

Territorial Impact of the Agriculture Vocational Education in Albania

ERALDA SHORE NOÇKA

Department of Economics and Rural Development Policies,
Faculty of Economics and Agribusiness, Agricultural University of Tirana,
Rruga Paisi Vodica 1025, Tirana,
ALBANIA
ORCID NO: 0009-0003-8324-0172

AELITA XHUVËLI MANI

Department of Business Administration,
Faculty of Economy, University of Luarasi, Tirana,
Rruga e Elbasanit 59, 1000 Tirana,
ALBANIA
ORCID NO: 0009-0007-1153-5958

ANA KAPAJ

Department of Mathematics and Informatics
Faculty of Economy and Agribusiness, Agricultural University of Tirana,
Rruga Paisi Vodica 1025, Tirana,
ALBANIA
ORCID NO: 0000-0002-2406-2164

ALERTA BASHA

Department of Mathematics and Informatics,
Faculty of Economy and Agribusiness, Agricultural University of Tirana,
Rruga Paisi Vodica 1025, Tirana,
ALBANIA
ORCID NO: 0000-0002-5690-6704

Abstract: - The agricultural vocational education secondary school (AVESS) system in Albania, is organized through 8 institutions located in various regions, that tend to respond to entire the national demand, giving equal opportunities to all interested students, regardless of their place of residence. In these regards, the Albanian government has implemented several measures to attract students to integrate AVESS and facilitate their integration in the labor market. Despite the various measures, including financial support or adapted facilities for students coming from families with low income or from remote areas. The territorial impact of AVES remains limited and shows a relatively low coverage. This phenomenon is not exclusive to agricultural professional schools that do not have dormitories, but even to vocational schools that have dormitories and adequate facilities.

Aiming towards a sustainable agricultural sector development and an efficient sectoral labor market, that tends to guarantee equal opportunities for the new generations, the objectives of the study are AVESS Gap identification, factors that impact AVESS attendance, assessment of the impact of governmental measures, and proposing recommendations for a sustainable AVESS system. To understand what are the main factors that influence the territorial impact of AVESS, a consolidated assessment has been performed during 2020-2021, passing through desk research, screening, focus groups, working groups, experts and agricultural representative interviews, and visit to relevant agricultural businesses, workshops, and dedicated surveys targeting teachers, students, and local businesses. Out of the assessment results, family income is the main factor influencing AVESS attendance. Regardless if schools have dormitory facilities or not, as the distance between students' homes and the vocational school's location increases, family income also tends to increase, but at a decreasing rate. Students coming from families with modest incomes show a lower mobility and beyond a certain distance they are less likely to register in AVESS located far from their residence.

By testing three main hypotheses, it has been noticed that home-school distance negatively affects the attendance of students coming from families with lower incomes. In other words, family income plays a significant role in determining school attendance, particularly when considering the distance between students' homes and AVESS. Considering this finding and the low AVESS territorial impact, imply that the governmental financial incentives have a low impact and do not offer equal opportunities to all students, especially the ones residing far away from AVESS and coming from families with low incomes. In this context, new policies could be taken into account, such as enlarging the number of AVESS or evaluating the possibility to open agricultural vocational education secondary classes in general high schools located in rural areas.

Key-Words: - Vocational Education, Professional Agricultural Profile, Family Income, Territorial Impact, Territorial Coverage.

Received: August 6, 2022. Revised: June 24, 2023. Accepted: August 9, 2023. Published: September 7, 2023.

1 Introduction

Youth in Albania represents the greatest employment potential considering that the country has the second youngest population in Europe. However, the unemployment ratio of the youngest generations remains very high (almost 20.9% of 15-29 years old), showing that the labor market faces difficulties in integrating young generations, even in sectors with high potential, such as agriculture.

Agriculture remains a non-attractive business for young people; even though the sector employs a large part of the population, the Albanian youth considers agriculture as "old fashion" and has steadily been migrating to urban centers for more opportunities. New funding availabilities and a shift in governmental strategic priorities have put a focus on a sector with increasing potential. In Albania, agriculture remains the main sector in terms of employment and contribution to the overall Gross Domestic Product (GDP). Agriculture accounts for 18% of the national GDP, and about 48% of the workforce is employed in this sector, [1]. Based on INSTAT official data in Albania there are approx. 355,000 farms of which about 300,000 are mixed with crops and livestock production. Farm size has increased from 1.14 ha to 1.20 ha, while parcel size has maintained the same level, about 0.27 ha, implying not only small farm size but also a high level of fragmentation, which characterizes the agriculture sector in Albania, [1].

According to the official Labor Force Survey for the year 2021, the estimated labor force was 1.411.308 persons (of which 88.48% were employed), of which 33.8% were employed in the agriculture sector, [1]. Still, further total employment was dominated by the agricultural sector, being clear the high potential and impact that Albanian agriculture has. The large employment shares of the agriculture sector and the major need for the upgrade of older technologies towards

European standards call for new technical skills to manage the transition.

The strong and positive relationship between individuals' education and skill levels toward labor market outcomes, shows that a focus shall be paid to ameliorating education opportunities and skills in this field. Guidance for youth towards the vocational education system plays an important role in orienting them toward employment options and decreasing migration. According to Instat, in the education for the academic year 2020-2021, vocational education students as a percentage of all students in secondary education represent 17.66%, [1]. Further improvement and development of the vocational education and training system will enable the country to achieve its full growth potential.

Taking into account the above-mentioned situation, a deep assessment of agricultural vocational education secondary school (AVESS) has been performed to make a screening of the overall situation, problems, and needs on a national scale. Particular attention has been given to governmental measures/interventions and results interpretation, to orient decisions, and strategies and to develop policies.

Thanks to an in-depth analysis of the situation, using questionnaires oriented to AVESS students, teachers/professionals, and local businesses in the agricultural sector, a large number of findings have been identified, concerning three main aspects: students' attendance on integrating AVESS, gaps that prevent AVESS to properly fulfill their functions, and AVESS relations with local businesses. The findings aim to elaborate recommendations/considerations to be taken into account in the further AVESS development, in Albania.

Aiming towards a sustainable agricultural sector development and an efficient sectoral labor market, that tends to guarantee equal opportunities for new generations, the objectives of the study are:

- To highlight the problems of the Agricultural Vocational Education System in Albania;
- Identifies main gaps/factors that impact AVESS attendance by students.
- Asses governmental measures impact and propose recommendations sustainable AVESS System.

2 Agricultural Vocational Education Secondary Schools in Albania

Aristotle's, education principles can be summarized as the progress of training man to fulfill his aim by exercising all the faculties to the fullest extent as a member of society. To Socrates, education means the bringing out of the ideas of universal validity which are latent in the mind of every man. International consensus on education priorities accords an important place for achieving gender justice in the educational sphere, [2]. Strategic planning in an educational context was defined in a variety of ways in the relevant literature, [3]. There is no agreed-upon definition in the field of history education. Concepts such as "skills," "processes," and "competencies" are often used interchangeably in educational jargon to refer to historical thinking, [4]. Current inquiry problem areas are often determined by the influx of new technologies into educational practice, [5]. Important to the newest research in education is the use of authentic environments and the voices of practitioners and users as well as a researcher, [5]. The digital transformation of the economy is reshaping how people work and do business since current approaches of operation by companies or start-ups influence the skills demanded, with a prevalence of innovation and entrepreneurship, [6]. The traditional view suggests that the teacher has the knowledge, the learner is dependent on the teacher to disseminate the knowledge and the learner has nothing to contribute, [7]. The study, [8], began to popularize "andragogy" as an alternative educational process to "pedagogy". In this transnational space, adults' education nature and scope are currently being revised to respond to the complexity that characterizes globalized modern societies, [9]. This paper will closely examine and compare the status and challenges of the AVESS system in Albania. In light of different social developments, it is expected to find differences in the status of education in AVESS. The role of the AVESS system in this context, in addition to its contribution to personal development and fulfillment, is increasingly recognized in the

Members States' National Reform Programmers, [10]. This Communication highlights the essential contribution of learning, through the acquisition of key competencies by all, to employability and mobility in a modern labor market and social inclusion, [10]. Increasing participation in young adult learning and making it more equitable is crucial, [10]. Teaching methods and materials should take into account the specific needs and learning approaches of young adults, [10]. The professional development of people working in AVESS is a vital determinant of the quality of learning. Little attention has been paid to defining the content and processes for initial training for learning staff. There are many educational and professional routes to becoming a learning practitioner and the profession is not always recognized within formal career structures, [10]. Teacher collaboration is a step toward the integration of disciplines, better mirroring what happens outside the classroom, [11]. According to [12], in a poor economy, schooling is costly for parents, and education is likely to be unequally distributed among siblings.

2.1 AVESS Main Data and Assessment Methodology

In Albania, 8 Vocational Education public secondary schools offer agricultural profiles, while there are no private schools with agricultural profiles. Being part of different national policies, strategies, plans, and action plans, these Vocational Education secondary schools are identified as a main actor in labor market insertion, especially in the agricultural sector. Even if there are no official preliminary assessments on AVESS's impact on the agricultural sector, it is unanimously considered by agricultural field professionals that these institutions encounter difficulties in achieving their objectives. To identify the main dynamics, an assessment has been performed during 2020-2021. The preliminary assessment has been achieved through desk research and a detailed screening, focus group, working groups, expert and agricultural representative interviews, and visits to relevant agricultural businesses. The results of the preliminary assessment have been the subject of a workshop with the main stakeholders coming from the agricultural sector and AVESS.

Thanks to a consolidated assessment three questionnaires have been elaborated: one targeting AVESS teachers; one targeting AVESS students; and one targeting agricultural local businesses in close collaboration with AVESS. These questionnaires included closed, semi-closed, and

open-ended tailored qualitative and quantitative questions. These questionnaires have been distributed to all active AVES in Albanian and 58 main agricultural businesses in close collaboration with these institutions. The absorption of different opinions, based on the territorial distribution, enables a comprehensive assessment of the heterogeneous community of the AVES system. In this context, the distribution of questionnaires in the zones of influence of each active AVES in Albania aims first of all to be all-inclusive from a territorial point of view, and assesses the AVES system from a three-dimensional perspective (education system, students, and business).

For a better representation and to reduce statistical distortions, the questionnaires were distributed randomly and were self-completed by the respondents. The surveys involve 516 students of vocational education agricultural profile (over a population of 1,381 students of the 8 public Albanian Public Vocational Education schools, representing 37% of the population and at least 21% of the students of each school have responded to the questionnaire), 75 agricultural profile teachers of vocational education (over a population of 161 teachers from the 8 public Albanian Public Vocational Education schools representing 46.5% of the population), 58 agricultural business in close collaboration with the existing AVES.

The results of the surveys have been subject to quality control, detailed data analyses, and crosscheck verification analyses, which have permitted to have a large number of relevant findings.

2.2 Albanian Agricultural Sector

Agriculture remains one of the main important sectors in the development of the Albanian economy, representing 19.23% of the national GDP, [1]. Based on official data, [1], there are approximately 84,369 active farms in Albania, and even though their size has increased during the last years, the agriculture sector is still characterized by small farms and a high level of agricultural land fragmentation, [1]. According to the official data, [1], the agriculture sector represents over 33.8% of the employed workforce, while taking into account that the sector still suffers from informality and undeclared work. The employment by economic activity is presented in Figure 1.

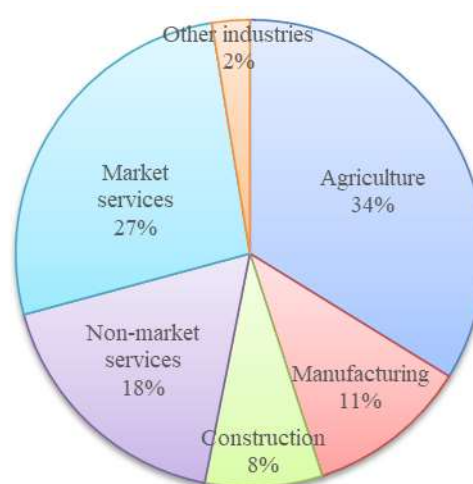


Fig. 1: Employment by economic activity, [1]

According to World Bank data agriculture's share in the Albanian economy is the highest in the region and the second-ranked in Europe, [13]. Referring to the same data agriculture share in the total GDP of Northern Macedonia was 7.9%, 6.8% in Montenegro, 6.1% in Turkey, 6% in Serbia, 5.6% in Bosnia and Herzegovina, and 9.1% in Kosovo, [13]. This trend remained more or less stable varying between 19.85% (2016) to 17% (2017), with an average share of 18% for the years 2010-2018, [13], [14]. Referring to these figures and the macroeconomic changes that occurred after the fall of the communist regime in the early 1990, the Albanian Government tried to focus its policies to make further progress in the sector. However, the progress made according to European Commission yearly reports, was moderate compared to the needs and standards of the EU common market, principally handling only horizontal issues, [14]. The principal governing law no. 9817 "For Agricultural and rural development" was adopted in 2007, after the entry into force of the Stabilization and Association Agreement, and was not amended since then, [15]. It implies the objectives, measures, and policies in agriculture and rural development. The law is accompanied by a set of other legal acts such as those regulating the implementation of foreign assistance under the Instruments of Pre-Accession (IPA) with the European Union, and the sectorial Assistance Programs for Agriculture and Rural Development (IPARD), [16], accompanied by by-laws.

Albanian agriculture and rural areas entered a new stage of development with the country's application for EU membership in 2010. To fulfill its strategic objective of EU integration, and to meet the Commission requirements in line with obligations entailed by the candidate status since

2014, specifically regarding Chapter 11 on Agriculture and rural development, the Albanian Government adopted the Inter Sectorial Agricultural and Rural Development Strategy – ISARDS, [17]. Its main objective is to define the strategic framework to treat the challenges faced by the agriculture and agro-processing sector, as well as the development of rural areas in a sustainable economic, environmental, and social manner, proposing similar policy instruments to the Common Agricultural Policy (CAP), to achieve economically viable farming, improved food security and sustainable rural development. ISARDS is based on three main pillars: (a) policy framework on rural development; (b) national budgetary support schemes, (c) institutional and legal development, and the implementation of the new framework, [17]. The strategic approach of the government to meet EU standards and *aquis* requirements in this field was pointed out again in the reviewed National Strategy for Development and Integration (NSDI II), which together with the National Program for European Integration (NPEI) and the Action Plan for the alignment towards the 2030 Agenda of Sustainable Development Goals (SDGs), supports the sustainable socio-economic development of Albania and the EU integration process by reasserting the vision of ISARDS, [17]. Even though the entire policy framework related to agriculture, and the specific provisions of the ISARDS, [17], underline the importance of vocational education, technical programs, and graduates for further development of the sector, they do not foresee any specific measures to improve the current situation in agriculture vocational schools. It may be considered that this scenario is a consequence of the fact that ISARDS, [17], was not followed by a public Action Plan, and neither has a mid-term review or approved update.

2.3 AVESS system in Albania

Vocational Education Schools in Albania have their origin in the early 1920s, with “Harry Fultz”, founded by the American Red Cross. After the Second World War, the vocational education system in Albania featured a dual element:

- firstly, vocational secondary schools provided theory classes for full-time students and students that already had a job, whereas, for practice learning, students undertook internships in state enterprises, and
- secondly, internships were regulated by the state, and the participation of enterprises was compulsorily enforced by law.

During Communism, 58% of all vocational schools were oriented toward an agricultural profile. After the fall of the communist regime in the early 90s, the country has undertaken agrarian reforms, that put an end to the communist cooperative system, and which resulted among other things in agricultural land fragmentation, a large rural exodus, and a considerable agricultural production decrease. These changes had the effect of significantly reducing the demand for agricultural vocational education and consequently, the vocational schools have been closed gradually. The decline of the agricultural sector during the first years of the transition period significantly reduced the number of students interested in professional agricultural formation. Due to the low impact and efficiency, the number of AVESS has been significantly reduced and agricultural vocational classes in general high schools have been closed for two decades (1990-2010).

Despite the considerable changes after the 90s, the agricultural sector has always played an important role in the family economy and employment. The development of the agricultural sector after 2010 and its main role in the local economy, resulted in a growing demand for a skilled labor force, in various branches of the agricultural sector. For this reason, in the last decade, the Albanian government has taken different measures to reactivate the professional education system, by reactivating or opening new vocational schools on the Agricultural profile. Moreover, to encourage student participation, scholarship and financial aid for transportation systems have been put in place. The new AVESS, aimed to meet national demand for agricultural vocational education.

However, based on different reports on Vocational Secondary Schools, despite the steps taken in support of the secondary professional agricultural system, AVASS shows a lack of territorial coverage, adapted structures (as dormitories, agricultural land, or/and greenhouses for school practices, technical tools, etc.). Moreover, there is a lack of formation and harmonization with the labor market demand, AVESS is offering theoretical training with a weak connection to agricultural and agro-processing businesses. To improve this relationship between supply and demand in the labor market, Albania has recently integrated Vocational Education Schools under the National Agency for Employment and Skills – NAES (an agency offering public services covering employment programs, facilities in linking employers and job seekers, professional training programs, self-employment programs, and financial

support to help people to find a suitable job). However, the integration of vocational schools under NAES has not been associated with a clear Vocational Education System Development Strategy, in other words, the integration of AVES under NAES does not change their territorial impact, especially since these schools still do not provide part-time training, for people that already have a job in the sector.

2.4 Main Finding on AVES Assessment in Albania

Currently in Albania, 8 public vocational secondary education institutions offer agricultural education, while there are no private schools in this field. A total of 161 teachers and 78 profiled teachers work in these institutions. All these schools, in addition to the agricultural direction, also offer other educational directions such as: Veterinary, Food Technology, Wood Processing, Forestry, Mechanics, Electrotechnics, Transport Services, Social-Health Services, ICT, Hotel-Tourism, etc. Considering the economic role of the agricultural sector (where the agricultural sector employs over 33.8% of the active population on a national scale), the total number of 1,381 students, let us understand that there is a relatively low demand for AVES formation.

The agricultural profile still attracts more males, because more than $\frac{3}{4}$ of students in agriculture vocational education are males (almost all students enrolled for the academic year 2019-2020 in Shkodra are males, while this phenomenon is more balanced in other AVES, and only one school registers a higher female attendance in Golem-Kavaja). These results show the perception of citizens on the agricultural professions. According to the teachers, this gender disparity is mostly due to local cultural perceptions.

Professional agricultural education is a continuity of the education course and is not considered by older groups as a qualification opportunity to integrate the agricultural sector labor market. Over 97.2% of students are aged 14-19 years, and over 66.6% of students aspire to higher education. These results show that vocational schools in the agricultural profile are mostly frequented by students that have not yet integrated into the labor market or consider AVES as a trampoline to integrate higher education. Vocational schools do not offer part-time education, highlighting the fact that these schools do not offer the opportunity to the currently employed labor to have a formation or to further ameliorate their knowledge and skills in the agricultural profile.

Even if NAES, provide short-term professional training programs to job seekers or employed people that want to improve their skills, the lack of part-time AVES does not offer the possibility for the agricultural labor market to develop in a sustainable way. On the other hand, only 33.4% of the students aspire to integrate into the labor market after conducting their agricultural vocational education, while over 66.6% of the students aspire to follow higher education, implying that agricultural vocational education is not mainly considered an option for quick integration into the labor market, but is mostly an opportunity to pursue higher education in agriculture profiles. The students that have at least received a state scholarship are presented in Figure 2.

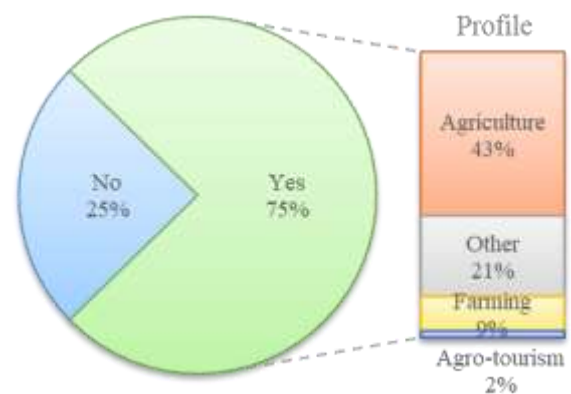


Fig. 2: Students that have at least received a state scholarship

Considering that 43% of students have never completed a single professional practice, while 37% of them identify experience exchange as one of the main opportunities to ameliorate agricultural vocational education, this shows a low level of professional practices and experience exchange. According to the teacher's perception, the lack of practice comes from the fact that these internships are not paid and students encounter financial difficulties in reaching the farms where the courses take place, farms do not respect the internship programs and use students as a free workforce, students families prefer their children to contribute on families' businesses, etc.

Students usually come from families with a high number of family members and low incomes. The average composition of the families' members is 5.3, exceeding the national average of 3.9 members, and the average number of family members at working age is 2.8, exceeding the national average of 2.6 members, while the average number of employed family members is 2, lower than the national average of 2.6 members. Almost $\frac{1}{4}$ of the

students have at least one family member in immigration and 18% declare that the main income of their families comes from remittances of family members in immigration. Moreover, 75% of the students have received scholarships, suggesting that a good part of the students come from economically disadvantaged families. In these conditions it is clear that there is a large proportion of students that come from families with low incomes, this can be justified by the fact that the government offers financial facilities to the students that integrate vocational education secondary school, based on family incomes.

The labor market opportunities and family economic activity are the main factors in selecting agricultural vocational education. About 47% of students have chosen agricultural vocational education “to easily find a job in agricultural farms”, and 37% “to support their family agricultural business”. Vocational education is considered an important instrument towards the integration of the labor market in the agricultural sector and develop the family farming business, highlighting the positive reputation of vocational education as a catalysator on labor market integration (supported even by the fact that 86% of the students consider the situation of the agricultural vocational education ‘quite favorable’ or ‘very favorable’). Despite the positive perception (supported even by teachers and local businesses), AVESS recorded a decreasing number of students registered on agricultural profiles.

The territorial impact of professional education schools is limited in the areas nearby the institutions. The majority of students come from the areas close to the location of the schools because the average distance between these students’ homes and educational institutions is 6,573m. The fact that there are only 8 vocational schools for all of Albania, emphasizes the lack of a balanced territorial distribution of agricultural vocational education. The average distance from students’ homes to vocational schools (meters) is presented in Figure 3.

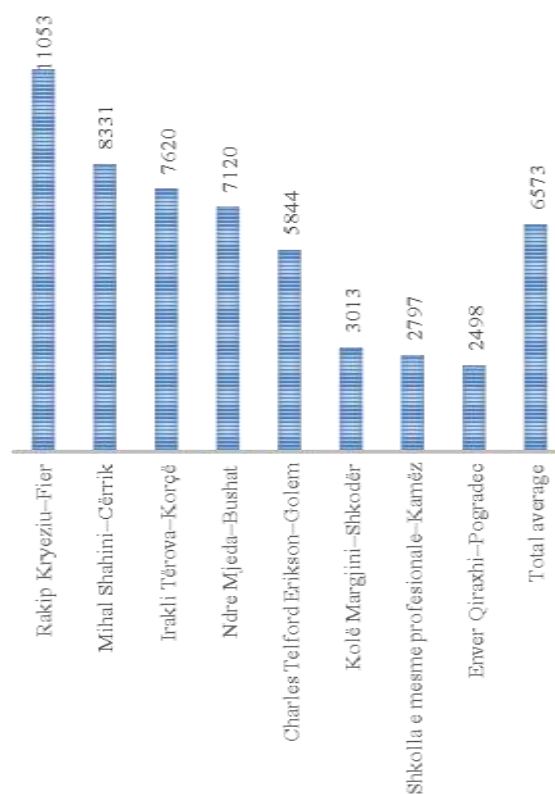


Fig. 3: Average distance from students' homes to vocational schools (meters)

3 Distance and Family Income Impact on AVESS Attendance

Only 5 schools out of 8 have functional dormitories (with a total capacity of 1040 places), underlining that the Agricultural Professional School of Kamëz and "Enver Qiraxhi" Technical-Professional School, Pogradec and "Kolë Margjini" Forestry Technical School, can mainly attract students who live in the immediate surroundings, while the other schools are presumed to have a larger impact. In addition to the lack of dormitories, it is worth noting that there is also a very low attendance of the dormitories, making it clear that the influence of the schools is mainly regional and does not have a large effect as could be expected.

According to the average distance to AVESS students’ homes, it appears that schools that do not have dormitories do not have a large territorial coverage, where on average the distance to AVESS-students’ homes does not exceed 3km and more than 50% of the students’ live e in a distance lower than 1Km. On the other hand, it seems that schools that have dormitories have a larger coverage, however, more than 50% of the students’ home is located at a lower distance than 4.5km. Even in the case of “Rakip Kryeziu” in Fier, which gives the impression of a larger territorial impact, 50% of the student's

home is located at a lower distance than 5km. The AVESS average territorial coverage is presented in Figure 4.

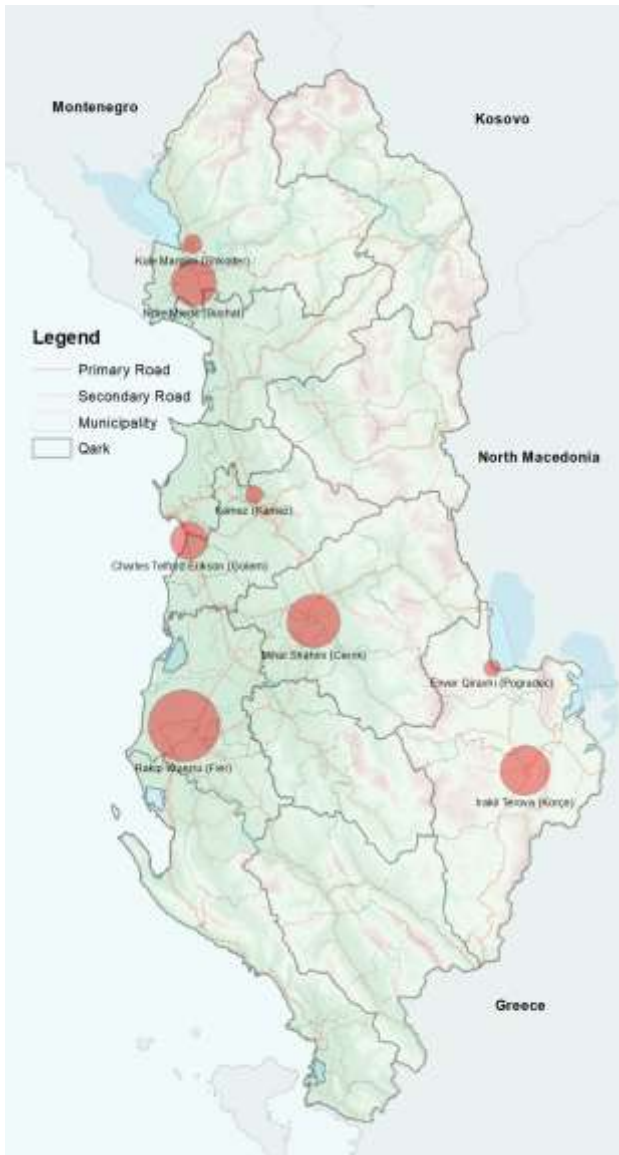


Fig. 4: AVESS average territorial coverage

From the questionnaires, “Distance from their home” and poor “transport access” are considered by students as the main factors that inhibit the development of agricultural post-secondary vocational education. The same, considerations have been raised by the teachers, emphasizing that even in the cases where dormitories are present and the fact that students that come from families with low incomes could benefit from scholarships, the territorial impact of vocational education remains limited. For the teachers and agricultural experts, this limited territorial impact comes from the fact that families with low incomes, cannot deprive themselves of their children's work, by sending them to vocational schools far from home.

Living near a vocational education school can offer an affordable solution for students who plan to pursue a vocational education: staying home to save on living and moving costs. However, the questions raised from the questionnaires are: Are students who live near a vocational education school more likely to go to a vocational education school than others? And, if so, what is the role of the family income? Frequenting the vocational education school may not be as much of a deterrent for students living in high- or middle-income families, as it is for those living in low-income families who may not be able to afford to pay the student's living and moving expenses. Indeed, based on the family income and the distance to the AVESS location and students' homes, it seems that at greater distances, the average family income is higher (the same observation is made for the family income by family members). Over a distance of 8km, the average family income per member is higher than 10,000.00ALL per family member, and more than 87% of the students have an average family income per member higher than 15,000.00ALL, what could be considered as students living in middle- or higher-income families. The Family income and distance AVESS location- students' home is presented in Figure 5.

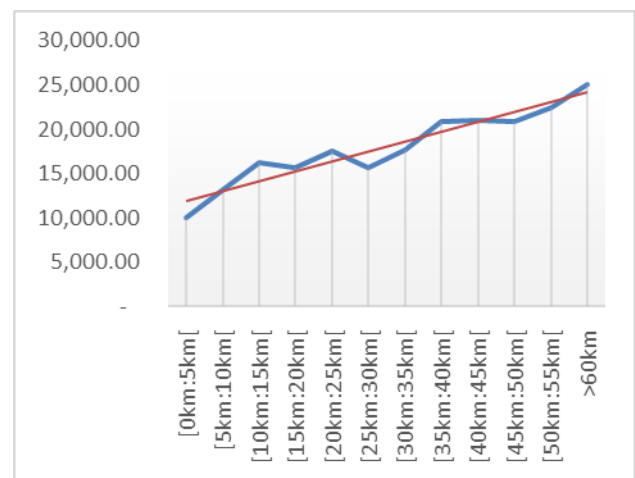


Fig. 5: Family income and distance AVESS location- students' home.

Considering that some students live at home and some others live at the dormitories during the week, and the fact that students coming from families with low income have almost access to scholarships, three hypotheses have been assessed:

- H1. Distance from the school negatively affects the frequentation of the vocational education school for the students coming from families with low income and residing in their family.
- H2. Distance from the school negatively affects the frequentation of the vocational education

school for the students coming from families with low income and residing in the school's dormitories.

- H3. Distance from the school negatively affects the frequentation of the vocational education school for students coming from families with low income.

To test these hypotheses, the interaction of family incomes per member with the distance home-school variables has been analyzed, while taking into account if the students stay at home or in scholar dormitories. This allows us to assess the role played by distance as a function of family income. The Econometrics results are presented in Table 1.

Table 1. Econometrics results

Hypotheses	H ₁	H ₂	H ₃
Regression Wight	D-I	D-I	D-I
B	0.399	2.394	1.679
R ²	0.259	0.371	0.483
F	F(1,316)	F(1,75)	F(1,392)
F	109.894	43.731	364.613
t	10.483	6.613	19.095
p-value	0.000	0.000	0.000
Hypotheses supported	YES	YES	YES
<i>Note. *p<0.05.d: Distance from school, I: Family income per member</i>			

The dependent variable distance from school has been regressed on predicting variable family income for the three hypotheses. Coefficients were further assessed to ascertain the influence of the factor on the criterion variable.

- H1 evaluate whether family income significantly affects the distance home-school, the results revealed that family income has a significant impact on AVESS attendance by students that reside in their family (B=0.399, t=10.3483, p=0.000).

- H2 results revealed that family income has a significant impact on vocational education school attendance by students that reside in school dormitories (B=2.394, t=6.613, p=0.000).

- H3 results revealed that family income has a significant impact on vocational education school attendance in general (B=1.679, t=19.095, p=0.000).

In this context, family incomes have a significant impact on AVESS attendance, whether in the case of schools with or without dormitories. Family income increase as the distance between

home and the AVESS location increases, implying that the greater distance between school and home, the smaller the predisposition of students coming from low-income families to follow AVESS. Moreover, the family income increases as the distance between home and the AVESS location increases at a decreasing rate, which is consistent with the notion that, beyond a certain threshold, the increasing distance might not matter as much, since the school is simply too far away for the student to commute.

Moreover, if focusing only on the students that declare that their family incomes come mainly from familial agricultural business, family income has an even larger impact on the distance home school, so on AVESS attendance. This result supports the perception of teachers, that families with low income could not prevent their family, from the work provided by their children, by registering them in vocational secondary schools far away from home, where children have to stay in dormitories or have lost too much time on transportation.

Despite the Albanian government's efforts to meet the demand for Agricultural Vocational Education, AVESS has a limited territorial impact that does not cover all the Albanian territory. In addition, even the financial measures that try to help disadvantaged students (such as scholarships, financial support on transportation, dormitories facilities, and financial support...), have a limited impact from a territorial point of view, because disadvantaged students living closest to the AVESS are more likely to follow agricultural vocational education than the ones that live far away. So, in the actual AVESS system, financial measures have a fairly limited impact on equal opportunities.

4 Conclusion and Considerations

Considering the impact of distance home -AVESS, family income, and the role of the agricultural sector in the Albanian economy and labor market, it is interesting to find out why AVESS has limited territorial coverage, while a large number of measures have been taken by the Albanian government (scholarship, dormitories and transport financial support, etc.). Family incomes have been identified as one of the main factors in AVESS attendance. The econometric analyses have shown, that family income per member increases as the distance between home and school increases, implying that the greater the distance between school and home, the smaller the predisposition of students coming from low-income families to follow AVESS. Even if family income per member

increase at a decreasing rate, this phenomenon underlying that beyond a certain threshold, the increasing distance might not matter as much, since the school is simply too far away for the student to commute.

Even if, financial support for following AVESSE could attract a larger number of students, this impact is mainly concentrated in a limited territorial area surrounding the school. The impact of family income on the distance home-school affirms that by going beyond a certain distance, relatives with lower incomes no longer inscribe their children to vocational schools located far from their house. These limitations could come from different factors such as the work contribution of the children in the family businesses, auxiliaries' expenses, perceptions, sentimental factors, etc.

Considering this limited territorial impact of AVESSE, it is clear that the actual Vocational secondary education system in Albania does not respond effectively to national demand, because some parts of the territory are outside the AVESSE "impact zone", AVESSE do not offer part-time education that offers the opportunity to the currently employed labor force to have a secondary formation to further ameliorate their knowledge and skills in agricultural profile.

In this context, besides the financial support, the Albanian government should evaluate the possibilities to:

- Integrate professional profile classes even in general secondary schools, where students can specialize while attending existing institutions that offer general education. This option seems very interesting, especially since that general education secondary schools have a better territorial coverage.

- Develop part-time education, to develop the currently employed labor force to have a secondary vocational formation. The development of part-time education may concern even the creation of part-time classes even in general secondary schools, especially in areas with a high demand on this formation.

In both possibilities, these evaluations require close collaboration between NAES (in charge of vocational education), the Ministry of Education and Sports (in charge of general education), and the Local Government (in charge of general education facilities). Moreover, by involving sectorial institutions in these evaluations (as ministries, agencies, private sector, groups of interest, and donors...) a better and integrated overview of the future Vocational Secondary Education System Development in Albania could be offered.

Please, follow our instructions faithfully, otherwise, you have to resubmit your full paper. This will enable us to maintain uniformity in the conference proceedings as well as in the post-conference luxurious books by Press. Thank you for your cooperation and contribution. We are looking forward to seeing you at the Conference.

References:

- [1] INSTAT, Official Statistical Database, <http://databaza.instat.gov.al/pxweb/sq/DST>
- [2] Subrahmanian, Ramya, *Gender equality in education: Definitions and measurements*, 2005, <https://www.sciencedirect.com/science/article/abs/pii/S0738059305000349>
- [3] Hambright, Grant, *Definitions, benefits, and barriers of K-12 educational strategic planning*, 2004, <https://go.gale.com/ps/i.do?id=GALE%7CA123578424&sid=googleScholar&v=2.1&it=r&linkaccess=abs&issn=00941956&p=AONE&sw=w&userGroupName=anon%7E61d65eb5&aty=open+web+entry>
- [4] Stéphane Lévesque, *Historical Thinking*, 2018, <https://onlinelibrary.wiley.com/doi/abs/10.1002/9781119100812.ch5>
- [5] Januszewski, Alan, *Educational Technology*, 2010, books.google.al/books?hl=en&lr=&id=JO3YcOUuK74C&oi=fnd&pg=PP2&dq=educational+definitions&ots=aBD3U0gNIm&sig=v_OQdmNIZTRjMoxodJax3jfwWU&redir_esc=y#v=onepage&q=educational%20definitions&f=false
- [6] Vladi, Kokthi, *Mapping Stakeholders Perceptions on Innovation Skills, through the Borich Needs Assessment Model: Empirical Evidence from a Developing Country*, 2022, chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.researchgate.net/profile/Elena-Kokthi/publication/363891323_Mapping_Stakeholders_Perceptions_on_Innovation_Skills_through_the_Borich_Needs_Assessment_Model_Empirical_Evidence_from_a_Developin
- [7] McDonough, Darlene, *Similarities and Differences between Adult and Child Learners as Participants in the Natural Learning Process*, 2013, <https://scirp.org/reference/referencespapers.aspx?referenceid=757366>
- [8] Knowles, M. S., *The modern practice of adult education: Androgogy versus pedagogy*. New York: New York Association Press, 1970.

- [9] Christin Tonseth, Emilio Lucio-Villegas, "Adult Education in a Transnational Space: The Status of Adult Education in Norway and Spain", 2019, <https://scirp.org/journal/paperinformation.aspx?paperid=92423>
- [10] European Commission, *Communication from the Commission*, 2006, <chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2006:0614:FIN:EN:PDF>
- [11] Ashley Chiu, M.S., C. Aaron Price, *Supporting Elementary and Middle School Stem Education At The Whole-School Level: A Review Of The Literature*, 2015, chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.msichicago.org/fileadmin/assets/educators/science_leadership_initiative/SLI_Lit_Review.pdf
- [12] Wolff, Nathalie Picard & François-Charles, *Measuring educational inequalities: a method and an application to Albania*, 2010, <https://link.springer.com/article/10.1007/s00148-008-0201-z>
- [13] *World Bank data*, 2017 <https://data.worldbank.org/>
- [14] European Commission, *Progress reports for Western Balkan Countries*, 2019, <http://www.europarl.europa.eu/document/activities/cont/201311/20131105ATT73959/20131105ATT73959EN.pdf>
- [15] *Law no. 9817 "For Agricultural and rural development"*, 2007, <https://qbz.gov.al/eli/ligj/2007/10/22/9817/560/ba670-5925-45f0-b54d-ec6e9ba2e10f;q=9817>
- [16] AZHBR, IPARD, *For the ratification of the sectorial agreement*", 2016, <https://ipard.gov.al/>.
- [17] Official Gazette, Ministry of Agriculture and Rural Development, *Inter Sectorial Agricultural and Rural Development Strategy – ISARDS*, 2014, https://www.bujqesia.gov.al/wp-content/uploads/2018/02/STRATEGJIA_NDE_RSEKTORIALE.pdf

Contribution of Individual Authors to the Creation of a Scientific Article (Ghostwriting Policy)

-Dr. Eralda Shore Noçka, as the first author, carried out conceptualization, data curation, formal analysis Investigation, methodology, project administration, supervision, validation, writing - original draft, writing - review & editing.

-Dr. Aelita Xhuveli Mani, as 2nd author, carried out data curation, investigation, methodology, writing - review & editing.

-Prof. Dr. Ana Kapaj, as 3rd author, carried out data curation, investigation, methodology, writing - review & editing.

-Dr. Alerta Basha as 4th author, carried out data curation, investigation, methodology, writing - review & editing.

Sources of Funding for Research Presented in a Scientific Article or Scientific Article Itself

No funding was received for conducting this study.

Conflict of Interest

The authors have no conflicts of interest to declare that are relevant to the content of this article.

Creative Commons Attribution License 4.0 (Attribution 4.0 International, CC BY 4.0)

This article is published under the terms of the Creative Commons Attribution License 4.0

https://creativecommons.org/licenses/by/4.0/deed.en_US