

Labour Market and Skills Needs Analysis

Perspective for the future

Labour Market Needs Analysis in Kosovo

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Labour Market and Skills Needs Analysis

ALLED II – “Aligning Education and Training with Labour Market Needs” Programme, funded by the European Union (EU) and the Austrian Development Cooperation (ADC), implemented by the Austrian Development Agency (ADA)

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Table of Abbreviations and Acronyms

ADA	Austrian Development Agency
ALLED	Aligning Education With Labor Market Needs
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
GoK	Government of Kosovo
HE	Higher Education
ICT	Information, Communications Technologies
ISCO	International standard classification of occupations
KAS	Kosovo Agency of Statistics
EARK	Employment Agency of the Republic of Kosovo
LFS	Labour Force Survey
MSMEs	Micro and Small and Medium Enterprises
NACE	Nomenclature statistique des activités économiques dans la Communauté européenne” (NACE Rev. 2) which stands for European Classification of Economic Activities
NDS	National Development Strategy
NEET	Not in Education, Employment, or Training
SBA	Small Business Act
SMEs	Small and Medium Enterprises
UNDP	United Nations Development Programme
VET	Vocational Education and Training
VTCs	Vocational Training Centers

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1. Introduction

This study focuses on a topic of critical concern for policy-makers in recent years - skill mismatch in Kosovo. Various strategic economic development documents and reports point out the need for qualified labour to support economic growth in Kosovo. The National Development Strategy (NDS) 2016-2021 emphasises that matching the skills acquired in education to those required by the labour market facilitate employment generation and foster economic growth (GoK 2016)¹. This is confirmed by a recent Economic Reform Programme of Kosovo (2019-2021)², which identified the mismatch of education (both graduate and vocational) and labour market to be the key growth constraints which reduces employment and innovation (GoK 2019). EU (2019)³ report, too, suggests that Kosovo has made little progress on improving the quality of education and addressing skills gaps in the labour market. Thus, there is an emerging need to identify the labour market needs for skilled employees.

The skills gap has consequences not only for private domestic companies, but for the foreign direct investment as well. Recent slowdown of FDI in Kosovo is linked to the general perception of the situation in the country, the issues with the electricity supply for manufacturing, bureaucracy and law enforcement in maintaining the business contracts etc., but to the great extent is influenced by the availability and supply of qualified labour.⁴ The importance of skills for attracting FDI can influence also creation of backward links to local suppliers which in turn need to have access to skilled workforce to meet quality standards to FDI.

Apparently, the policy initiatives to reduce the skills gap are very important to boost Kosovo's competitiveness, in the light of the rapid changes in the labour market, globalization, labor migration, and demographic changes. In Kosovo, as in other countries it is now a global priority to streamline qualifications and occupational skills to ensure better employment outcomes and employability for workers and increased productivity and competitiveness of the economy (ILO 2018)⁵

To address this gap, the general aim of this report is to assess the current labour market skills mismatch in Kosovo. It begins with broad analysis of the demographic, economic and labour market background to facilitate selection of the priority economic sectors with higher potential for job creation. With this in mind the broader analysis of all economic sectors narrowed down to deeper investigation of four proposed sectors for intervention: agriculture, food processing, and industry/manufacturing, and energy and electricity supply. The fourth potential sector, energy and electricity supply, came up during the field interviews and meetings with stakeholders as well as a priority of

1. NATIONAL DEVELOPMENT STRATEGY 2016 – 2021, (http://www.kryeministri-ks.net/repository/docs/National_Development_Strategy_2016-2021_ENG.pdf)

2. *Economic Reform Programme 2019-2021*, (<https://mf.rks-gov.net/desk/inc/media/4FC-9C8D0-8ADF-4DD1-97B8-BB2DD36150C3.pdf>)

3. *EU Progress report: Kosovo* 2019 Report* (<https://ec.europa.eu/neighbourhood-enlargement/sites/near/files/20190529-kosovo-report.pdf>)

4. *Interviews with Business Associations*

5. https://www.ilo.org/wcmsp5/groups/public/---dgreports/---stat/documents/meetingdocument/wcms_636052.pdf

GoK, reflected in the strategic development document. The report is based on primary research carried out during June and July in 2019 that assessed the current labour market needs of private sector, and identified the various skills mismatches.

The research involved three components, including (i) Desk research and analysis of secondary sources, (ii) qualitative field research based on stakeholder interviews and situational/stakeholder analysis, (iii) collection of company level data through questionnaire surveys and analysis of the survey data used to identify the labour market skills needs in selected sectors from the desk research and analysis. The research gives us insights into the skills issues companies face and the action they are taking to address them, providing a unique skills perspective alongside other labour market information based on secondary data research. As acknowledged by ALLED 1 project there is a need for skills needs forecast to form the basis for better planning in educational and training institutions (ALLED 2015). The forecasts provided in this research allow policy-makers to take decisions in time.

This report is structured as follows. Section 2 provides an overview of the methodology that is deployed to carry out the study. Three main components are detailed: interviews, analysis of administrative data and country reports analysis, employer's survey. Section 3 presents the overview of demographic, economic and labour market trends in Kosovo. Section 4 discusses the qualitative interviews and analysis and selection of priority sectors. Section 5 offers employers' survey data analysis. Finally, section 6 draws the conclusions and sketches out recommendations and the next steps.

2. Methodology

Implementation approach is based upon three components, including **(i) Desk research and analysis of secondary sources**, **(ii) qualitative field research** based on stakeholder interviews and situational/stakeholder analysis, **(iii) collection of company level data** through questionnaire surveys and analysis of the survey data used to identify the labour market skills needs in selected sectors.

2.1. Desk research

The desk research involved main activities, including literature review, desk review of secondary data including project documents, assessments, evaluations and previous labour market surveys and situational analysis based on quantitative information. Firstly, we carried out a literature review on the labour market trends and skills mismatch, but with a specific focus on identification of priority sectors. The review of national strategic documents such as National Development Strategy, Economic Reform Agenda, competitiveness and sectorial strategy documents (ICT, Wood Processing sector for example), Innovation and Entrepreneurship Strategy of Kosovo, Smart Specialisation Framework, KESP, EU Progress report and other labour market studies has been consulted to provide an overview of the labour market trends (see Annex 1 for the reference list). The research team expanded the scope of analysis with other studies and surveys conducted by various institutions/organisations in the area of labour market skills assessment. These important studies were carefully reviewed in to inform the analytical and methodological approach of the current study and ensure that the most relevant methodology is used to investigate the labour market and skills needs analysis in Kosovo.

Secondly, a situational analysis is used as an after-desk research as a first step in the process because one needs to evaluate the current situation and how and recommendations for the future can be made. The situational analysis provided quantitative information about recent trends in the Kosovo labour market. The secondary data and existing surveys is used to produce new information on current labour market trends using demographic framework; economic activity indicators (current Labour Market Survey situation and unemployment); macroeconomic indicators. The existing surveys and data sources are used to estimate the future labour market skills needs forecast, including disaggregated data for gender and marginalized group such as people with disabilities and minority groups. The special attention is paid on producing quantitative information for economic activity indicators or marginalized groups (e.g. for women and people with disabilities, minorities) as well as barriers they face to access labour market.

The literature review, desk research and quantitative analysis of existing data sources contributed to identification of the priority sectors as drivers of economic development and employment generation and future competence/skills forecast. In addition, cross cutting issues – gender, social inclusion and environment has been included. The analysis also contributed to elaborate labour market developments within a context of time, considering three distinct time horizons, short-term (next 1-2 years), mid-term (3-5 years in foreseeable future) and long-term (5+ years)”. Interview notes were written up in a database of qualitative research materials. The database is analysed using the SPSS/STATA or Excel as deemed appropriate which enabled research team to produce cross-sectional tables for specific sectors and groups.

2.2. Interviews with key stakeholders

In addition to the secondary data analysis and review of key strategic development documents, the fieldwork was carried out in the second phase of the project. More specifically, it involved semi-structured interviews with key stakeholders in each priority sector. Building on previous ALLED 1 project which identified agriculture, food processing and mechatronics as priority sectors we have conducted additional analysis and interviews to validate the importance of these sectors and inclusion of additional sector. In doing so, the team identified stakeholders at all levels in government, agencies, and other key stakeholders such as, but not limited to, private sector employers, business associations, previous graduates, VET schools, VTCs, HEIs providers, relevant government ministries and agencies. A special focus of the interviews was on understanding of the skills needed in the labour market, with special interest in the analysis of current labour market trends and future dynamics in order to come up with future labour market prospects. The interviews also enabled the research team to fill any gaps in the review of the literature carried out in the desk research component of the research activity.

Another group of stakeholders included private employers, including owners or managers of a sample of key employers in selected priority sectors. We also carried out a focus group of owners/managers within each priority sector identified. The aim of this set of interviews was to gain a qualitative understanding of the current and future labour market trends. Interviews with companies specifically explored the expansion plans of the companies and their future needs for specific skills and competencies. The same approach is used with the group of previous graduates in the selected sectors, enabling the research team to come up with the priority sectors. Interview with previous

graduates enabled to assess the relevance of gaining skills/competences related to their actual employment.

2.3. Employers' survey

Based on the desk research and situational analysis as well as the interviews with key stakeholders, the priority sectors were chosen for further investigation. The previous ALLED I report has identified the mechatronics, agriculture and food processing as priority sectors. The proposed Labour Market Survey included these sectors and add two other sectors based on the analysis. Data gathered from companies in those selected sectors through a standard questionnaire delivered to senior company managers or owners in the form of face-to-face meetings based on pen and paper. The sample is chosen randomly from the register of the Agency of Business Registration in these sectors using the NACE Rev. 2 sectors for identification of priority sectors selected in the situational analysis. The sampling framework includes the total number of the companies in specific sector, which has been used to draw random sampling. The total sample consisted of 300 companies. Then, outlines selected ISCO-08 occupational groups for each industry enabled to conduct analysis based on occupations and qualifications.⁶ As suggested by ADA (2018) User's guide for implementing the Employers' competence survey, for the team was possible to know where particular occupations work only at the level of minor occupational groups of ISCO classification which is the level of reporting in the Labour force survey. In line with this manual, therefore, we managed to get information about a group occupation in the minority group. When we choose the sample, we have to make sure that our firms do employ our occupation of interest and this was possible by consulting the Tax Authorities and employers' associations. The proposed sample size was up to 100 firms for each of priority sectors depending on the sampling frame.

Questionnaires gathered data on five topics as follows.

- i. The characteristics of firm size, age, economic activity, sales, education and training including information on the selected occupation (number of employees and distribution by gender, age and education, vulnerable groups).
- ii. Information related to the training and education, employers' practices in reviewing the skills and training needs of their employees.
- iii. The occupational-specific characteristic skills according to occupation. In line with literature, we included use open-ended questions, interviewees to list up to five tasks and corresponding skills to achieve the expected performance results.
- iv. Employers' views and assessment of whether the selected skills are to be acquired at school or on-the-job and their future significance. In addition, employers provided the information and their

6. *An occupations is one of more similar jobs which define a group of tasks that can be implemented by a single worker. In the text we will use the term job rather than occupation for simplicities sake. When we talk about an occupation we are thinking of a person who has this occupation, when we talk about a job, we think about a workplace in a firm (see ADA, p.4) User's guide for implementing the Employers' competence survey <http://www.alledkosovo.com/publications/download/3-Udh%C3%ABzues-dhe-sig-urimi-i-cil%C3%ABsis%C3%AB/Udhezues-per-zbatimin-e-anketes-me-punedhenes.pdf>*

- expectations on emerging skills needs and the measures employed by businesses to address them were obtained.
- v. Future expansion plans of the business in short-term (next 1-2 years), mid-term (3-5 years) and long-term (5+ years) in relation to the specific skills and occupations such as businesses on major changes, innovations and investment and the impact on the corresponding occupational group.

3. Economic and labour market background

In this section, we set out our understanding of the demographic characteristics, current macroeconomic framework, labour market trends and sectors with higher contribution to employment and potential for future economic growth. This enables to set the scene for better understating of the labour market needs and designing policy measures to address these needs if fundamental to boost growth of private sector.

3.1. Overall economic development

Kosovo's per capita GDP is the lowest in the region, with EUR 3,566 in nominal terms in 2017, which is about 26.3% of the EU average (the regional average is EUR 4,853) (EU 2019). The economic activity has been growing steadily since 2015, but it is constrained by a narrow production base and significant under-utilisation of labour. Real GDP growth reached 3.9% in 2018 (Central Bank of Kosovo, 2019). In recent years, the economy has been driven by public investment in infrastructure and private consumption (the latter financed by large remittances from abroad and robust wage and credit growth).

In terms of private sector, Kosovo has significantly improved its business regulations as evidenced by continued to improve the ease of doing business, moving closer to the frontier of global best practices in business regulation, (World Bank Doing Business 2019). Doing Business Report indicates that Kosovo has improved its score from 73.71 to 74.15 points, where a higher score indicates a more efficient business environment and stronger legal institutions. However, this access to qualified and skilled labor remains and persistent obstacle to growth of private sector.

Various strategic economic development documents point out the need for qualified labor to support economic growth in Kosovo. For example, the National Development Strategy (NDS) 2016-2021⁷ emphasises that matching the skills acquired in education to those required by the labour market facilitate employment generation and foster economic growth (GoK 2016). This is confirmed by a recent Economic Reform Programme of Kosovo (2019-2021), which identified the mismatch of education (both graduate and vocational) and labour market to be the key growth constraints which reduces employment and innovation (GoK 2019). Based on EU reports, Kosovo has made little progress on improving the quality of education and addressing skills gaps in the labour market.

7. NATIONAL DEVELOPMENT STRATEGY 2016 – 2021, (http://www.kryeministri-ks.net/repository/docs/National_Development_Strategy_2016-2021_ENG.pdf)

Studies at the firm level too, found that many firms in Kosovo reported problems hiring new employees, largely because of insufficient experience or skills (Cojocar 2017). In turn, the low quality of education/training and skill mismatches prevent the inactive population from obtaining and retaining good jobs acting as key constraining barriers to economic growth. In addition, the quality of labour, according to SBA Policy Index 2016, Kosovo needs to make a more sustained effort to build knowledge and skills among SMEs which keen to trade with the EU. Quality assurance of vocational education and training also needs further development to match the needs of SMEs in building competitiveness and export growth (OECD/EU/EBRD/ETF/SEECEL 2019). This is particularly important considering that the private sector consists entirely of SMEs (Krasniqi 2012) which particularly find it hard to access education and skills development programmes because of the cost (OECD 2016).

Beside the high demand and struggles of private companies for qualified labor, Kosovo still faces high unemployment rates. The Kosovo Agency of Statistics (KAS)⁸ data based on the results of the Labour Force Survey (LFS) in 2018 the unemployment rate is 29.6%. Moreover, the KAS shows that within the working age population, the rate of participation in the workforce is 40.9%, while the rate of employment in the Labor Force Survey in 2018 is 28.8%. Further the KAS (2019) evidences that two-thirds of the population in Kosovo is a working age population (15-64 years). The highest employment rate is for males (45.3%), while female employment is 12.3%. Females are employed mainly in the sectors of education, trade and health care, by 52.9%, while males are mainly employed in the sectors of trade, construction and manufacturing, by 43.0%.

In addition, KAS (2019) finds that promising economic sectors that continue to employ more people are: trade by 17.0%; construction by 11.9%; education by 11.3%; and manufacturing by 10.3%. Meanwhile, other sectors participate with the lowest percentage in employment. On the sectoral contribution to the economy, the EU progress reports also point to the need for future interventions. According to the EU Progress report (2019) there was no progress in addressing the structural weaknesses of Kosovo's private sector, which continues to be fragmented and unable to improve its efficiency. There have been no significant structural changes in Kosovo's economy since 2008.

Kosovo is the laggard country from Western Balkans in terms of competitiveness. Several obstacles in this regard include general business environment, low investment of SMEs' and limited supply base and limited access to global value chain. The country has problems in terms of available skilled labour. Low competitiveness as identified by indicators in the Global competitiveness report, slow implementation of SBA compared to other WB countries – SBA⁹ which should be more seriously approached. Lack of information about the EU markets and need for networking, standardization, licensing and accreditation. Kosovo has set following priorities to improve competitiveness of the country: improve skills of labour through training programs and education; improve of business environment and SBA scores for Kosovo; need to create regional linkages in order to promote bigger supply base in WB and then become more competitive in terms of big buyers in EU; strengthen the Innovation by adopting innovation strategy and establish Innovation Fund; design of financing needs

8. The Kosovo Agency of Statistics (2019) *The Labour Force Survey results 2018*, (accessed on 30 June 2019 at <http://ask.rks-gov.net/en/kosovo-agency-of-statistics/add-news/labour-force-survey-in-kosovo-2018>)

9. OECD (2019) *SME Policy Index: Western Balkans and Turkey 2019*
Assessing the Implementation of the Small Business Act for Europe, Paris: OECD.

for SME innovation. Need for increasing capacities (laboratories) to licence and issue quality standards certificates for products aimed EU Markets which is behind neighbouring and other countries in Balkans. In terms of sectors, Kosovo has potential mainly in ICT and high value-added services, food processing, manufacturing and wood processing and tourism.

Demographic and labour market indicators	2011	2021	2031	2041	2051	% change 2011-2031	% change 2031-2051
Total population	1,780,021	1,883,805	1,931,957	1,923,157	1,859,447	8.5	-3.8
Men	896,426	952,170	979,886	975,977	943,659	9.3	-3.7
Woman	883,595	931,635	952,071	947,198	915,788	7.8	-3.8
6 year old males	16,280	12,991	12,512	10,270	8,394	-23.2	-32.9
15 years old male	18,160	15,508	12,419	11,856	9,605	-31.6	-22.7
18 years old male	18,690	17,592	12,553	12,138	10,246	-32.8	-18.4
6 years old female	15,324	12,553	12,020	9,850	8,063	-21.6	-32.9
15 years old females	17,153	14,477	11,994	11,407	9,233	-30.1	-23.0
18 years old females	17,469	15,797	12,111	11,730	9,895	-35.2	-15.6
Working age male population 15-64	582,887	663,053	675,475	659,363	616,405	15.9	-8.7
Working age female population 15-64	579,157	638,503	633,077	602,652	561,409	9.3	-11.3
Active male population (activity rates of men 2013)	398,870	453,727	462,215	451,202	421,806	15.9	-8.7
Activity female population (activity rate 2013)	134,828	148,463	147,380	140,297	130,696	9.3	-11.3
Employment men (male employment rate 2013)	295,815	336,499	321,287	305,846	312,826	8.6	-2.6
Employment woman (female employment rate 2013)	82,993	91,498	90,720	86,360	80,450	9.3	-11.3
Total employment	378,808	427,997	412,007	392,206	393,276	8.8	-4.6
Total working age population	1,162,044	1,301,556	1,308,534	1,262,015	1,177,814	12.6	-10.0
Target employment level total (EU target employment rate 75 %)	871,533	976,167	981,401	946,511	883,361		
Gap between target and estimates	492,725	548,170	569,394	554,305	490,085		

Table 1. Population estimates from 2011-2051, by economic activity and gender

Source: Kosovo population projection 2011-2061, KAS, based on ALLED (2015), Labour Market Needs Assessment.

3.2. Demographic overview

The demographic framework is important for assessing the potential labour market trends over time. The demographic indicators are directly linked with labour market indicators, hence the overview of demographic picture of Kosovo is important to set the scene for labour market analysis (see Annex 4 for detailed information).

Demographic framework influence labour market indicators over the time. Moreover, fertility rate, mortality rate, migration and those who enter the education system indicate the active population. Table 1 shows the projections for the population from 2011 till 2051. The Kosovo population is estimated to increase in the 10 years period in the range of 5.8 % while till 2051 for 4.5 %. Standing on these estimates, population will decrease from 2031 mainly within the young age groups. Children that entered the school in 2011 were 16,280, while is planned to decline for 20.1 % by 2021 while in 2051 is planned that only 8,934 boys will enter the school (decrease of 48.4 %). Moreover, boys that will enter a secondary school will also experience a decline of 14.6 %. However, males and females who enter secondary school will decline within 48 and 43 %. In general, the population of Kosovo will experience a drastic change in its structure. In the next 40 following years estimation shows that there will be a decline in the birth rate which will influence enrolment in the education system. Consequently, will decline working age population that a key component of the labor supplies.

3.3. Labour market

3.3.1. Labour market indicators

Kosovo is the youngest country in Europe with the youngest population. However, despite work-force potential, Kosovo's economic growth is unable to generate jobs for entire active labour force that stands as unutilized recourse of our economy. Based on the official estimates, population of the Kosovo in 2017 was 1,793,467 with males in the range of 905,364 and females 888,103. Elderly people above 65 are estimated to be 209,785 where male is 100,264 and female 109,521. The number of employed within the age range between 15 and 64 are 341,610 and unemployed 142,550. However, youth employment in the age within 15 and 24 is 33,113 and unemployment in the identical age rate is 40,447 (KAS 2018).

Table 2 shows indicators concerning the labour for the Kosovo economy based on the Labor Market Survey conducted in 2018. Unemployment rate among young people remain still unsolved issue for the Kosovo economy. Inactivity rate among females is an additional concern that needs to be addressed not only in terms of policy arrangement but also to be studied in our domestic social context. Employment rate for males was 44.8% while for females 12%.

Table 2: Labour market indicators

Key labour market indicators (%)	Male	Female	Total
Rate of participation in the labour force	63,1	17,4	40,4
Inactivity rate	36,9	82,6	59,6
Employment rate	44,8	12,0	28,5
Unemployment rate	29,1	30,6	29,4
Unemployment rate among young people (15-24 years of age)	51,8	63,2	55,0
Percentage of young people NEET youth population (15-24 years age)	30,7	29,6	30,2
Percentage of unstable employment to total employment	19,4	16,7	18,8

Source: Kosovo Statistical Agency based on the Labor Market Survey 2018.

3.3.2. Employment by age group and educational level

It is well-established fact that individuals with higher education enjoy higher employment rates. Moreover, educational level is one of the crucial inputs that increase productivity level. Graduates that enter the labour force in the last decades has increased rapidly and raised the number of skilled workers (OECD, 2006). According to the data presented in table 3, the highest employment rate consists within age group between 35 and 44 years (39.0%) while the lowest one among youth among 15 and 24 years (9.7%). The employment rate for female group from 15 to 64 years was 12% while among males in the same age group was 44.8%. The highest employment rate stands on the age cohort 35 to 44 (66.2%), followed from the age group within 45 to 54 (65.4%) and the young people with only 14.1%.

Table 3. Number of employees and employment group by gender and age group

Kosovo (Employment in thousand)	Male	Female	Total
15-24	25,6	7,6	33,1
25-34	62,1	18,9	81,0
35-44	68,5	19,2	87,6
45-54	72,9	15,5	88,5
55-64	40,7	10,6	51,4
15-64	269,8	71,8	341,6
Employment to population ratio (%)			
15-24	14,1	4,7	9,7
25-34	48,7	16,4	33,4
35-44	65,4	16,0	39,0
45-54	66,2	13,3	39,0
55-64	51,6	12,7	31,6
15-64	44,8	12,0	28,5

Source: Kosovo Statistical Agency based on the Labor Market Survey 2018.

Table 4 shows employment by the education level on absolute numbers and percentage level. Results from male and female group indicate that education level is associated with employment rate. The outcomes stand in line with the theoretical expectations that educational increase the possibility of finding a job. The lowest ability to find a job is imposed on people with no formal education while the highest one stands on the people with tertiary education.

Table 4. Employment by education level

Employment (in thousands)	Male	Female	Total
No formal education	0,3	0,4	0,7
Primary	34,9	9,1	44,0
Secondary educational, vocational	94,3	18,2	112,5
Secondary education, gymnasium	76,2	9,4	85,6
Tertiary	64,2	34,6	98,8
Total	269,8	71,8	341,6

Employment rate %

No formal education	5,9	2,5	3,3
Primary	20,6	3,1	9,5
Secondary education, vocational	48,0	14,4	34,9
Secondary education, gymnasium	51,9	9,8	35,2
Tertiary	75,6	54,2	66,4
Total	44,8	12,0	28,5

Source: Kosovo Statistical Agency based on the Labor Market Survey 2018.

Table 5 represents spread of the employees among diverse type of employers, such as: public sector, state-owned enterprises, private companies, individual private. Based on the Table 5, job requirements are higher for the government positions where over half of employees have completed higher education. Private companies employ almost 29 % of people with secondary education. However, also state-owned companies recruit almost 60 % of people with tertiary education. The most important finding is that 43% of employees with vocational education are employed by the private sector, pointing out the needs of private sector for this type of qualifications for growth.

Table 5. Higher level of education by type of employee (15-64)

Kosovo	Public sector, government	State-owned enterprises	Private company	Individual, private
Highest educational level %				
No formal education	0,2	0,0	0,1	0,0
Primary	5,0	4,9	11,1	52,8
Secondary education, vocational	16,6	20,3	43,0	8,9
Secondary education	19,0	14,6	29,1	24,5
Tertiary	59,2	60,2	16,7	13,9
Total	100	100	100	100

Source: Kosovo Statistical Agency based on the Labour Market Survey 2018.

The results of the second quarter of 2018 from the KAS show that 73.3 % of the employed persons were employees. In addition, 7.9 % were self-employed and had other employees, 13.4 % were self-employed without employees while 5.5 % family workers. Moreover, 18.8 % of the employed workers work in the unstable jobs. People in the unstable jobs are self-employed people without employee and employees who work in the family businesses with no payments.

Concerning sectorial composition of the employment activity construction, education and manufacturing contain more than half of the employed people (Table 6). The lowest employment in total stands for the property activities while the maximum employment by activity is concentrated on wholesale retail trade, car and motorcycle repairs.

For purposes of labour market and skills gap analysis it is important to analyse the employment rate by field of study. Referring to the MCC (2017) Kosovo - Labour Force & Time Use Survey it is apparent that respondents who studied services reported employment rates of 66.1%, followed

by engineering at 64.7% and teacher training and education science (61.6%) (Table 7). The most popular field of study, social sciences, reported the fifth lowest employment rate among all fields, while the second most popular field of study, engineering, had the second highest employment rate. The engineering and services professions may be important for future intervention programs to help labour market adjust to the needs of employer.

Table 6. *Employment by sector of activity and gender (in %)*

Kosovo (age 15 and over)	Male	Female	Total
Agriculture, forestry and fishing	3,8	0,8	3,1
Mines and more	1,1	0,1	0,9
Manufacture	10,6	5,5	9,5
Supply of electricity, gas, steam and air conditioning	2,1	0,1	1,7
Water supply, sewerage, waste management	1,6	0,5	1,3
Construction	14,4	1,2	11,6
Wholesale and retail trade, car and motorcycle repairs	16,5	18,0	16,8
Transport and storage	3,8	1,5	3,3
Accommodation and food service activities	7,1	3,3	6,3
Information and communication	4,0	3,4	3,9
Financial and insurance activities	1,8	4,3	2,3
Properties activities	0,1	0,0	0,1
Professional, scientific and technical activities	1,7	2,5	1,9
Administrative and support service activities	2,9	1,9	2,7
Public administration and defence, compulsory social security	8,1	6,6	7,8
Education	8,9	22,4	11,7
Activities of human health and social work	3,9	12,4	5,7
Arts, entertainment and recreation	1,4	0,5	1,2
other service activities	5,3	5,6	5,4
Household employment activities	0,4	7,2	1,8
Activities of the institutions and extra-territorial organization	0,6	2,3	0,9
Total	100	100	100

Source: Kosovo Statistical Agency based on the Labour Market Survey 2018.

Table 7. Employment Rate (%), by Field of Study

Field of Study	Employment Rate (%)
Services	66.1
Engineering	64.7
Teacher training and education science	61.6
Administrative and clerical	59.6
Crafts and trades	59.2
Agriculture and veterinary	58.5
Life science (including biology and environmental science)	56.9
Computer science	55.2
Humanities, languages and arts	51.9
Law	50.0
Business	47.9
Manufacturing and construction	47.6
Social sciences	46.9
General programs	46.7
Mathematics and statistics	44.8
Health and welfare	43.0
Physical science (including physics, chemistry, and earth science)	39.5
Total Employment Rate (for Individuals with at least upper secondary education)	51.5

Source: MCC Kosovo LFTUS (2017)

Note: Includes only individuals who had completed at least upper secondary education.

3.3.3. Registered unemployment

This section reports data on registered unemployment based on the Kosovo Employment Agency- KEA (2019). The total number of the registered unemployment in 2018 was 95,890. The registered unemployment varies significantly based on the level of qualifications. The total number of registered unemployed as "Unqualified" is 22,003 persons or 22.9% while those registered as primary school level 24,306 or 25.3%, with secondary professional schools is 31,506 persons or 32.9% and gymnasium 6,592 persons or 6.9%, with bachelor 11.2% and master only 0.7%. There is no single person registered as unemployed with PhD.

Table 8. Registered unemployment by qualifications

Qualifications	2018	(%)	Change in 2017	Female	Male
Unqualified	22.003	22.9%	-10.7%	11170	10833
Levels I –IX (Primary school)	24.306	25.3%	1.2%	10646	13660
Secondary professional education	31.506	32.9%	1.1%	11505	20001
Secondary school (gymnasium)	6.592	6.9%	63.5%	3120	3472
Bachelor	10.787	11.2%	13.5%	6720	4067
Master	696	0.7%	34.9%	386	310
PhD	-	-	-	-	-
Total	95890	100.0%	2.2%	43547	52343

Source: Kosovo Employment Agency (2019), Labour and Employment in Kosovo, Research report.

On registered unemployment by occupations, in 2018 the elementary occupations (47.9%) have the highest shares, followed by Craftsmen and similar workers (12%), and technicians and associate professionals (10.7%). However, there was a sharp decrease in 2018 compared to 2017 of registered unemployment for elementary occupation (16.6%).

Table 9. Registered unemployment by occupations

ISCO occupations	2018	%	Change in 2017	Female		Male	
				N	%	N	%
Managers	1.324	1.4%	35.4%	688	1.6	636	1.2
Professionals	9.173	9.6%	40.2%	5586	12.8	3587	6.8
Technicians and associate professionals	10.219	10.7%	27.6%	4256	9.8	5963	11.4
Officers and office assistants	4.975	5.2%	43.6%	2624	6.0	2351	4.5
Service workers and shop sales workers and market	9.378	9.8%	21.4%	5166	11.9	4212	8.0
Skilled workers in agriculture	1.521	1.6%	2.4%	530	1.2	991	1.9
Craftsmen and similar workers	11.543	12.0%	28.1%	2570	5.9	8973	17.2
Operators and assemblers of equipment and machines	1.805	1.9%	16.0%	247	0.6	1558	3
Elementary occupations	45.952	47.9%	-16.6%	21880	50.2	24072	46
Total	95.890	100%	2.2%	43 547	100.0	52 343	100.0

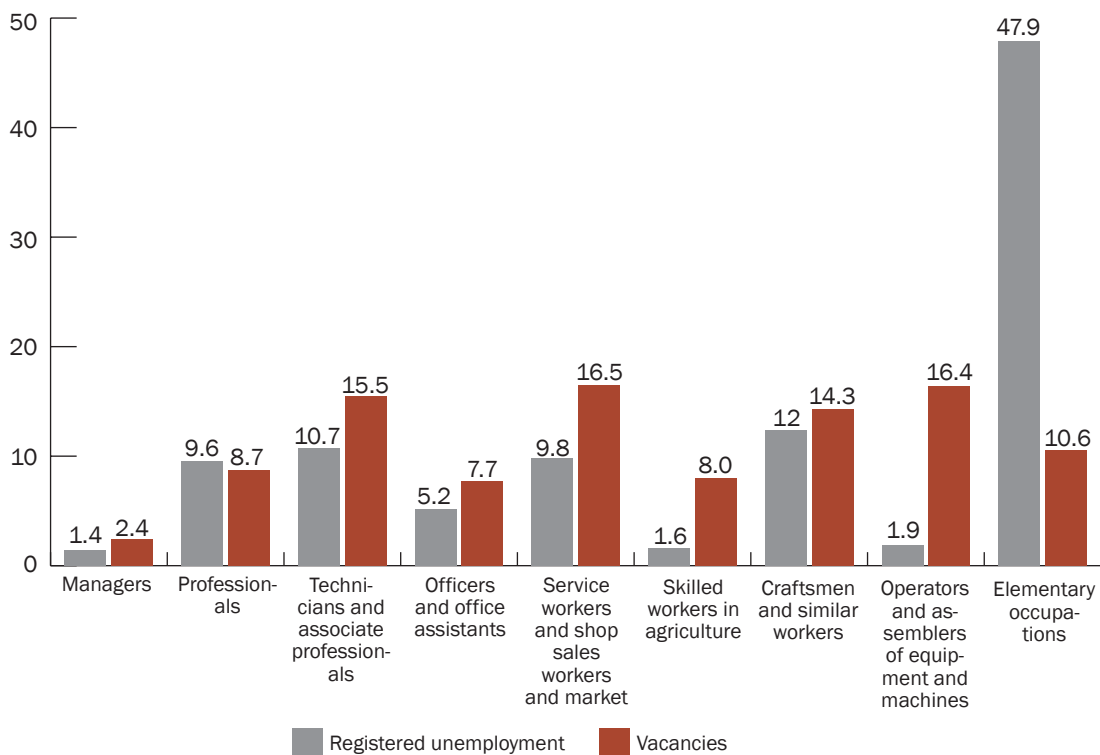
Source: Kosovo Employment Agency (2019), Labour and Employment in Kosovo, Research report.

Gender differences are noted in terms of “Craftsmen and similar workers” with considerably higher share of men (17.2) compared to women (5.9) and ‘technicians and associate professionals, with 11.4% men and 9.8% women.

The distribution of registered unemployment and vacancies based on the occupations is important to investigate the possible mismatch in terms of demand and supply of labour. Based on the Employment Agency data the following figure is compiled to check for mismatch. Leaving aside

elementary occupation, the higher gap is found in “Operators and assemblers of equipment and machines” occupation pointing out the importance of the secondary vocational schools to increase the supply of labour (see Figure 1). In some occupations, this exercise suggests that the unemployment and vacancies are at almost comparable level, suggesting that unregistered unemployment is high but at the same time the number of vacancies is high too. This indicates that there is available workforce, which most likely is not able to meet satisfactory criteria of companies, such as the case with “Technicians and associate professionals” and ‘Craftsmen and similar workers” occupations. To this end, there is a need for intervention to retrain or work more closely with schools to increase quality and equip graduates with required skills aligned with employers’ needs.

Figure 1. Comparison between distribution of registered unemployment and vacancies by occupations, in percentage (2018).



Source: Based on Kosovo Employment Agency (2019), Labour and Employment in Kosovo, Research report.

3.3.4. Occupations and economic activity by gender

The data provided by MCC Kosovo LFTUS (2017) on occupations show that the most common types of occupations among respondents were elementary occupations, which include cleaners and food preparation assistants, agriculture and construction labourers (30.2%), followed by services and sales workers (13.1%). Interesting, the least common occupations were technicians and associate professionals which include health, business, legal, information and communication related associate professionals (1.2%) and armed forces occupations (2.6%). Although, engineering occupations were found to be among the top employed this is among the least popular occupation.

Generally, there were no significant differences in the distribution of males and females in elementary occupations were similar. For example, male respondents were more likely to hold craft and trade related occupations (18.8%), compared to only 8.4% of females. Plant and machine operators are almost always male (6.6%) compared to only 0.1% of females who identified themselves as being in these occupations.

Table 10. Occupation (%), by gender

Occupation	Male (%)	Female (%)	Total (%)
Elementary Occupations	29.1	33.4	30.2
Services and Sales Workers	15.9	17.3	16.3
Craft and Related Trades Workers	18.8	8.4	16.1
Professionals	8.8	19.2	11.5
Skilled Agricultural, Forestry and Fishery Workers	6.9	11.2	8.0
Managers	6.4	2.7	5.5
Plant and Machine Operators and Assemblers	6.6	0.1	4.9
Clerical Support Workers	3.6	5.1	4.0
Armed Forces Occupations	2.6	0.1	2.0
Technicians and Associate Professionals	1.2	2.5	1.5

4. Selection of high potential sectors in Kosovo

To facilitate the selection of high potential sectors in terms of competitiveness and economic growth of the country we employ several established approaches and indicators which may signal high potential sectors (see ALLED 2015). Accordingly, we first, measure the impact of skill sector on the dispersion of its use in the economy. Second, whether the skills required by the economic sector has highest human resource potential, and finally if the selected sector has highest job creation potential. In addition, we complement this approach with the findings from interviews and meetings with policymakers, representative of government agencies, employers and business associations. This helped the team to assess the government's views about the long-term vision of economic growth and priority sectors in government's agenda. This approach will provide evidence-based analysis for choice of sectors to be used in implementation of ALLED 2. What follows we will provide number of indicators to facilitate the selection of sectors.

Indicator 1: The impact of the skill sectors, employment by occupations

The dispersion of sectorial occupations in the economy enables to assess the impact of a skill sector on the economy. That data elaborated in the Table 9 provide data on registered unemployment by occupations, in 2018 the elementary occupations (47.9%) have the highest shares, followed by Craftsmen and similar workers (12%), and technicians and associate professionals (10.7%). Leaving aside elementary occupation, the engineering and technical professionals and draftsman seems to perform well in labour market. This points out the importance of engineering occupations which as mostly required in manufacturing and industry.

Indicator 2: Registered unemployment versus vacancies by occupations

This indicator is very critical to investigate the distribution of registered unemployment and vacancies based on the occupations which is important to investigate the possible mismatch in terms of demand and supply of labour (See Figure 1). The key conclusion for this exercise suggests that, leaving aside elementary occupation, the higher gap is found in "Operators and assemblers of equipment and machines" occupation pointing out the importance of the secondary vocational schools to increase the supply of labour. As discussed in previous section, in some occupations, the unemployment and vacancies are at almost comparable level, suggesting that unregistered unemployment is high but at the same time the number of vacancies is high too. This indicates that there is available workforce, which most likely is not able to meet satisfactory criteria of companies, such as the case with "Technicians and associate professionals" and "Craftsmen and similar workers" occupations. This points out the importance of manufacturing which potential to growth, but conditional upon the qualified labour.

Indicator 3: Number of employees by sector of economic activity

The Table 11 provides valuable information on job creation potential of economic sectors. As can be noted, the wholesale and retail trade, repair of motor vehicles, motorcycles have largest share of employment (34.6%) followed by production (15.6%) and construction (10.9%).

Table 11. Number of employees by sector of economic activity for the years by section & description of the economic section and year

Economic sectors	2015		2016			2017		
	Total employment	% Share	Total employment	% Share	% change	Total employment	% share	% change
B Mining and quarrying	3042	2.0	2780	1.8	(8.6)	3313	2.0	19.17
C Production	23651	15.2	24457	15.6	3.4	26095	15.6	6.70
D Supply of electricity, gas, steam and air conditioning	8045	5.2	7770	5.0	(3.4)	7467	4.5	(3.90)
E Water supply, sewerage, waste management and land revitalization activities	4380	2.8	4560	2.9	4.1	4721	2.8	3.53
F Construction	15354	9.9	16687	10.7	8.7	18206	10.9	9.10
G Wholesale and retail trade, repair of motor vehicles, motorcycles	55768	35.9	54609	34.9	(2.1)	57862	34.6	5.96
H Transportation and storage	6810	4.4	6634	4.2	(2.6)	7202	4.3	8.56
I Accommodation and food service activities	12965	8.4	11895	7.6	(8.3)	12773	7.6	7.38
J Information and communication	8019	5.2	8714	5.6	8.7	9597	5.7	10.13
L,M,N,R,S Other service activities	17100	11.0	18398	11.8	7.6	19859	11.9	7.94
Total	155135	100.0	156504	100.0	0.9	167095	100.0	6.77

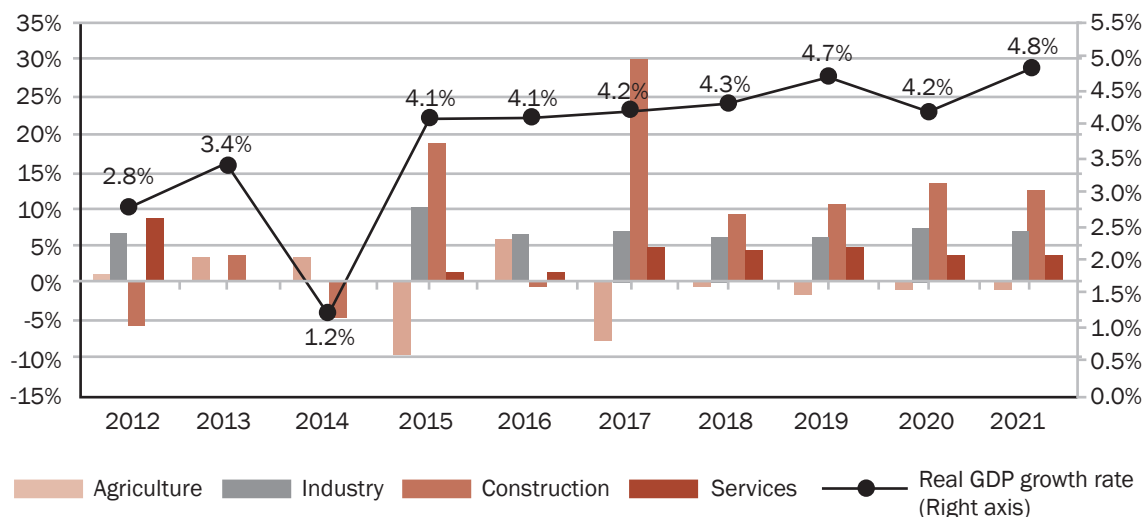
Source: Kosovo Agency of Statistics, 2019

In terms of percentage change, in 2017 construction experienced decrease in terms of employment, and the percentage change of growth in manufacturing was higher than that of 'Wholesale and retail trade, repair of motor vehicles, motorcycles. Mining and quarrying had the highest percentage growth (over 19%). Based on these findings following sector come up as potential for job creation: Wholesale and retail trade, production, and construction. However, both sectors, construction trade are not considered to be adding to Kosovo's competitiveness and the percentage change was higher for production and mining.

Indicator 4: The future economic potential of sectors

In this section we conduct analysis based on secondary reports and data to facilitate the choice of high potential sectors which contribute most to the economic development. The analysis aims to provide an evidence base for the choice of skill sectors to be used in the implementation of the ALLED II project. We look at the number of economic sectors which employ sector occupations but at the same time contribute to the competitiveness of the economy. One of the ways of understanding the impact of a skill sector on the economy is to look at the dispersion of sectorial occupations which belong to the sector in the economy and employment potential of these sectors. According to Economic Reform Programme - ERP (2019-2021), similar to previous years, the four main sectors that employed more than half of total employees in 2017 were trade (14.7%), production (13.2%), construction (12.9%) and education (9.5%). Further the ERP shows the significant gender employment variation for sector. Male employment was higher in the sectors of construction, trade and manufacturing, while female employment was higher in education, health and trade sectors. It should be noted that during 2017, the number of female employees with primary and secondary professional education decreased, whereas, the number of employed females with higher education increased (ERP, 2019, p.17).

Table 12. Sectorial contributions to GDP growth (in % points)



Source: KAS and DEPP/Macroeconomics Unit calculations, based on ERP (2019)

Despite economic growth, the private sector has been unable to provide sufficient high-quality jobs, particularly in the tradable sector. The ERP (2019) projects that construction sector is projected to remain the largest contributor to economic growth. Similar to its historical trends, services are projected to continue their growth with an increasing trend, marking a 1.7% average real growth over the projection period. In addition, value added from the industry sector is projected to increase by an average of more than 7% over the medium-term, while, agriculture is expected to have a moderate growth of 1.8% throughout the medium-term. Therefore, the need to promote manufacturing sector remains crucial for economic growth and job creation.

On the sectorial contribution to the growth and employment, the EU report suggests that structure of economic sectors is still not favourable, with agriculture sector contributing to 13.5 % of the gross value added (GVA) (compared to 17.5 % in 2008), is responsible for 26.7 % of total employment and provides about 12 % of the total value of exported goods. The promising sign is the rise of the services sector to 59 % of GVA (compared with 55 % in 2008), centred around the trade, finance and IT sectors. On the other hand, exports of services accounted for 23% of GDP in 2018 and are projected to increase by an average real growth rate of 5.8% over the medium term, with the expected higher demand for telecommunication service exports (GoK 2019). Beside this positive sign, compared with the average of developed countries Kosovo's economy is still lagging in terms of sector diversification. Micro Small and Medium Sized Enterprises (MSMEs) continue to account for 99 % of total employment. The largest number of enterprises operate in the trade sector (29.9 %), followed by accommodation, food services and industry.

Agriculture which, due to its present size and the large estimates of employment in the rural sector, still remains one of the most important economic sectors in Kosovo and any intervention in agricultural skills will by itself have potentially very large impact. Indeed, the high informal share of the agriculture sector, makes it difficult to estimate the real impact of this sector in Kosovo's economy and employment. Moreover, the share of female unemployment is very high. Also, the need to activate the large inactive female population is high on the policy agenda and most effect of such policies can be achieved by focus on agriculture (ALLED, 2015). To this end, we suggest that agriculture should remain as a skill sector which will be in focus of the ALLED 2 project since its transformation can only happen by changing the skill structure and the use of new technologies which require new types of skills beyond the current capacities of the farmer. In addition, this is in line with GoK's strategy for subsidizing the agriculture sector and most likely will be expanded also by support of EU and other donors.

Indicator 5: Findings from interviews with key stakeholders - insights for potential sectors

In addition to the secondary data analysis, IESB Consultants had meetings with representatives of institutions, organizations, projects and other stakeholders during May-June 2019. Detailed information on interviews and overview of main findings in each country are presented in individual country reports that are annexes to this report. Interviews and meetings with stakeholders identified similar potential sectors for competitiveness: ICT sector and business processing services, agriculture, manufacturing/industry, energy and electricity supply and mining. The last one, energy and electricity supply with special focus of new investment in Power Plant, which is expected to generate around 5,000 jobs in Kosovo.¹⁰ According to Minister Lluka the high potential of energy sector, in

10. *Interview with Minister Valdrin Lluka*

which for the next decade are foreseen to be invested about 3 billion euros, including power plant, renewable energy projects, energy efficiency projects, etc. This will require workforce equipped with proper skills to respond to labour market needs in this sector. According to the Business Associations and private companies, low productivity linked to low technology and low innovation activities of enterprises, need for investments, lack of skills, and lack of export linkages remains the key challenge for competitiveness of the country.

As a small country Kosovo needs to accelerate especially private investments, including Foreign Direct Investments. The low performance of the sector with exporting performance (except the ICT) suggest the need to focus more on productivity and increase in capacity to export, mainly in manufacturing. To boost private investment and there is a need for adoption of new technology, innovation and of course skills. With a young population, Kosovo can benefit from investing in skills. These benefits are not likely to increase in the future due to decrease in population growth, recently affected significantly by migration of labour force.

To support growth of the private sector in sectors with higher potential to generate employment and growth, we need to ensure a right skill match necessary to understand employers' needs. To conclude, Kosovo, experiences very low activity and employment levels and the marginal presence of women in the labour market are some of the most striking challenges, next to pervasive informal employment and poor job quality in the private sector.¹¹

In conclusion, the analysis pointed out several skill sectors which have a strong impact on the whole economy as well as are ranked as priority by policymakers (ICT for example). Considering, the share of occupations with highest employment rate, and other indicators we come up with following economic sectors:

1. ICT sector and services
2. Agriculture
3. Food processing
4. Manufacturing and processing.
5. Energy and electricity supply

Beside the economic potential of ICT sector, we recommend to skip for further consideration, because there is a huge donor intervention in this sector. In addition, GoK's priority is to support this sector through Ministry of Innovation and Entrepreneurship. The rest of the report will deal with more thorough skills gap analysis of the analysis agriculture, food processing, and manufacturing/industry, energy and electricity supply. For this purpose, we report findings from the employer's survey with 300 companies.

11. <https://data.consilium.europa.eu/doc/document/ST-8546-2019-INIT/en/pdf>

5. Employers' survey results

The survey sample was based on random sampling method across four sectors: agriculture, food processing, and industry/manufacturing, including energy and electricity supply, as one of the potential priority sectors to be addressed by ALLED2 activities. The total sample design included 300 companies, but our usable sample is limited to 287 companies. The industry/manufacturing sectors has highest share in the sample to reflect the share of this sector in total population (see Table 13). Of total number of respondents, 15% were women.

Table 13. Total sample and position of respondents in the organization

Position in the organisation	Agriculture	Food processing	Industry/Manufacturing	Energy and electricity supply
Entrepreneur/Owner	15.2%	18.9%	47.0%	18.9%
Manager	15.6%	22.1%	44.3%	18.0%
Human resource manager	20.0%	40.0%	40.0%	0.0%
Other	7.1%	14.3%	64.3%	14.3%
Total sample (%)	14.6%	20.2%	47.4%	17.8%
Total sample (N=287)	42	58	136	51

5.1. Firm growth and sector performance

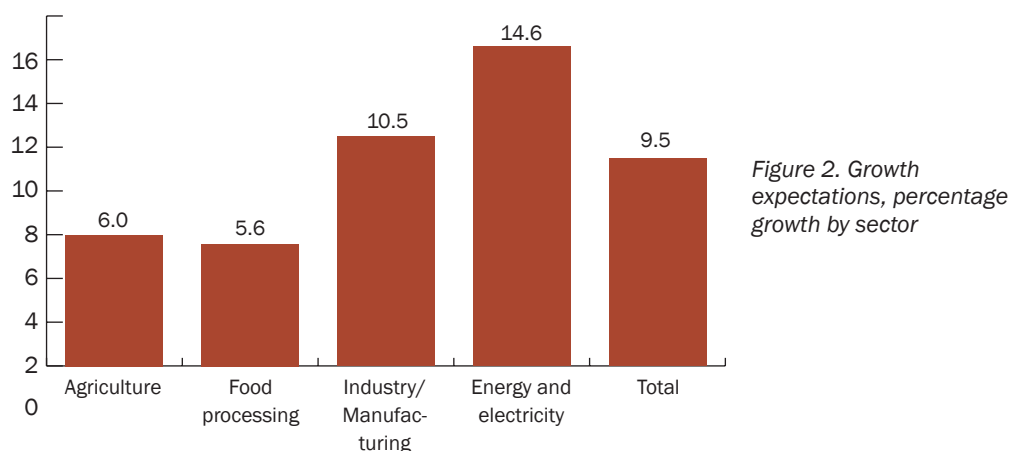
The current and future performance of the private companies is important to estimate future job creation. Table 14 below reports that data on current and future sales performance of companies and personal views of owners/managers regarding future growth expectations of the sector in which their companies operate. Compared to 12 months before half of companies declared that they had increased their sales, 34% remained the same and only 15.4% reported decrease. The food processing sector reporting the highest sales increase, followed by agriculture and energy.

Table 14. Growth performance of companies and sectors

Sectors	Sales performance compared to 12 months ago?			In 5 years from now, you plan/expect that company sales will?			In your personal opinion, what do you expect from the growth of your sector of operation?		
	Decreased	Remained the same	Increased	Decrease	Remain the same	Increase	Decreased	Remain the same	Increased
Agriculture	12.2%	36.6%	51.2%	7.3%	17.1%	75.6%	11.9%	31.0%	57.1%
Food processing	17.2%	24.1%	58.6%	3.6%	12.5%	83.9%	6.9%	20.7%	72.4%
Industry/Manufacturing	17.8%	34.8%	47.4%	7.6%	15.3%	77.1%	7.6%	20.5%	72.0%
Energy and electricity supply	9.8%	41.2%	49.0%	6.0%	40.0%	54.0%	5.9%	25.5%	68.6%
Total	15.4%	34.0%	50.5%	6.5%	19.4%	74.1%	7.8%	23.0%	69.3%

In terms of future growth plans survey results show very optimistic plans with 75% of companies reporting positive expectations about the sales growth with food processing and manufacturing industries reporting highest growth expectations. These findings is in line with expectations about the sector growth. However, to have better picture of growth, the companies were asked to report percentage growth expectations. Figure 1 provides average percentage growth of all sectors. As can

be noted the highest average growth experienced the energy and electricity supply (14.6%) followed by manufacturing (10%) and agriculture and food processing. The high performance of companies in energy and electricity supply indicates the importance of inclusion of this sector as priority for ALLED 2 which is in line also with other priorities of GoK.



5.2. Education and training

Continuous training is important to support growth of companies. The survey results show that private sector does not invest much on training of employees – only 18.2% of surveyed companies reported that they have specific budget dedicated for training. However, considerable higher percentage of companies the companies responded that their employees went through some kind of training (24.6%). The industry/manufacturing sector reported to have most training activities.

Table 15. Training of employees,

Sectors	Do you have dedicated budget for training?	In last 12 months, did your employees participate in any training courses?
	YES	YES
Agriculture	19.0%	28.2%
Food processing	15.5%	17.9%
Industry/Manufacturing	23.0%	29.5%
Energy and electricity supply	8.0%	16.3%
Total	18.2%	24.6%

Majority of the companies reported that company itself covered for the training cost (75%), followed by donors or jointly company-donor funding.

If companies covered the cost of the training, 2.4% declared that they have some type of contract to ensure the employee remain in the company for some time, otherwise they have to pay pack the training cost to company.

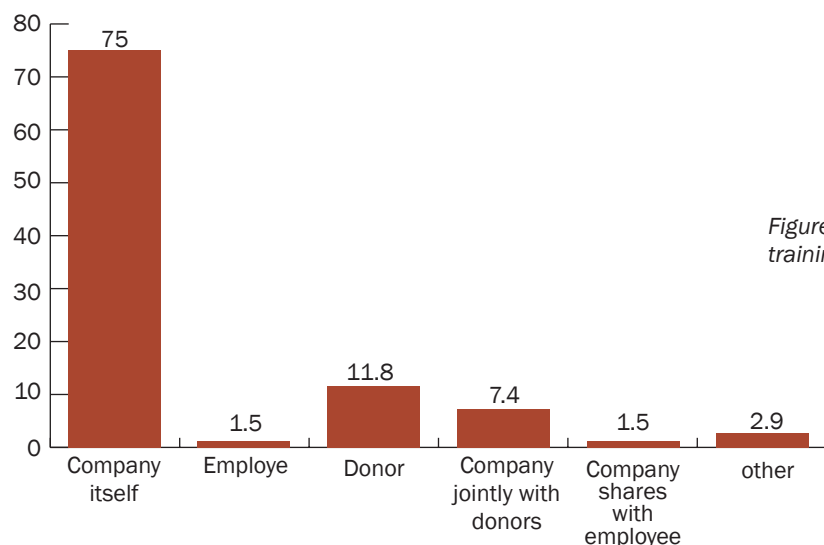


Figure 3. Payment of training cost

For those companies who did have training for their employees we asked their managers to rate the training providers in terms of importance according to their views in terms of preferences/their availability/efficiency/relevance for company. Private consulting companies, business associations, and companies from which the technology was bought are rated as very important for training.

Table 16 Owners/managers' views about the training providers

Training provider	% of companies received training	% of companies who rated "Very important"
Vocational education and training center	52.6	10.5
Vocational education school	64.7	5.9
Higher educational institutions/ university	62.5	6.3
Business Associations/chambers	45.5	31.8
Private consulting companies	46.0	64.0
Company from which we bought machinery equipment	33.3	38.1

Interesting finding is that vocational educational schools were rated very low, apparently suggesting the need for intervention in order to support these schools to deliver better services for private sector. In terms of the time after graduation employees need to be able to work on the job with satisfactory required performance, results show that on average 3.42 months. Notable differences are noted between sectors – in manufacturing (4.3 months), food processing sector (3.1 months), energy and electricity supply (2.8 months), and agriculture (1.8 months) employees need to achieve required satisfactory performance at work.

For those companies who did have training, an average percentage of workforce trained in past 12 months is 49 % which suggests high importance of training for private sector. At the same time, this may indicate the low quality of educational system which struggles to produce adequate and

skilled labour force, which incurs additional cost on private sector. The energy and electricity supply sector have the highest share of total of workforce trained in the past 12 months (60%), food processing (55%), agriculture (47%) and manufacturing industry (44.4 %).

5.3. Access to skilled labour

Finding right employees with required skills and competencies is one of the most important factors to develop vibrant private sector. Kosovar companies do face serious obstacles in filling vacancies with adequate employees. More than 46% of companies stated that they have problems to find adequate labour, and the manufacturing and food processing sector are hit most by this issue (see Table 17).

Table 17 Obstacles to fill vacancies with skilled labour

Sectors	Do you face obstacles in filling vacancies with adequate skills and competencies		What is the biggest obstacle in developing skills/ competencies?			
	Yes	No	Primary school	Secondary general	Secondary vocational	University or higher
Agriculture	16.7%	83.3%	22.9%	5.7%	57.1%	14.3%
Food processing	45.6%	54.4%	19.6%	10.9%	56.5%	13.0%
Industry/Manufacturing	59.1%	40.9%	7.7%	5.8%	73.1%	13.5%
Energy and electricity supply	39.1%	60.9%	12.5%	5.0%	37.5%	45.0%
All sectors	46.6%	53.4%	13.3%	6.7%	60.9%	19.1%

Concerning the educational level and obstacles to fill vacancies, survey findings show that the majority of respondent's report that secondary vocational education is biggest obstacle. This finding points out the need to support vocational education schools to boost employment and private sector growth.

5.3.1. Migration of workforce

Migration in Kosovo is becoming a serious problem for future development of the country. During the interviews with Business Associations/Chambers, private companies and policymakers, migration of skilled workforce merged as an important issue to address in terms of competitiveness of the country. The survey with employers confirmed the concern of the private sector with migration of their skilled workforce. 47.9% of stated that some of their employees left companies to go abroad. Almost 11% of the workforce, left Kosovo in past 12 months posing an obstacle to growth of businesses (see Figure 3). Considering that entrepreneurs reported that their most productive employees left their jobs to migrate, mainly in EU countries. Manufacturing and food processing sectors were most hit by the issue suggesting a cautious policy measures to address the migration. Even in terms of the future intervention programs, one should note that potential threat of migration of skilled labour.

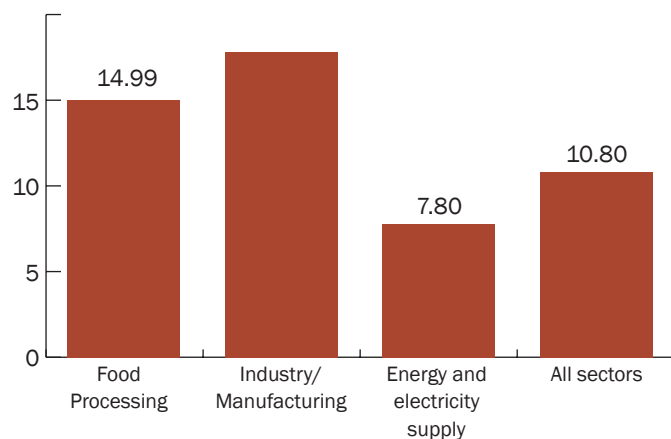


Figure 4. Migration of workforce, percentage of employees who left job to go abroad

5.4. Occupations

This section provides information on occupations based on Employers' survey, their importance and availability of vacancies in the private sector. Table presented below shows that managers and engineering professions are most important for the private sector. In particular, the employers rated ICT professional, Industrial and Production Engineers and generally engineering professionals as most important for their operation and growth suggesting very high potential for job generation in the future and pointing out the importance to support schools of engineering in higher education. From the secondary level education related occupations, the study finds that Skilled Agricultural occupation and other category "Sheet and Structural Metal Workers, Moulders and Welders, and Related Workers" are important for employers.

Table 18. Importance of occupations/skills and vacancies

Qualifications	Occupation ISCO 08	Based on your organization, please indicate how much you consider important for your business operations and growth following specific competences/skills as follows: Please select a level of importance 1. Very important 2. Important 3. Moderately important 4. Low importance This figure is average rating	Do you currently have vacancies for proving hard to fill for the lack of adequate skills of applicants? % of YES response
Bachelor, equivalent or higher	1. Chief executive officers,	1.82	20.1%
	2. Production Managers in Agriculture	1.17	16.7%
	3. Manufacturing, Mining, Construction and Distribution managers	1.80	30.0%
	4. Information Communications Technology Managers	1.00	40.0%
	5. Professional service managers	1.38	28.6%
	7. Environmental Protection Professionals	1.00	50.0%
	9. Industrial and Production Engineers	1.50	37.5%
	11. Environmental Engineers	2.33	33.3%
	12. Mechanical Engineers	1.44	55.6%
	13. Chemical Engineers	2.33	66.7%
	14. Mining Engineers, Metallurgists and Related Professionals	1.00	0.0%
	15. Engineering Professionals Not Elsewhere Classified) e.g. food and drink technology engineers	1.00	100.0%
	16. Electro technology Engineers	1.00	33.3%
	17. Electrical Engineers	1.05	22.2%
	18. Electronics Engineers	1.40	80.0%
	19. Telecommunications Engineers	1.00	50.0%
	20. Architects, Planners, Surveyors and Designers	3.00	70.0%
	21. Veterinarians	1.00	50.0%
	22. Software and Applications Developers and Analysts	1.00	100.0%
	23. Database and Network Professionals	1.00	100.0%

Secondary education or Post-secondary 1st stage (some) of tertiary education (level 5B)	24. Physical and Engineering Science Technicians	1.00	50.0%
	25. Chemical and Physical Science Technicians	3.00	50.0%
	27. Electrical Engineering Technicians	1.00	33.3%
	28. Electronics Engineering Technicians	1.44	22.2%
	29. Mechanical Engineering Technicians	2.00	N/a
	30. Chemical Engineering Technicians	1.00	100.0%
	31. Mining and Metallurgical Technicians	1.00	0.0%
	32. Draughts persons	1.00	0.0%
	35. Mining Supervisors	1.00	0.0%
	36. Manufacturing Supervisors	1.35	62.7%
	37. Construction Supervisors	1.00	0.0%
	38. Process Control Technicians	1.29	52.7%
	39. Power Production Plant Operators	1.00	0.0%
	41. Chemical Processing Plant Controllers	1.00	N/a
	43. Metal Production Process Controllers	2.33	33.3%
Secondary education or Post-secondary-ary non-tertiary education	44. Process Control Technicians, Not Elsewhere Classified	1.88	50.0%
	45. Agricultural Technicians	1.00	100.0%
	49. ICT Operations and User Support Technicians	1.00	0.0%
	50. Telecommunications and Broadcasting Technicians	1.00	100.0%
	51. Web Technicians	1.00	0.0%
	52. Market Gardeners and Crop Growers	2.11	33.3%
	53. Field Crop and Vegetable Growers	1.17	0.0%
	55. Gardeners; Horticultural and Nursery Growers	1.50	66.7%
	56. Mixed Crop Growers	1.00	0.0%
	57. Animal Producers	1.00	75.0%
58. Livestock and Dairy Producers	1.00	100.0%	
59. Poultry Producers	1.00	75.0%	
60. Apiarists and Sericulturists	1.00	100.0%	
61. Animal Producers Not Elsewhere Classified	1.00	100.0%	
62. Mixed Crop and Animal Producers	1.00	100.0%	
63. Mixed Crop and Animal Producers	1.92	53.8%	
64. Subsistence farmers	1.00	50.0%	

Secondary education or Post-secondary non-tertiary education	65. Sheet and Structural Metal Workers, Moulders and Welders, and Related Workers	1.57	71.4%
	66. Metal Moulders and Coremakers	1.57	42.9%
	67. Welders and Flame Cutters	1.80	60.0%
	69. Structural Metal Preparers and Erectors	3.50	50.0%
	70. Riggers and Cable Splicers	1.67	66.7%
	71. Blacksmiths, Toolmakers and Related Trades Workers	5.00	100.0%
	72. Blacksmiths, Hammersmiths and Forging Press Workers	1.00	0.0%
	73. Toolmakers and Related Workers	1.00	66.7%
	74. Metal Working Machine Tool Setters and Operators	1.88	85.7%
	75. Metal Polishers, Wheel Grinders and Tool Sharpeners	2.00	60.0%
	76. Machinery Mechanics and Repairers	2.00	50.0%
	78. Aircraft Engine Mechanics and Repairers	1.76	35.3%
	79. Agricultural and Industrial Machinery Mechanics and Repairers	2.10	50.0%
	80. Bicycle and Related Repairers	2.08	50.0%
	81. Electrical Equipment Installers and Repairers	1.08	38.5%
	82. Building and Related Electricians	2.33	33.3%
	83. Electrical Mechanics and Fitters	1.00	0.0%
	84. Electrical Line Installers and Repairers	3.00	50.0%
	85. Electronics and Telecommunications Installers and Repairers	2.20	54.1%
	86. Electronics Mechanics and Servicers	1.17	0.0%
87. Information and Communications Technology Installers and Servicers	1.82	41.2%	
88. Food Processing and Related Trades Workers	1.00	50.0%	
89. Butchers, Fishmongers and Related Food Preparers	1.00	57.1%	
90. Bakers, Pastry-cooks and Confectionery Makers	1.00	100.0%	
92. Fruit, Vegetable and Related Preservers	1.00	0.0%	
93. Food and Beverage Tasters and Graders	1.00	50.0%	
Secondary education or Post-secondary non-tertiary education	95. Mining and Mineral Processing Plant Operators	1.80	55.6%
	96. Metal Processing and Finishing Plant Operators	1.87	33.3%
	97. Chemical and Photographic Products Plant and Machine Operators	2.13	42.9%
	98. Rubber, Plastic and Paper Products Machine Operators	2.81	12.9%
	99. Textile, Fur and Leather Products Machine Operators	1.82	40.0%
	100. Assemblers	1.33	80.0%
101. Cleaners and Helpers	2.00	70.0%	

Concerning, the availability of vacancies, the employers' survey found that highest demand for mechanical and electrical engineers within the category of university level education, while the assemblers and food processing technicians within the secondary level education. These findings suggest that policy making efforts should focus more on support of engineering schools both at secondary and tertiary level education. Helping these schools to align the study programs, teaching methods, infrastructure to the needs of private sector is very critical to job creation and private sector growth.

Future skills forecast is by employers is fundamental to any workforce development initiative. Respondents were asked following open-ended question "When thinking about the future of your business do you think some new skills will become very important your business?". The respondents could provide up to three answers. Because of diverse responses received we categorized all emerging skills into following categories based on the similarities: engineering skills, ICT related skills, food production skills, and general skills such as creativity and innovation skills, team work, foreign language skills, communicant and sales. Numbering of these skills in the table is based on dominance of certain skill as mentioned by respondents. Indeed, this finding is in line with the skills gap study conducted by Hapciu (2017) for sector specific skills suggest that manufacturing companies state that technical qualifications related to the industry and assembly line skills will continue to be important to their operations after 10 years as well. This finding is important, particularly considering the fact that any potential reform in the education sector takes a long time to complete

Table 19. Type of emerging skills forecast, in 2-5 years from now

Types of emerging skill	In 3 years from now?	In 5 years from now?
When thinking about the future of your business do you think some new skills will become very important in this occupation? % of Yes responses	1. Engineering skills 2. ICT related skills 3. General skills (team work and communications skills) 4. Agriculture and food production skills 39%	1. ICT skills 2. Engineering skills 3. General skills: foreign language Creativity and innovation 42.1%

Note. The respondents left open to choose the merging skills. Authors of the report have grouped all these skills into four emerging categories. Under the category **engineering skills** following were most frequently mentioned by respondents: electrical installer, assembler, machine repair, engineers, wood processing skills, quality control, electrician and electronic technicians, machine operator, welder etc.; **for ICT related skills** were mostly web design, programming, and ICT skills for production purposes; use of computers to control production processes etc.; **For Agriculture and food processing skills** were mostly related to agriculture animal and plant growers, farming skills, and to food technologist; meat processing skills, food preparers **General skills** include mostly, creativity and innovation, team work and communications and sales skills.

Whether these emerging skills need to be learned at school or on the job 6.5% of the respondents state at school, 47.7% on the job, and 45% both at school and on the job. This shows an important of dual education system especially at secondary vocational schools. At the same time, it suggests that schools need to work closely with the private sector to enable their students' access to internships apprenticeship and practical work experience which is found to be fundamental in learning new skills need for employment. The ALLED 2 program should focus on supporting all levels of education to work directly with private sector.

This in line with finding that companies face difficulties finding courses or trainers for the newly emerging skills. More than 25% of companies experience difficulties in finding the right courses and trainers for new emerging skills for their employees as identified in Table above. Of those who declared that they experience difficulties, more than a half belong to industry sector (around 55 %).

Table 20. Difficulties in finding courses and trainer for emerging skills

Has the enterprise met any difficulties finding courses or trainers for the newly emerging skills?	Agriculture	Food processing	Industry/ Manufacturing	Energy and electricity supply	Total
YES	7.30%	16.40%	54.50%	21.80%	25.7%
NO	16.30%	25.60%	45.70%	12.40%	74.3%

5.5. General skills

The assessment shows that employers require employees to have both occupational-specific skills and general skills (UNDP 2016). The survey findings show the level of importance for 13 general skills (Table 21). Team work, teaching and instructing skills such as instructing new employees, and manual dexterity rank as top three most important general skills for employers, followed by numeracy and problem-solving skills. As such, any curricula and training programme should ensure that graduates have the necessary team working skills, writing, numeracy, manual dexterity and other general skills such as problem-solving skills, reading/writing. The majority of firms surveyed consider the aforementioned skills to be increasingly more important.

Table 21. Level of importance of other general skills

Type of general skills	Very important	Important	Moderately important	Low importance
Reading skills	59.6	23.5	12.3	4.7
Writing skills	57.8	24.4	13.5	4.4
Numeracy skills	61.2	24.1	10.4	4.3
Problem solving skills	61.2	25.3	8.8	4.8
Communication skills (e.g. Presentation of the company)	48.7	31.6	15.6	4.0
Foreign language skills	26.3	19.6	22.6	31.5
How important is manual dexterity (for example, to mend, repair, assemble, construct or adjust things?)	68.5	22.1	7.6	1.8
Team work	77.1	16.8	6.1	0.0
Sales skills	52.2	20.4	16.7	10.7
Creativity and innovation skills	40.3	27.0	21.3	11.4
Entrepreneurship skills (e.g. New ideas and productivity)	32.8	32.1	17.2	17.9
Teaching and instructing skills (e.g. Instructing new employees)	64.0	27.3	6.2	2.5
Computer and ICT related Skills	40.3	28.3	19.8	11.6

5.6. Environment protection and quality standards

The protection of environment has become important for firms. Around 33% of surveyed firms apply some sort of quality standards to ensure protection of the environment, mainly ISO and HACAP international quality standards. In question “How important is the implementation of practices to reduce the use of raw materials, energy and water?”, 56% of respondents rated as very important (Table 22). In addition, around 43% stated that the importance of that task is to increase in the future.

Table 22. The importance of the implementation of practices to reduce the use of raw materials, energy and water

Importance	Percent
Very important	56.1
Fairly important	35
Not important	4.5
Does not apply	4.5
Total	100

6. Conclusions and recommendations

In this section, we provide key conclusions and recommendations regarding the priority sectors. The draft report identified skills needs analysis by proposing key priority sectors, and draw up a set of policy recommendations relevant for policy-makers sectoral and national level. The policy recommendations will be evidence-based, i.e. grounded in the research produced throughout the project.

The selection of the priority sectors was based on the economic potential of these sectors for competitiveness of the country, but taking into account the importance of intervention of the ALLED 2. One sector which is found to be very strategic in terms of economic development is ICT, but there is a large involvement of the donors and government support towards this sector therefore we suggested to exclude for consideration as priority sector for intervention by ALLED II. In addition, we have included agriculture and food processing from ALLED I project. Mechatronics, is also included within the large group of the manufacturing industry sector to research the need for engineering occupations. Analysis show that employment rate among the engineering occupations was very high while these is among the least popular occupations found in labour market. ICT sector is considered high potential in terms of growth and job generation, however, is not proposed here to avoid duplication with other donor and GOK's initiatives for intervention and support. However, ICT is proposed as cross sectoral in terms of skills and occupations.

On the basis of the above, we have chosen previous sectors agriculture and food processing. Mechatronics and other work related to the engineering work is covered under the broad industry/manufacturing sector. Thus, other sub-sectors within the broad sector called industry, are more prone to employ people with engineering profession, mechanics and digitalization or computer added work in industry. This will give clearer picture of skills gap and needs for engineering profession. In addition, based on the stakeholder analysis and interviews, we propose the energy and electricity supply sector with particular focus on renewable energy. The importance of the energy and electricity supply sector is highlighted also in other strategic documents such as Economic Reform Program, Kosovo Development Plan, EU reports and so on.

Our analysis of the secondary reports and strategic documents of Kosovo (including Economic Reform Program, Kosovo Development Plan etc.) suggested that these sectors came out to be important for Kosovo's competitiveness too. These sectors have created our sampling frame based on which we have drawn random sampling and select companies to be interviewed.

Concerning, the availability of vacancies, we found that highest demand for mechanical and electrical engineers within the category of university-level education, while the assemblers and Food processing technicians within the secondary level education. These findings suggest, that policy making efforts should focus more on support of engineering schools both at secondary and tertiary level education. Helping these school to align the study programs, teaching methods, infrastructure to the needs of private sector is very critical to job creation and private sector growth.

Next steps

The key aim of this study was to identify main skill and economic sectors which could justify the focus of the ALLED 2 project over the next 3 years. Based on the secondary data analysis we propose following sectors:

1. Agriculture
2. Food processing
3. Manufacturing and processing.
4. Energy and electricity supply

Following, skills and occupations are proposed:

Skills needed	Sectors NACE 2	Type of occupations	Qualifications
Engineering skills	Food processing, manufacturing, energy and electricity supply, metal, plastic and wood processing, manufacturing of electrical equipment	<ul style="list-style-type: none"> • Mechanical, electric and electronic engineers • Food technology engineers 	<ul style="list-style-type: none"> • (Bachelor, equivalent or higher)
		<ul style="list-style-type: none"> • Electrical Engineering Technicians • Electronics Engineering Technicians • Mechanical Engineering Technicians • Chemical Engineering Technicians • Metal Production Process Controllers • Food technology technicians • Machine maintenance repair, • Quality control, 	<ul style="list-style-type: none"> • Secondary education or Post-secondary 1st stage (some) of tertiary education (level 5B)
		<ul style="list-style-type: none"> • machine operator, • assembler, • welder 	<ul style="list-style-type: none"> • Secondary education or Post-secondary non-tertiary education
Agriculture	Crop and animal production	<ul style="list-style-type: none"> • Agricultural veterinary engineer • Agricultural and veterinary technicians, 	<ul style="list-style-type: none"> • (Bachelor, equivalent or higher) • Secondary education or Post-secondary 1st stage (some) of tertiary education (level 5B)
ICT related	Cross sectoral support to other sectors	<ul style="list-style-type: none"> • Software and Applications Developers and Analyst • Database and Network Professionals • ICT Operations and User Support Technicians • Telecommunications and Broadcasting Technicians • Web Technicians 	<ul style="list-style-type: none"> • (Bachelor, equivalent or higher) or Secondary education or • Post-secondary 1st stage (some) of tertiary education (level 5B)

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Annex 1: List of documents/reports:

- Project Review – ALLED I
- Description of the Action (DoA) for ALLED2 Project
- Higher Education Law
- Law on National Qualifications
- Law on Vocational Education and Training
- Adult Education Law
- Kosovo Education Strategic Plan 2017-2021
- Framework for school based Vocational Education and Training
- Law on National Qualifications
- ADA country strategy Kosovo 2013-2020
- Kosovo National Development Strategy 2016 – 2021 (NDS)
- European Reform Agenda (ERA),2016
- Western Balkans Labor Market Trends 2018
- Analysis of VET institutions involved in curricula development process
- Strategy for improvement of professional practice in Kosovo
- Overview of HE system in Kosovo (Erasmus plus)
- Good Multilevel Governance for Vocational Education and Training – ETF 2013
- South East Europe 2020, jobs and prosperity in a European Perspective (RCC 2013)
- Skills Gap Analysis _SDC_October 2018
- ICT Skills Gap Analysis , November 2013
- Labour Market Needs Assessment ALLED I
- VET Governance Kosovo –ETF,2017
- Workforce Readiness Assessment _USAID_2015
- Skills Needs Assessment 2016_UNDP
- ACS21442-WP-PUBLIC-ADD-SERIES-KosovoJDWEB,2017
- EU key competence framework and EU New Skills Agenda
- Sector Analysis from ALLED I and Sector Analysis
- Other relevant documents and studies related to the subject of study

Annex 2: List of interviewees

- Government agencies
 - Employment Agency of Kosovo
 - Agency For Vocational Education And Training And Adult Education
- Private sector employers
 - Wood Processing Company (Tefik Canga-Ferizaj, Berto Prishtine, Bini Vushtrri, Ukaj Company)
 - ICT sector (Solaborate, METdan, TRECIS, IQ LINK, RROTA, Gjirafa)
- Business associations
 - (Kosovo Chamber of Commerce, Alliance of Business of Kosovo, STIKK/ICK, Bonevet, Innovation and Training Park in Prizren, Wood Processing Association of Kosovo)
- Previous graduates,
 - (Selected sectors)
- VET schools and VTCs
 - (Don Bosko, Hymeri Kleman, PROED school on programming, Wood Producers Cluster in Ferizaj)
- HE providers, relevant government ministries and agencies.
 - Faculty of Engineering
 - Faculty of Agriculture
 - Riinvest – computing and IT
 - Faculty of Applied Sciences in Ferizaj (wood processing)

Annex 3: Employers' survey questionnaire

Dear Ms/Mr...

Thank you very much for accepting to be interviewed. The Institute for Entrepreneurship and Small Business-IESB has been contracted by Austrian Development Agency through ALLED II – “Aligning Education and Training with Labour Market Needs” Programme, funded by the European Union (EU) and Austrian Development Cooperation (ADC), implemented by Austrian Development Agency (ADA) to conduct Labour Market and Skills Needs Analysis. The main purpose of the interview is to understand better what your enterprise/you as director/owner need in terms of knowledge and skills in order to be competitive on the market. We want to improve the education system so that students are ready for the tasks which await them in their jobs. This will save time and money for the employer and also make young people more employable. We can only change training programmes if we know what your workers are required to do in the workplace. We will ask large, medium and small firms who employ these occupations and change programmes according to their real, everyday needs and to prepare for the challenges of the future.

The approximate duration of the interview is 30-40 minutes.

INFORMATION ABOUT THE RESPONDENT

1. *Company general data: position in the organization (Check any that apply)*
 1. *Entrepreneur/owner*
 2. *Manager*
 3. *Human resource manager*
 4. *Something else, (write?) _____*

2. *Gender* 1. *Male* 2. *Female*

3. *Educational level*
 1. *Primary school*
 2. *Secondary general*
 3. *Secondary vocational (VET)*
 4. *University or higher*

4. *Contact details (e-mail or telephone) Tel: _____ email: _____*

I. Module 1: ABOUT THE FIRM

5. *Which sector does your company belong to?*
 1. *Agriculture.*
 2. *Industry/Manufacturing*
 3. *Energy and electricity supply*

6. *Total number of employees (now) – including number of part-time/ full-time / permanent/ temporary workers?*

	Past 12 months		Currently		2025 (Expected number of employees in 5 years)	
	Male	Female	Male	Female	Male	Female
Full time employees						
Part time employees						
TOTAL (LEAVE BLANK FOR CALCULAITON)						

7. Compared to the 12 months ago sales of your company had?

1. Decreased 2. Remained the same 3. Increased

8. If sales of your company has increased or decrease, what is the percentage change (decrease or increase)? _____%. (If no increase or decrease please put zero?)

9. In your personal opinion, what do you expect from the growth of sector of operation?

1. Increase 2. Remain the same 3. Decrease

10. In which market did your enterprise sell the largest share of goods and/or services during the past two years?

1. Local or regional
2. National
3. Neighbouring countries
4. EU countries
5. Other countries (Write country please?), _____.

11. Does your company export its products/services: 1. Yes 2. No

12. If your company exports, what is the percentage of sales that is exported? (Only for exporting companies)? _____ (%)

TRAINING AND EDUCATION

13. Do you have dedicated budget for training? 1. Yes, 2. No

14. In last 12 months, did your employees participate in any training courses

15. If Yes, who covered the training costs:

1. Company itself
2. Donor
3. Government/ Government agencies
4. Company jointly with donors
5. Other (Write please) _____

16. Refereeing to the trainings in last 12 months, who was provider of training

1. Vocational education training centre
2. Vocational education school
3. Higher educational institutions/ university
4. Business Associations/chambers
5. Private consulting companies
6. Other (Please specify?) _____

17. Percentage of workforce trained in past 12 months _____%

ABOUT THE CHOSEN OCCUPATION

The next questions refer only to the occupational group of [group_select as an annex sheet with occupations] working in your enterprise.

18. Approximately how many employees of this occupational group are currently working in this enterprise and how important are those competencies/skills for the operation and growth of your enterprises (THE INTERVIEWER SHOWS THE ANNEX 1 SHEET FOR OCCUPATIONS)

What is the average age of your employees? _____.

19. After graduation and initial contract with your employee, how many months are needed for them to be able to work on the job with satisfactory required performance (months?) _____

20. In the past 12 months has your employees quit their job because they left Kosovo.

1. Yes 2. No

21. If yes, how many left your company to go abroad for work in past 12 months: _____

MODULE 2: OCCUPATIONAL SKILLS

We would like to ask you now about the tasks that workers are expected to undertake on their job. A task is a set of activities that are undertaken every day or are regularly repeated and are important to achieve the expected results on-the-job. Some tasks are operational and are usually the main activity on-the-job, such as: assembling elements of wooden furniture or monitoring food-processing machines; others are administrative (filling in requests for production inputs, materials, reporting). In the course of the interview, if the interviewee can only remember a few tasks he should be prompted to remember some of the tasks the enumerators have on a separate sheet of paper – (Document xxxx).

22. What is the biggest obstacle in developing skills/competencies?

1. Primary school

- 2. Secondary general
- 3. Secondary vocational (VET)
- 4. University or higher

23. Could you name the main tasks in this job and indicate which OCCUPATION RELATED skills/ knowledge the worker needs to have in order meet expected job performance?

	Skill to be learned:	Will THE SKILL become more important in the future? In 3 years from now	Will THE SKILL become more important in the future? In 5 years from now
1.1. <u>TASK 1:</u>	1. At school 2. On-the-job 3. Both at School and On-the-job 4. Don't know	Yes =1, No = 2	Yes =1, No = 2
1.1.1. Skill 1			
1.1.2. Skill 2			
1.1.3. Skill 3			
1.1.4. Skill 4			
1.2. <u>TASK 2:</u>			
1.2.1. Skill 1			
1.2.2. Skill 2			
1.2.3. Skill 3			
1.2.4. Skill 4			
1.3. <u>TASK3:</u>			
1.3.1. Skill 1			
1.3.2. Skill 2			
1.3.3. Skill 3			
1.3.3.4 Skill 4			
1.4 <u>TASK 4</u>			
1.4.1 Skill 1			
1.4.2 Skill 2			
1.4.3 Skill 3			
1.4.4 Skill 4			
1.5 <u>TASK 5</u>			
1.5.1 Skill 1			
1.5.2 Skill 2			
1.5.3 Skill 3			
1.5.4 Skill 4			

24. When thinking about the future of your business do you think some new skills will become very important in this occupation? (Open answers to maximum 3 newly emerging tasks)

Type of emerging skill	In 3 years from now?	In 5 years from now?
1 st new emerging skill		
2 nd new emerging skill		
3 rd new emerging skill		

25. How does your firm respond to emerging skill needs? Chose ranking 1-most important 5-not important and all)

	Write ranking for each item (1-most important 5-not important and all). You can give importance of 1 only for one item.
1. Training of my employees	
2. Internal reorganization to better use the existing skills and competences	
3. Cooperation with VET and secondary schools	
4. Cooperation with higher education institutions	
5. Recruitment of new staff	
6. Employment agency	
7. Other measures (Please specify?), _____	

26. Has the enterprise met any difficulties finding courses or trainers for the newly emerging skills?

1. Yes 2. No 3. Don't know

MODULE 3: GENERAL SKILL USE

Many employers are frequently dissatisfied with some general competencies of the workers not related to the occupational skills. Could we now determine which of the following general skills you are looking for in your workers?

27. For their job, what is the importance of employees' skills listed below: (Read out the possible answers)

	Very important	Important	Moderately important	Low importance	No answer
Reading skills					
Writing skills					
Numeracy skills					
Problem solving skills					
Communication skills (e.g. Presentation of the company)					
Foreign language skills					
How important is manual dexterity (for example, to mend, repair, assemble, construct or adjust things?)					
Team work					
Sales skills					
Creativity and innovation skills					
Entrepreneurship skills (e.g. New ideas and productivity)					
Teaching and instructing skills (e.g. Instructing new employees)					
Computer and ICT related Skills					

ENVIRONMENT PROTECTION SKILLS

28. Does your company apply any quality standards to ensure protection of the environment?

1. Yes 2. No

29. If yes, which quality standards (write the name please?) _____.

30. How important is the implementation of practices to reduce the use of raw materials, energy and water?
1. Very important
 2. Fairly important
 3. Not important
 4. Does not apply
31. Is the importance of that task about the same, increasing or decreasing?
1. Increasing
 2. Staying about the same
 3. Decreasing

THANK YOU FOR YOUR TIME AND COOPERATION!

Annex of the questionnaire.

How to choose occupations (Agriculture, Food-processing, Mechanical engineering) FOR PRIORITY SECTORS. If you show the list of occupations from the above sectors to the employer, you first mention the occupations Agronomist, Mechanical engineer or Food-processing engineer (occupations requiring higher education) you choose them first.

If the employer does not employ these occupations you ask whether he employs agricultural technicians, mechanical technicians or food-processing technicians, etc. If yes, you choose one of these occupations and interview them for this job.

If the employer only employs occupations such as: fruit, vegetable and related preservers, food and beverage tasters and graders, food and related products machine operators, choose them (primary level education).

As you know, the jobs have different names in different forms so it is important to establish that a food-processing technician, for example, is someone with required VET school level training and that his tasks are related to industrial or non-industrial food-processing. Make sure that you enter the actual name of the occupation in the questionnaire in separate Annex sheet.

Annex 4: Demographic and labor market indicators for the Kosovo economy

Total	2010	2012	2013	2014	2015	2016	2017	2018 Q1	2018 Q2
Total population (1,000)	1,775	1,807	1,818	1,813	1,788	1,778	1,791		
Working-age population aged 15> (1000)		1,213	1,250	1,277	1,262	1,276	1,310	1,358	1,353
Employment aged 15> (1000)		303	340	324	298	333	359	344	344
Employment rate (% population aged 15>)		25	27.2	25.4	23.6	26.1	27.4	25.3	25.4
Employment rate (% population aged 15-64)		26.6	29.2	27.5	25.8	28.7	30.5	29.2	29
Employment rate (% population aged 20-64)		31	34	32.1	29.9	33.1	35.2	34.1	33.7
Employment rate (% population aged 15-24)		10.1	10.2	9.1	8.7	10.2	11.4	9	9.7
Employment rate (% population aged 25-29)		29.1	32.2	30	27.8	31.4	32.6	29.2	30.6
Employment rate (% population aged 25-54)		34.7	38.1	36.2	33.8	37.4	39.1	38.3	37.6
Employment rate (% population aged 55-64)		29.1	33.5	31.9	28.9	31.6	34.7	32	33.3
Employment for low skilled 15-64 (ISCED 0-2)		9.7	12.5	11.5	9.9	13.6	13.5	9.7	9.5
Employment rate for medium skilled 15-64 (ISCED 3-4)		37.2	38.5	35.4	32	33.8	37	36.7	35.6
Employment rate for high skilled 15-64 (ISCED 5-8)		60.6	64.9	58.9	53.3	56.3	56.3	68.1	66.3
Self-employed (% of total employment)		19.6	22.8	23.2	21.2	22.4	23.6	21.6	21.3
Part-time employment (% of total employment)		11.2	12.1	8.2	5.3	6	5.9	4.2	3.7
Temporary employment (% of total employment)		72.9	68.8	71.5	72	70.6	70.1	79.7	79.5
Activity rate (% population aged 15>)		35.8	41.5	42.5	38.4	39.6	43.8	39.7	41
Activity rate (% population aged 15-64)		38.2	41.5	42.5	38.4	39.6	43.8	39.7	41
Activity rate (% population aged 15-24)		22.3	23	23.3	20.4	21.5	24	19.6	21.5
Activity rate (% population aged 25-54)		47.5	51.8	53.3	48.6	49.5	54.7	50.4	51.8

Activity rate (% population aged 55-64)	32	37.3	37.6	33.1	35.9	39	35.4	36.5
Unemployment aged 15> (% labour force 15>)	30.3	29.5	35	32.7	27.4	30.3	26.4	29.2
Youth unemployment (% labour force 15-24)	54.7	55.7	60.9	57.6	52.3	52.6	53.9	54.9
NEET rate (% population aged 15-24)	33.7	34.9	29.6	30.9	29.5	25.9		
Long term employment rate (% labour force 15>)	18	19.7	24.7	23.6	18	21.7	16.6	17.7
Share of long term unemployed (% of total)	59.4	66.9	70.5	72.1	65.5	71.6	63.1	60.5
Unemployment rate, low educated 15> (ISCED 0-2)	43.9	39.9	45.8	46.6	32.2	34.9	34.8	38.7
Unemployment rate, medium educated 15> (ISCED 3-4)	29.1	29.1	35.4	32.6	28.9	30.6	28.3	31.1
Unemployment rate, high educated 15> (ISCED 5-8)	17.6	16.8	20.6	19.9	18.5	25.8	15.1	18

Source: World Bank Group 2019 based on the Vienna institute for economic studies.



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