle and pigs, which are used for both fresh meat selling and for processing.

Consumer segment: Wide range of retailers for both fresh meat and processed products.

Products & services: the main products are Salami and prosciutto, packaged meat, canned meat and semi-finished products. The company also uses and trades non-meat products, however (fresh and process) meat is the main activity. The slaughterhouse is used mainly for the needs of the company (for live animals imported directly by the company for its own business trade/processing needs) – service to third party represent a negligible share of the activity.

Market and channels: The company has established his own distribution channels supplying directly small shops as well as supermarket chains. the company has its own distribution logistic capacities (eg. cold transport). The company has a strong presence in Korca (one of the largest cities in the south), although, its products are found throughout the country.

Supplier: the company relies mainly in imported meat, although it buys also local cattle (to smaller extend). To achieve volumes and traceability, import remains the main strategy (considering the small farm size in Albania).

Resources: Modern processing unit, modern slaughterhouse, good logistic capacities for transport.

Success factors and lessons learned: a) integrated / closed cycle – the company imports directly live animals, which enable cost-effectivity and quality (part of its products are produced from fresh meat, which is not the case for most processors, who rely on frozen imported meat), b) ownership and operation of a slaughterhouse, next to the processing plant, which is an advantage in terms of operation cost, but also standards control, c) implementation of ISO and HACCP d) investment in distribution and marketing, e) long production and trade experience in this business (since early transition).

Key issue: the investment in modern slaughterhouse is used to a limited extend by third parties, given that informal / illegal slaughtering is still very common. If the system of control (veterinarian / standards control) would be properly functioning, this capacity would be more/better used – furthermore, the business could make more use of local production.

Source: author elaboration based on interview with Mr. Nikolla Tona, owner and manager of the company

4.2. VALUE CHAIN FLOWS AND CHAIN GOVERNANCE

Product flows, information and financial flows

Product flow. There are three distinct channels in meat value chain, namely fresh meat channel for cattle, sheep and goat and pig (first channel in the figure 2), industrial poultry channel (second channel in the figure 2), and industrial meat processing channel (third channel in Figure 3). Meat produced and self-consumed (on farm) is not object of this analysis. In the first channel, the restaurants order live animals which are transported to slaughterhouses or slaughter points, processed and supplied to them. The collection is made either by meat collectors who quipped with transportation means or by restaurants themselves. In the same way, butchers acquire the animals from farmers who transport them to slaughterhouses or slaughter points. In the second channel, large poultries process their own production in their own modern slaughterhouses and supply the chicken meat to meat shops, restaurants and large outlets. Some large poultries (Driza case) have started some kind of contract farming - they provide farmers with birds (and potentially feed) and buy back the finished product. In the third channel, large modern meat processors process mainly imported meat and rarely fresh meat. Some of them have also their own slaughterhouses. They process meat in their slaughterhouses and supply the fresh meat to meat shops and large outlets/supermarkets. Processed meat is supplied via their own retail chains (eg. EHW or KMY) and directly to other retail chains or traditional shops.

Financial flows. Payment for fresh (cattle, sheep and goat and pig) meat sold to retailers is typically cash based. In case of sale to large outlet by large poultries or meet processors late payments are rather common. Meat processors often get late payment from the retail units that they supply.

Information flows. The information flow from actors downstream to cattle and small ruminant farmers is scarce given that meat production is seldom (if at all) a separate activity. Large poultry have engaged in some kind of contract farming provide farmers with raising technology.

Value chain governance

Some kind of contract farming has started to take place in poultry sector (as mentioned earlier). Large poultries with modern and large capacity slaughterhouses have established more durable relationships with a limited number of farmers. They provide them the birds (and potentially the feed) and buy back the finished product (grown chicken). This kind of chain organization is expected to be the future of poultry sector. As the poultry sector grows, there is need for specialization - a large number of operators (including farmers) deal with farming and a small number of processors (slaughterhouses) deal with meat processing and marketing. That said, poultry farming by a larger number of smaller operators is motivated also by animal health concerns and product quality.

5. PRODUCTION TECHNOLOGY PROCESSES

Local breeds are dominant and well adapted to local conditions. In northern Albania, the main sheep breeds are Ruda, Bardhoka; and the main goat breeds: are Hasi, Capore, Alpine (French cross-breeding). In Southern Albania the main sheep and goat breeds are local breeds crossed with foreign/French breed.

Small ruminant breeding is highly dependent upon access to pasture – intensive small ruminant breeding businesses are rare (few). In terms of the business model, we see a difference affected by location. As a matter of comparison, there is a different breeding pattern more typical of highlands or Northern Albania, where the price of milk is lower (when compared to South-West Albania), making it more profitable to focus on meat production. In the Southern part of Albania (such as Gjirokaster), since the price of sheep and goat milk is much higher than in the North, there is more profitable to sell lambs (or goat kid) as soon as possible, to have available for sale as much milk as possible – however, even in such case, income from lamb (goat kid) sales still account for a significant share of income (despite being inferior to income from sold milk).

Cattle breeds are dominated from intensive breeds (eg. imported from Holland, France and Germany). Cattle production is almost exclusively focused on dairy production – meat is considered as byproduct. There are very few cases of meat-oriented cattle farming, but this orientation is not very feasible due to high production cost and strong competition from cheaper imports from more competitive countries.

Poultry meat production is dominated from intensive farming. For poultry, production cycles is usually 35-40 days corresponding to a live weight of ca 1.7-2 kg (the yield is ca 75%). Conversion rate is 1.6 or 1.7 Kg feed per 1 kg of live weight meat (calculation of conversion rate for small ruminant or cattle is less feasible, because of the strong mix or milk orientation).

For pig intensive production, conversion rate is ca 1 Kg meat of live weight for every 2.6 – 3.3 of food, however considering that in Albania there are only few intensive pig farms, it is difficult to conclude with average estimates.

Table 22 below provides an overview of the main livestock (eg. cow) production processes (related to expenditure) including animal feed and other relevant services.

Table 22: Calendar of livestock production processes with focus on cattle

Main type of processes	Month											
	1	2	3	4	5	6	7	8	9	10	11	12
On farm production of animal feed (eg. cereals)												
1. Soil preparation for forage production	█										█	█
2. Basic & complement fertilizer	█	█	█	█	█	█			█			
3. Land drainage	█	█										█
4. Harvesting			█	█	█	█	█	█	█	█		
Buying feed												
Grazing livestock	█	█	█									█
Livestock in stables	█	█	█	█	█	█	█	█	█	█	█	█
Medical treatment												
Medical treatment, vaccination etc.			█	█	█	█			█	█	█	

Source: Expert assessment, based on desk review and interviews

The main methods of raising the level of productivity of livestock production are: i) selection and improvement of breed; ii) choice of a balanced food ration in relation to the level of production, iii) sheltering conditions and health care, iv) appropriate and timely nutrition and; v) a good combination between use of pasture and concentrated food.

Table 23 below provides an overview of the small ruminants and cattle birth calendar. Lambs and goatkids are usually sold 3-6months after birth (but that depends from the region as shown above), while calves 3-6months after birth. Whereas the calendar of chicken meat production is harmonized (controllable) throughout the year.

Table 23: Birth calendar for small ruminants and cattle

Type	Months											
	1	2	3	4	5	6	7	8	9	10	11	12
Sheep and goats		█	█	█	█							
Cows			█	█	█							

Note: For cows in stables there is a diversification.

Source: Expert assessment, based on desk review and interviews

The gap between the expenditure (which tend to be widespread throughout the year) and income (eg. time when calves or lambs or goatkids are sold, as well as milk) may represent a potential for short term loans.

6. SWOT ANALYSIS AND FINANCING NEEDS

6.1. SWOT ANALYSIS STRATEGY

The following SWOT analysis strategy is conducted with the objective identifying financing opportunity in the meat sector.

Table 24: Meat sector: SWOT analysis strategy

	STRENGTHS (+)	WEAKNESSES (-)
	There are suitable (including local) breeds for meat production (cattle, pig, poultry)	Often breeds no suitable for meat production
	Positive trend regarding farm size, significant number of large poultry farms	
	Emerging modern stables (cattle, small ruminants, poultry)	Often inappropriate stables, or no premises for home raised poultry
	Larger farms own tractors and produce their own feed.	Often insufficient feed or high cost feed
	Emergence of modern slaughterhouses (poultry...)	Slaughterhouse owned by municipalities face cost although insufficient income
	Modern premises and technology for frozen meat processing	Outdated facilities and equipment in slaughtering points
		Inexistent or at best under-developed subcontracting poultry houses-farmers
		No waste disposal system (farm, slaughterhouses and meat processing)
OPPORTUNITIES (+)	S (+) / O (+) STRATEGY	W (-) / O (+) STRATEGY
Pasture, rich and high quality for grazing. Sufficient rainfall		
Export opportunity for lamb meat	Support to increase the number of animals, particularly for larger herds	
Favourable government and IPARD policies		Upgrade public slaughterhouses
		Support to modernize slaughtering points in area where s slaughterhouses are missing
		Support subcontracting in the poultry sector
		Rendering or incineration plant in the country
THREATS (-)	S (+) / T (-) STRATEGY	W (-) / T (-) STRATEGY
Laws and regulations not enforced		
Reduced potential for pig meat due to religious reasons		
No enforcement of veterinary law		

6.2. FINANCING NEEDS

6.2.1. Investment trends and financing needs

Investment trends

The establishment of some new dairy cattle farms with modern equipment and more than 50 cows per farm has been observed in recent years. In some cases, new farmers enter small ruminant sector investing in buying sheep and goats – indeed there have been reported few cases of start ups in goat farming. Evidence suggest that there has been an increase in the number of sheep and goats in recent years. Small ruminant farms with larger heard have also invested in improving stables.

Fresh meat production for cattle and small sheep and goat does not exist as separate activity in Albania. Field interviews inform that there have been only a handful of yet not successful cattle meat producers in Albania. In addition, small ruminant meat production does not exist as such. In the past there have been limited cases of lamb and goat kid fattening; some farmers used to purchase lambs and goat kids from other farmers and grazing them as a separate activity.

Several large poultry (Driza, Tik-Tak, Chicken Farm, Zoo Farm) have made large investment in facilities and particularly in modern slaughterhouses. The most modern investment is made in meat processing industry. Large meat processing company such as EHV, KMY, Kazazi, Kimca, Fix, Tona have made mode investment in meat processing. Some of them (KMY, Kazazi, Tona, Komca) have also modern slaughterhouses.

Contract farming investment seem to be an interesting investment in poultry. Large poultries (example Driza) supply farmers with birds and buy back the finished product. Some of these farmers have invested sometimes in small but rather modern poultry houses.

Investment financing needs

Following the SWOT analysis strategy and investment trends, investment financing needs are summarised in the Table 25.

Table 25: Investment financing needs

Type of investment	Farmers	Slaughter-houses	Processors
1. Support purchase of improved breeds animals (cattle, small ruminants and pigs)	■		
2. Construction/extension/modernisation of animal stables	■		
3. Improving animal feeding by supporting agricultural machinery (and irrigation and certified seeds)	■		
4. Construction and/or renovation of feed storage buildings	■		
5. Transportation equipment compatible with Community animal welfare standards	■		
6. Renovation and technology completion of slaughterhouses		■	
7. Renovation, equipment for slaughter points in areas where there are no slaughterhouses		■	
8. Modernization of meat processing enterprises, especially for smaller processors			■
9. Support investment using contract farming in poultry sector	■	■	
10. Cold storage equipment, purchasing refrigerated transport means of carcass and meat products	■	■	■
11. Waste treatment investment at farming and processing level	■	■	■

Improved efficiency calls for investment in improved livestock breeding (cattle, goats, sheep and pigs) by importing live animals or buying improved breeds animals from within the country – substantial investment in improved breeding, particularly in cattle has happened during transition in Albania and therefore improved breeds animal are available domestically. But improved breeding alone is not likely to brings results unless this is done in parallel with improved stable (shelter) conditions and animal feeding. Hence supporting animal shelter and feed production investment also represent interesting financing opportunities.

While expert assessment support that investments in new slaughterhouses are hardly needed, technology completion of existing slaughter houses represent a financing opportunity. Mobile slaughterhouses may also be considered for support. Additionally, given the lack of slaughter houses in certain areas leads to a need to support investment in facility renovation, and upgrading of a number of slaughter points to bring them in line with food safety standards. Investment in licences slaughterhouse will however be profitable if government manages to enforce current food safety legislation – not allowing slaughtering other than in slaughterhouses meeting the required standards.

Investment using contract farming in poultry sector represents an important opportunity to be explored. The financial institutions in combination with government support may consider investing in construction or renovation of existing building which may be used to breed chickens for meat production – the large poultry equipped with modern slaughterhouses may provide

them the feed and purchases the final product (refer to value chain financing for more details). While this is not happening in Albania today, experience from other countries (including USA), suggest that contract farming in poultry sector may represent a huge opportunity¹¹.

Other opportunities in terms of financing include construction and/or renovation of feed storage buildings, transportation equipment compatible with Community animal welfare standards, modernization of capacities for smaller processing enterprises, cold storage equipment and refrigerated transport means of carcass and meat products, waste treatment investment at farming and processing level.

National schemes as well as IPARD II represent an opportunity for new investments, and respectively for new loans. Namely, there may be a need for long term for the co-investment part (eg. ca 50% but may vary by type of scheme) and for the grant part (short term subsidy, considering that reimbursement is done typically after investment implementation).

Box 2: Public support schemes for Albanian agriculture

There are two major public support schemes for Albanian Agriculture, namely Annual National Support Schemes (ANSS), and EU like Rural Development Programme, IPARD II. While the latter aims at enhancing competitiveness and implementing EU (safety, quality and environment) standards and targets the most competitive businesses, ANSS has multiple policy objectives and a broader coverage.

Objectives and measures for ANSS-2018 area summarized below:

- Increase of competitiveness by providing support to investment (investments in agro processing and marketing), supporting innovation technologies, and certification and insurance
- Improvement of food safety by supporting investments to improve the food chain safety of livestock products; and other food safety enhancing measure such as animal identification, support to safe milk delivery systems, safe storage and transport of milk and the like.
- Vertical and horizontal and business formalization
- Diversification of rural activities.

While the ANSS have traditionally provided support for meeting multiple policy objectives, including increased competitiveness, recently there has been a growing attention towards meeting the standards.

National subsidy schemes, have traditionally been changing from year to year (often drastically). The budget allocated for ANSS for 2018 is Euro 20 million. For investment support, similar scheme of partial grant policy (at least 50% public support) is valid.

Another major Program is EU like Rural Development Programme, IPARD, which enables support for investment aiming at improving competitiveness and meeting national and EU standards, through co-financing investment by a grant (eg. 50%, however the exact value depends on a number of criteria). It is expected that IPARD calls for applications (which will also highlight the details of the eligibility criteria) will start in the second half of 2018. For this programme a budget has been approved of 71 Mill Eur from EC and 24 Mill Eur grant from Albanian government (75% EU: 25% Albanian government), so there is a 94 Mill Eur grant available for investments at farm and processing level during 2014 – 2020.

¹¹ Tyson company in USA processes 25 million bird per day without having its own poultry according to expert interviews.

6.2.2. Operating capital financing needs

Working capital financing trends

Meat production in cattle and small ruminants is seldom a separate activity - milk and meat are jointly produced on the same production units. Hence the milk processing factory faces liquidity problem – cheese technology process resulting into stocks and hence late payments affects also the meat production (activity).

Working capital financing needs

When farmers sell milk, the money they receive is used to support both milk and meat production. All milk processing factories have a liquidity problem associated with cheese technology process (refer to milk study). As shown above, there is a gap between the expenditure (which tend to be widespread throughout the year) and income (eg. time when calves or lambs or goat kids are sold, as well as milk) may represent a potential for short term loans.

Given that payment for fresh meat sold to retailers is usually cash based or farmers receive their payment upon delivering the product, there is not a major need for finance (no late payment). On the other hand, since late payment is rather common for sales to large outlet by poultries or meat processors, a need for short term finance exists.

6.2.3. Value chain financing

Establishing a working relationship between large poultry businesses (preferably the largest ones but not only) and farmers interested in chicken raising may represent an important opportunity for financing.

The poultry-farmer relationships may develop in two scenario or combination of them.

First scenario (poultry supply both birds and feed and to farmers): the poultry provide farmers with birds, chicken raising technology, and feed. The farmer commits to raise the chicken and supply them back the poultry at market price. In this case there is a need for chicken houses, which in some case may exist and need renovation and in other cases should be constructed. Portable chicken houses (stables) may be considered for financing. Since, this kind of shelter is portable, there is no need for construction permit. Such stables may shelter around 10,000 birds and farmers may conduct 3 cycles per year.

Second scenario (farmers produce feed): the poultry provide farmers with birds, chicken raising technology and assist them in feed (maize) production – supply farmers with high yield maize seed, advance cash for agricultural machinery operations (which seems to be a concern for farmers especially when fuel price has increased), support them in terms of irrigation, etc. and buy back the finished product. The farmer commits to raise the chicken and supply them back the poultry at market price.

In both scenarios or combination of them, the relationship poultry-farmer should preferably take the form of a contract farming.

This kind of relationships represent financing opportunities for financial institutions in the following ways: (i) support need for cash by large poultries, (ii) support chicken shelter investment at farmer's level.

This working relationships among poultries, farmers and FI is of mutual interest – poultries make a better exploitation of their slaughter houses which are currently only partially exploited, farmers use their idle resources (land, labour and buildings) and FI have and financing opportunity.

7. CONCLUSIONS

Since the early 2000's, there has been an increase in production of meat. While the number of cattle and small ruminants has been decreasing, production of meat has increased, caused by investments in breeds and management (the latter, typical for the growing number of larger farms). In the case of poultry, broiler production increased fourfold over the same period. Overall, meat production is destined to the domestic markets, thus the production increase is mainly triggered by increase in the domestic demand. However, the meat trade balance shows a structural deficit. About 1/3 of the domestic demand is still met by imports (in the form of live animals and frozen meat). Thus any investments or business developments should consider import substitution context rather than export (which is not feasible to be important, at least in the near future).

This value chain is characterized by a marked dualism in development: the processing industry is relatively modern and has a business model that so far is functioning well, while domestic production of meat (except poultry meat) is still extremely fragmented and, more important, the safety of the fresh product sold at retail level is not always ensured, as it has not yet been possible to establish a network of slaughterhouses compliant with minimal standards.

At primary production level, most farms in cattle, sheep and pig breeding are small or very small. On the contrary, commercial poultry breeding is well developed with more than a dozen units with more than 10,000 broilers. Most feed is imported and processed in Albania. Because of import of raw materials, the cost of production is high. In the case of poultry, also small chicks are imported.

Meat industry has been the first agroindustrial sector to consolidate and develop. Industry is focused on the domestic market, where it proved competitive. Its sustainability is based on import of cheap frozen meat, which are ensured by a few large importers, also sufficiently capitalized and well organized.

The current study informs the financial institutions and other interested parties in supporting meat sector about the main opportunities to finance the sector. Some of the most important financing opportunities are investment in supporting improved breed animals (cattle, goats, sheep and pigs), improved stable (shelter) conditions and animal feeding. While investment in new slaughterhouses are hardly needed, technology upgrading of existing slaughter houses represent a financing opportunity. Mobile slaughterhouses may also be considered for support. Upgrading of a number of slaughter points to bring them meet required food safety standards may also be an interesting option in areas where there is a shortage of licensed slaughter houses. Other opportunities in terms of financing include construction and/or renovation of feed storage buildings, transportation equipment compatible with Community animal welfare standards, technology improvement in current small meat processing enterprises, cold storage equipment and refrigerated transport means of carcass and meat products, waste treatment investment at farming and processing level.

Investment using contract farming in poultry sector represent an important opportunity to be explored including construction or renovation of existing building which may be used to breed chickens for meat production or support portable chicken houses.

Meat sector is considered a priority sector for Albanian government - the sector has been benefiting from public financial support schemes, including recent support schemes. The current grant policy has important implications for financial institutions - they have the opportunity to

co-finance the investment (stables, cooling chain, milk processing, etc. for 100% of investment amount out of which at least 50% short term loan (the part to be reimbursed by the grant after the investment implementation) and 50% loan term loan for the part to be paid by the beneficiary.

To be successful in their interventions, financial institutions should consider (i) the way safety standards are enforced (which is a prerequisite for new investments in the livestock sector) and (ii) use investment co-financing: bank financing combined with public financial support using government support scheme or IPARD schemes.

8. BIBLIOGRAPHY

EC (2017). EU Agricultural Outlook for the Agricultural Markets and Income 2017-2030.

Eurostat (2018). Database available at <http://ec.europa.eu/eurostat>

FAOSTAT (2018). Database available at <http://www.fao.org/faostat/en/>?

FAO (2014). Meat Sector Study.

Gjeci, G., Bicoku, Y., & Imami, D., (2016). Awareness about food safety and animal health standards – the case of dairy cattle in Albania. *Bulgarian Journal of Agricultural Science*, 22(2), 339–345.

Imami, D., Zhllima, E., Merkaj, E., Chan-Halbrendt, C., & Canavari, M. (2016). Albanian Consumer Preferences for the use of Powder Milk in Cheese-Making: A Conjoint Choice Experiment. *Agricultural Economics Review*, 17(1), 20.

Imami, D., Chan-Halbrendt, C., Zhang, Q., & Zhllima, E. (2011). Conjoint analysis of consumer preferences for lamb meat in central and southwest urban Albania. *International Food and Agribusiness Management Review*, 14(3).

Imami, D., Skreli, E., Zhllima, E., Cela, A., & Sokoli, O. (2015). Consumer preferences for typical local products in Albania. *Economia agro-alimentare*.

INSTAT (2017). Database available at www.instat.gov.al

Verçuni, A., Zhllima, E., Imami, D., Bijo, B., Hamiti, X., & Bicoku, Y. (2016). Analysis of consumer awareness and perceptions about food safety in Tirana, Albania. *Albanian Journal of Agricultural Sciences*, 15(1), 19.

Zhllima, E., Imami, D., & Merkaj, E. (2012). Food consumer trends in post socialist countries: the case of Albania. *Economia agro-alimentare*.

Zhllima, E., Imami, D., & Canavari, M. (2015). Consumer perceptions of food safety risk: Evidence from a segmentation study in Albania. *Journal of Integrative Agriculture*, 14(6), 1142–1152.

UNSTAT (2018). Trade database <https://comtrade.un.org/data/>



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