

Distribution of Wood Processing Industry in Albania

Ramadan Topuzi

Agricultural University of Tirana,
Department of Wood Industry, Tirana-
Albania; Email id : dan_topuzi@live.it

Arben Bejtja

Agricultural University of Tirana,
Department of Wood Industry,
Tirana-Albania

Leonidha Peri

Agricultural University of Tirana,
Department of Wood Industry,
Tirana-Albania

Abstract – Wood Processing Industry in Albania, has developed naturally being adapted from a centralized industry to a free enterprise. Today it is organized mainly in manufacturing businesses and trading of furniture and other wooden products, exercising this activity in the country.

The purpose of this study is to provide an overview of the Manufacturing Entities of Wood Processing Industry in Albania, employment of wood processing engineers and the training/qualification of the latter.

This study summarizes an analysis of data collected through a structured questionnaire for this purpose. The material prepared refers to 250 surveys carried out in the entire country. For the research were selected leading manufacturing entities operating in the field of manufacturing and trading of furniture and very well-known on the market.

The largest number of them work with semi-finished material, chipboard and MDF (Medium Density Fiberboard). Generally, the Wood Processing Industry in Albania is more developed in the centers/large cities, as in the rest of the country, there takes place little activity conducted through old technology. Most of the businesses surveyed have no wood processing engineers. In the businesses surveyed there were 65 wood processing engineers employed, while the needs are for 3-5% more.

Respondents expressed on the request for professional training of wood processing engineers. They also think that the Faculty should give more attention to the practical side of their training. Professional Practice of students is maximally estimated by 92% of the respondents.

Keywords – Wood Processing, Industry, Curriculum.

I. INTRODUCTION

Albania inherited a Wood Processing Industry organized in factories and combines from the previous regime. After changes in the 90s, the Wood Industry in Albania

Developed naturally being adapted from a centralized industry to a free enterprise. Today it is organized mainly in small to medium companies that produce and trade in furniture and other wood products. This can be considered the main labor market for a good part of furniture manufacturing specialists.

This study is based on the data collected through structured questionnaires for this purpose. The data collected, are filed into a database to be further analyzed and to meet the objectives of the study. Respondents were heads of manufacturing entities, wood processing engineers, economists, etc. who operate in the field of manufacturing and trading of furniture. The purpose of this study is to provide a clear picture of the distribution of the Wood Industry in Albania and the classification of entities as a whole according to the activity they exercise, employment of wood processing engineers, needs for

engineers and the university training the latter should have.

A significant proportion of the surveyed entities, for different reasons, have no profile engineers employed. In many cities (especially in the north and south of Albania), little activity takes place. This is indicated by the number of employees (table 1) as well as by the technology, machinery, premises used, etc. Lack of investment in machinery, lines and staff, means a level which is not very high.

In large cities the situation is different and many businesses run this activity. Businesses are more developed and have a more sustainable manufacturing and trade activity. The greatest number of them is focused in Tirana wherein operate 120 manufacturing entities with approximately 1200 employees and are located mainly in the outskirts of the city. Another city having an widespread activity of wood processing subjects is Fushe-Kruja. Then, other cities include Durres, Shkodra, Elbasan, Fier, Vlora, etc.

II. METHODOLOGY

The methodology followed for the implementation of this study is:

Identification of entities operating in the wood processing field in Albania.

Development of necessary questionnaires, through which, the respondents give their assessment regarding the curriculum.

Direct on site contacting of the respondents at the manufacturing entities and filling in questionnaires.

Analysis of data

III. COLLECTION AND ANALYSIS OF DATA

After on-site verification and the data collected, it turns out that:

At the national level, over 800 entities with around 9,000 employees run their activity in the field of manufacturing and trading of furniture. In Albania, the wood processing entities range from small craftshops (individual enterprises), carpentry (self-employed individuals) to family businesses, in shops which sell only, to those who have strong production units. The largest number consist of "Custom Made Furniture", well managed businesses with 2-5 employees.

a) *Manufacturing Activity of Wood Processing Entities.*

To create a clearer picture, the surveyed entities were grouped according to their activity:

- Entities working with massive wood

- Entities working with chipboard and MDF (Medium Density Fiberboard)
- Entities working with wood and tiles
- Entities working with upholstery etc.

Table 1 reflects a summary of the activity of the entities.

Table 1. Manufacturing activity of wood processing entities

No.	Manufacturing activity of the Entity	Number of entities by activity
1	Working with chipboard and MDF tiles (semi-finished)	43
2	Working with chipboard, MDF and massive wood	45
3	Working with massive wood	22
4	Custom work (diverse)	46
5	Different furniture and UPHOLSTERY	54
6	Use and processing of timber	6
7	Manufacturing and trade of various furniture	30
8	Various services	4
	TOTAL	250

As shown in the table above, most of the wood processing industry in Albania comprises manufacturing entities that work with wood-based tiles (semi-finished). Then there are entities that perform diverse works, including the upholstery. A large number is comprised of those entities working with massive wood and entities that produce and trade in furniture.

b) Cities Where Surveys are Conducted

In proportion to the number of businesses in each city were also conducted surveys necessary to achieve the goals of the study. Table 2 contains the cities where surveys were conducted, the number of surveys carried out, the employees and the needs for wood processing engineers.

Table 2. Distribution of surveyed entities

No.	City	Number of survey	Total employed	Specialists Workers	Emloed Engineers	Needs for Engineers
1	B.Curri	1	4	4	0	0
2	Pukë	1	5	5	0	1
3	F.Arrëz	1	3	3	0	0
4	Has	1	4	4	0	1
5	Kukës	5	26	26	0	3
6	Shkodër	9	124	123	1	2
7	Koplik	2	12	12	0	1
8	Lezhë	7	82	82	1	4
9	Rrëshen	3	20	20	0	0
10	Peshkopi	4	18	18	0	2
11	Burrë	5	30	29	1	1
12	Laç	1	3	3	0	0
13	F.Krujë	29	321	317	4	9
14	Vorë	2	14	14	0	1
15	Krujë	7	85	84	1	4
16	Tiranë	59	786	749	37	19
17	Kamëz	6	42	39	3	3
18	Durrës	8	105	102	3	1
19	Shkozë	4	86	84	2	1
20	Shijak	2	14	14	0	0
21	Sukth	2	16	15	1	1
22	Kavajë	5	62	62	0	2
23	Lushnjë	8	67	67	0	2

24	Divjakë	4	20	20	0	1
25	Ballsh	1	6	6	0	1
26	Patos	1	5	5	0	0
27	Fier	9	99	97	2	1
28	Elbasan	14	187	185	2	3
29	Berat	8	75	73	2	3
30	Memaliaj	1	3	3	0	0
31	Tepelenë	1	3	3	0	1
32	Vlorë	7	82	81	1	3
33	Gramsh	2	57	56	1	1
34	Përrenjas	1	3	3	0	1
35	Pogradec	3	28	28	0	2
36	Librazhd	3	56	55	1	0
37	Çorovodë	1	20	19	1	1
38	Korçë	7	52	52	0	2
39	Ersekë	5	34	34	0	1
40	Përmet	2	7	7	0	0
41	Gjirokastër	3	54	54	0	2
42	Ksamil	1	4	4	0	0
43	Sarandë	4	42	41	1	2
	TOTAL	250	2766	2701	65	83

Based on the survey data (Table 2) it turns out that the surveyed businesses have hired about 2800 employees. The majority are highly qualified specialists, artisans, and aid workers. A number of about 200 employees are of higher education, of whom only at the surveyed entities 65 of them are Wood Processing engineers.

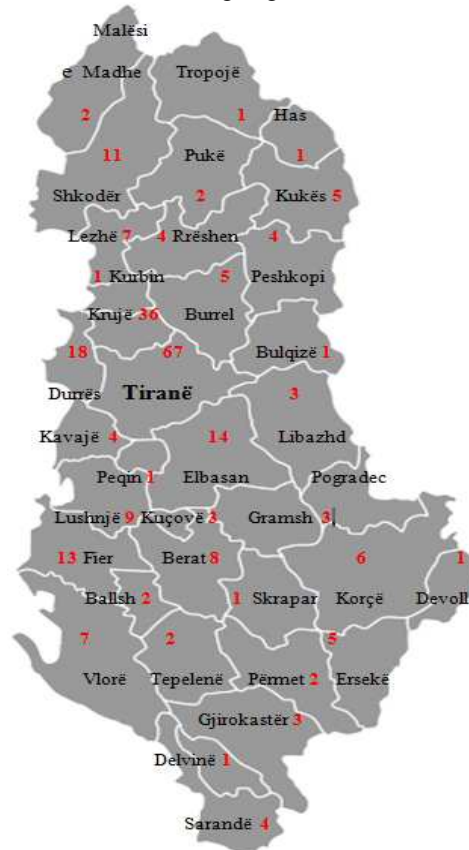


Fig. 1. Distribution of surveyed entities

• Distribution of Wood Processing Engineers

As for the engineers; they are employed (entrepreneur or management positions), mainly in large businesses. Resulting from the survey, 83 businesses have expressed their need for wood processing engineers (Table 1). Below

(Figure 2), on the side of a map there are shown the businesses employing wood processing engineers, in each city. As shown in this map, most of the engineers employed are in Tirana and in major cities. In most of the territory there are no employed engineers. Considering that some businesses have more than one employed engineer, it appears that about 75% of them do not have any Wood Processing engineer.



Fig. 2. Distribution of Wood Processing engineers

• *The Need for Engineers and the Assessment of the Curriculum*

Considering the needs of businesses for Wood Processing engineers and based on the surveys conducted, some conclusion is reached. The main reasons for having no Wood Processing engineers are economic and organizational.

1. Economic – businesses’ inability to pay the engineer.
2. Organizational - small businesses with few employees and with standard products.

A good part of businesses are reluctant to hire engineers even when they need them, and express with reservations about their education.

This problem should be sought at its source, at the Faculty, where it is studied for years and finally, the graduate student, already an engineer, probably has not been appropriately trained to deal with practical market requirements. Perhaps this is the main reason why we often face situations where graduates do not find themselves. They are offered to work in inappropriate working positions, where to be practiced for a long time until they are trained in their profession of the engineer.

For this, it was required the initiation of the survey and

an estimate for some other elements of university training, other than the theoretical ones.

• *Evaluation of Some Elements of University Training as Perceived by the Respondents*

In the Wood Industry Department at the Faculty of Forest Sciences in addition to subjects/teaching disciplines, dealing with theoretical aspect, the curriculum includes as follows:

- Exercises, Course Assignments and Projects
- Practical Classes and Field Excursions
- Professional Practice
- Diploma Thesis

The above elements are considered as components of university training (engineering) and constitute an important part of the curriculum in Bachelor and Master levels. Given this, we asked the respondents an opinion on the importance of each of these components in professional and scientific training of Wood Processing engineers¹.

Table 3. Respondents’ evaluation on the elements of university training (engineering)

ESTIMATION	Course Exercises, Assignments and Projects	Practical Courses and Field Excursions	Professional Practice	Diploma Thesis
Assessment	109	120	191	112
Paramount	105	87	40	94
Important	27	35	16	34
Less important	9	8	3	10
TOTAL	250	250	250	250

Considering that; **paramount** and **important** are formulations close to each other, we have grouped them both in a single response. In this way we get a more concrete feedback on the elements of university training (engineering) which are quoted more.

Following this logic, it seems that the respondents highly value the Professional Practice (231 of 250 respondents or 92.4%). Exercises, Course Assignments and Projects are quoted from important to paramount by 214 respondents.

Practical Classes/Field Excursions and Diploma Theses are considered as important elements of university/engineering training by 80% of the respondents.

IV. CONCLUSIONS AND RECOMMENDATIONS

- Wood Industry in Albania is organized in manufacturing and trading entities of furniture and other wooden products that perform this activity across the country:
 - The event takes place mainly in big cities.
 - The majority of them work with semi-finished material, chipboard and MDF tiles.

¹ Engineering Education Elements and their Assessment by the Labor Marke, International Journal of Current Engineering and Technology, E-ISSN 2277 – 4106, P-ISSN 2347 – 5161, Accepted 02 Aug 2015, Available online 06 Aug 2015, Vol.5, No.4 (Aug 2015), pg 2732-2737.

- In the North and South of Albania takes place a little and outdated activity.
- In 250 manufacturing entities surveyed, there were employed 65 wood processing engineers, while the needs are for 3-5% more:
- Most of the businesses surveyed have no wood processing engineers.
- Respondents have no economic opportunities but also, they are reluctant to employ Wood Processing engineers.
- Wood processing engineers are mainly employed in large businesses and especially in Tirana.
- For other university training components, we emphasize that:
 - Professional Practice of students is evaluated from important to paramount by 92% of the respondents.
 - Exercises, Course Assignments and Projects are quoted from important to paramount by 82% of them.
 - Practical Classes/Field Excursions and Diploma Thesis are also evaluated by over 80% of the respondents.
 - The curriculum should be flexible and resistant to time being adapted to technology developments.
 - There should be applied long-term agreements with developed businesses, for the development of Professional Practice and scientific experimentation.



Leonidha Peri received the PhD degree in Department of Forestry from the Faculty of Forestry Sciences, Agricultural University of Tirana, Albania in 2008. Currently working as Assoc. Prof. in Department of Forestry, Faculty of Forestry Sciences, Tirana, Albania, covering teaching and research activities in the fields of forest economics, forest products markets and marketing, natural resources economics and forest policy.

REFERENCE

- [1] National consultation with international participation. Academic restructuring and institutional assessment of Tirana Agricultural University. Tirana 2003.
- [2] The strategic plan of Tirana Agricultural University. Tirana 2005.
- [3] Engineering Education Elements and their Assessment by the Labor Marke, Ramadan Topuzi*, Arben Bejtja† and Leonidha Peri, International Journal of Current Engineering and Technology, E-ISSN 2277 – 4106, P-ISSN 2347 – 5161, Accepted 02 Aug 2015, Available online 06 Aug 2015, Vol.5, No.4 (Aug 2015), pg 2732-2737.
- [4] Assessment for wood processing engineers in accordance with the request of manufacturing entities in Albania. Topuzi R Bejtja A. International Conference on Civil Engineering, Infrastructure and Environment, Nov 2015, pg. 135-143.
- [5] Evaluation of the curriculum of the Department of Wood Industry in view of wood processing engineers who perform this activity. Topuzi R Bejtja A, Peri L. Online International Interdisciplinary Research Journal, {Bi-Monthly}, ISSN 2249-9598, Volume-V, Nov 2015 Special Issue, pg. 51-60.

AUTHORS' PROFILE



Ramadan Topuzi received the MSc. degree in Department of Wood Industry, Faculty of Forestry Sciences, Agricultural University of Tirana, Albania in 2010. Currently working as Wood Processing Engineer. Currently, PhD. Cand. in the Faculty of Forestry Sciences.



Arben Bejtja received the PhD degree in Department of Wood Industry from Agricultural University of Tirana, Albania in 1995. Currently working as Assoc. Prof. in Department of Wood Industry in Faculty of Forestry Sciences.