



Teacher assignment in rural regions of Azerbaijan

Azar Abizada¹, Ulkar Gurbanova², Ainura Iskandarova³, Narmin Nadrzada⁴

¹ Associate Professor of Economics, School of Business, ADA University, 11 Ahmadbay Aghaoglu St., Baku AZ1008, Azerbaijan. Email: aabizada@ada.edu.az.

² Research Fellow at the Institute of Education of the Republic of Azerbaijan. Email: u.gurbanova@arti.edu.az.

³ Research Fellow at the Institute of Education of the Republic of Azerbaijan. Email: a.iskandarova@arti.edu.az.

⁴ Research Fellow at the Institute of Education of the Republic of Azerbaijan. Email: n.nadirzada@arti.edu.az

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HIGHLIGHTS

- More than a change in teaching or curriculum is necessary: sustainability indicates a change of cultural paradigm
- University is called to interpret and transform reality creatively facing the social, economic and environmental challengers.
- Education for Sustainable Development, ESD, prepares learners to understand and respond to the changing world and drives sustainable development
- Problem-Based Learning, PBL, and Bachelor's Degree Dissertations within the framework of a research project on sustainability in urban planning and within the framework of a research project on the recovery of cement-based waste.

ABSTRACT

Large number of unfilled teaching positions in rural regions is a common problem in most of the countries, including Azerbaijan. In this paper, we try to identify factors affecting preferences of teachers on workplace and thus, the reasons for not choosing schools in rural areas and propose an incentive mechanism to reduce number of unfilled vacancies in these regions of Azerbaijan. To understand the factors affecting student preferences, we surveyed around 2000 junior students majoring in various education programs in different universities. Based on the survey results, we identify the factors affecting the decisions of the prospective teachers and the barriers that keep them away from choosing schools in rural areas. Based on our findings, we propose an incentive mechanism to fulfil the vacancies in rural area schools.

Keywords: schools in rural region; teacher assignment; vacancies in rural region; incentive mechanism.

1. INTRODUCTION

Education can be identified as the process to improve cognitive and social skills of an individual, to meet the interests and needs of society, to help individual to realize his/her potential. The purpose of education in all societies is to instill the cultural value of the community, to shape the personality and behavior of individuals. To fulfill this goal, teachers are defined as one of the most important factors on students. Accordingly, teachers are responsible for guiding students' activities and contributing to their success. Therefore, students are in need of benefit from experience of teachers. However, there is a large group of students, who mainly live in rural regions of the countries in the world including Azerbaijan, who are deprived of such an experience of teachers. This is mainly due to the fact that majority of teachers prefer to teach in urban schools because of the disparities between rural and urban areas, which in turn leads to unfilled teacher vacancies in rural schools. Statistical data from the Ministry of Education of the Republic of Azerbaijan shows that there is a need for teachers in rural areas of the country, and that this problem becomes

more important year by year. In the hope of helping to resolve this problem, this paper tries to explore the causes of unfilled vacancies in rural regions of the country and based on our findings to propose additional incentive mechanisms.

According to the latest United Nations estimates, the current population of Azerbaijan is 10 million and 44.8% of them live in rural areas¹. Students body is around 1.5 million. The ratio of teachers to students is 1:11 which indicates that there is enough teacher supply in Azerbaijan. This ratio is close to the ratios of different countries where the education system can be considered as successful. The table below shows the average ratio of teacher to students in those countries².

Table 1: Teacher-student ratios in several countries.

Countries	Teacher-Student ratio
Canada	1:17
Australia	1:15
Spain	1:14
Germany	1:13
Poland	1:10
Sweden	1:10

¹<http://www.worldometers.info/worldpopulation/azerbaijan-n-population>

² <https://data.worldbank.org/indicator/se.prm.enrl.tc.zs>

Only in 2017-2018, 47,000 teachers filled the online application form for teacher recruitment examination. Despite of this number, 4,075 vacancies out of 8,607 remained unfilled. Rural areas cover 82% of these vacancies meaning that students in those areas do not have sufficient teachers. Taking into account the importance of teacher factor on student academic performance, it is worth to think about the effect of teacher absence in remote areas. The data of previous two years clearly shows that this problem is growing. In both 2015-2016 and 2016-2017, only 2,500 out of 3,500 vacancies were filled. However, the number of applicants were 22,000 and 32,000 respectively.

For academic year of 2017-2018, teachers were mainly needed in the following subjects: physics, chemistry, primary school teacher, information science, biology and Russian language teacher, while the similar trend continued for 2018-2019. High number of unfilled vacancies covers mainly Yardimli, Agdam, Guba, Lerik, Fuzuli, Sabirabad, Kurdamir, Gusar, Jalilabad, Saatli, Imishli, Masalli regions. The need for teachers in these regions is between 100-250. Under this condition, parents refuse to send their children to schools. This may affect education level in the country. In order to address this problem, government offered some incentive programs, in order to attract teachers to the schools in rural areas. Currently, the local executive authorities and the ministry of Education provide various incentives. Incentives are implemented since 2010. Initially, these stimuli were considered for limited number of teachers who were in need. However, for now, all newly recruited teachers are encouraged by these incentives from the beginning of their experience in rural schools.

Encouraging measures taken by Ministry of Education within 2010-2016 years are followings:
(i) Additional 60 AZN was added to the monthly salaries of teachers working at schools located 20 km far from the center of the district, whereas this amount reaches 100 AZN when the distance becomes more than 20 km. According to the latest amendment in 2014 to the legislation of Ministry of Education, above-mentioned measure is applied to young teachers for 3 years. This period can be prolonged 2 years in case teachers desire to continue to work in that school. The second incentive was (ii) to offer additional financial support for transportation of property and utility services. Teachers who are sent to remote areas to start their labor activity are provided with one-time doubled salary for the purpose of meeting transportation of property and accommodation costs.

Despite all taken measures, they were not sufficient to meet the expectations of teachers, as the vacancies still remained unfilled. The Ministry of Education approved an order on March 28, 2016 about "Determining the needs of teachers in general educational institutions and vocational high schools and recruitment/replacement rules of pedagogical personnel". According to these rules, recruitment and replacement process is carried out by the Ministry of Education.

The purpose of this paper is to understand the reasons for teachers not choosing the schools in rural regions of the country and to identify possible incentive options that would make schools in rural regions attractive for prospective teachers. To do so, we conducted primary research: data was collected via student surveys from the third-year pedagogy students of state universities in Azerbaijan. We questioned both (i) possible barriers for them for choosing the schools in rural regions and (ii) additional incentive options that might make these schools

attractive option for them. Around two thousand students were surveyed. According to the analysis of survey data, we identified primary barriers for choosing remote schools and we provide a shortlist of additional incentive options that might possibly make schools in rural regions as attractive options for prospective teachers.

2. LITERATURE REVIEW

Shortage of qualified teachers in rural areas has been a growing problem for many years in many countries [3, 9, 22, 24, 34, 36],. According to the NASBE [24], the problem is not related to the low production of qualified teachers, but to the great percentage of teacher turnover due to the limited targeted incentives to attract educators who are capable and willing to teach and retain in those schools. While teacher turnover can be considered as an advantage in metropolitan schools, it can have a great impact on the stability of rural schools [2].

Several challenges that discourage teachers to take up a rural appointment have been identified in the literature. Moreover, these discouraging factors have been grouped as professional, organizational and personal [8]. Teachers with the greatest credentials are the first ones to leave the job [31] and their biggest dissatisfaction is associated with the workplace and salary [2, 37]. While some researchers claim that financial reward can have a positive impact on teacher recruitment in rural areas, others argue that despite of extra financial incentive, teacher supply is still very low in many remote schools [17]. Moreover, Sharplin [32] found that besides the low salary in schools in rural regions, deficit of experienced teachers as mentors is another major obstacle preventing teachers from choosing those schools. Furthermore, social, cultural and cooperative isolation, exhaustion and stress, multi-grade or subject teaching and insufficient acquaintance with schools and

communities are other reasons of teacher turnover [1, 4-6, 8, 13-16, 18, 19, 26]. Moreover, number of researchers found that professional development is a prevalent issue for teachers as well. In that sense, limited availability of additional teachers to cover for absences, the time allowances, cost and the distance of the schools in regions can affect the access of the teachers to professional learning, which discourages teachers from choosing those schools [2, 5, 13, 20, 28, 29, 35]. Moreover, lack of resources such as classroom space and textbooks, and primary social services such as provision of hospitals, water, sufficient infrastructure, electricity, roads also have a great influence on the development and the quality of rural education [25].

While many researchers studied the reasons of teacher shortage in rural areas, others conducted a research on finding the intrinsic factors affecting teacher's decision to work in rural schools [8, 18, 21]. It was found that predominantly, a great percentage of early career teachers work in rural schools. Sharplin [32] examined pre-service teachers who had a field trip to rural schools and decided to teach in remote areas. The survey respondents were mainly females with the age range between 18-30, who grew up and had family relations in rural areas. The rationale behind their choices is the small school size that leads to increased knowledge of students and sense of collegiality, professional development opportunities, enhanced responsibilities, expectations of a different curriculum and variety of teaching experience, active social life, and an ideal place for their family. Some of these factors are consistent with findings by Boylan et al. [2], Sharplin [32], Ralph [27], Lyons [17] and Handal, et. al. [9] who also concluded that rural environment, gaining practice in rural education, sense of community and general atmosphere

are the major influential forces. Furthermore, Lyons et al. [18] revealed that job availability, remote lifestyle, affordable housing, availability of rural or remote allowances, spouse's employment and having lived in the same area before are the major influential factors. He also mentioned that while females are encouraged by partner employment, males are stimulated by higher chance of promotion and payment. According to Handal, et. al. [9], these influential factors should be communicated to pre-service teachers to change their perception of rural teaching.

There have been a number of strategies, and recommendations that can promote rural teaching and teacher retention in rural schools. Zoe A. Barley [1] studied the elements of teacher preparation programs in Central region and found out five core components, namely providing teachers with multi-certificates in diverse fields, improving teachers through distance learning, recruiting teachers from the same district, offering practice-teaching opportunities in rural communities, and offering courses for prospective teachers focused on issues related to teaching in rural communities for preparing teachers to rural schools. In contrast, Ingersoll [12] believes that all initiatives will be valid only in case of having more focus on retention of educators in rural areas and less on recruitment. This is also consistent with the arguments by Mulkeen [23] who mentioned that there is no need for educating more teachers for rural schools since there is an oversupply of teachers in urban schools. The only requirement is to think about the ways to attract teachers to relocate and retain in rural educational institutions. According to Boylan et al. [2], having access to professional learning can also increase teacher retention. Particular measures, such as hiring a temporary relief teacher to cover rural teachers while their professional learning

can be considered in this regard. Moreover, extra resources apart from those assigned for teachers, such as more travel time and funding to cover costs are also needed to support the degree of equity between teachers in rural and urban schools and ensure similar opportunities in terms of professional development [13]. Lyons [17] stated that the incentive scheme for attracting and retaining teachers differ according to the diverse age groups. While older teachers are more likely to go to rural schools because of the lifestyle and are attracted by promotion, transfer system, departmental placements and bonding, younger teachers are more encouraged by budgetary incentives that include rent and allowances. Hence, to engage teachers, he suggests having fiscal incentives for younger teachers and career development, casual staffing and more leave for older teachers. According to Sedere [30], there should be a separate line of investment in teachers' housing in remote areas and teachers with the experience of more than 5 years must be prioritized and granted with additional salary.

Haynes & Miller [10] found that rural universities play a very crucial role in rural employment issues. Teachers are more likely to teach in places where they feel strong personal connection and working in areas identical to where they studied or lived influence their decision to teach in rural schools [10, 13, 14, 17, 18, 33]. Moreover, in order to improve quality teaching and reduce the need for teachers, Ramsey [28] and Green & Reid [7] suggested to stimulate collaborative relations among teacher education institutions, remote schools, teachers and education system.

3. METHODOLOGY

We first conducted face-to-face interviews with the head of HR department, the head of Education Development Programs Department

at the Ministry of Education and deans of pedagogical faculties. They gave information about the fundamental changes of the teacher recruitment process and change in educational system throughout the years. Additionally, we collected secondary data on teacher recruitment and replacement results for 2016-2018 from the HR department of MoE. Data included the overall number of applicants, number of vacancies, number of replacements (from one district/city to another and within the same district/city), and number of unfilled vacancies according to each district.

Additionally, to help us to identify factors affecting the decisions of the prospective teachers, we conducted student surveys among students studying pedagogy major. The surveys took place during months of March and April of 2018 and were conducted manually in four universities that has pedagogy programs, namely Baku State University, Azerbaijan State Pedagogical University, Azerbaijan University of Languages and Baku Slavic University. We surveyed slightly over 2000 third year students. The reason for considering only third year students was the time they spent in the program as we wanted to consider the students who are close to graduation and already have some thoughts on what they will do next. It would be ideal to survey graduates of the program or senior students. However, since there is no easy way to reach graduates and most of the senior students are busy with their mandatory internships, we could not survey them. The surveys were anonymous and were distributed during class-time in Azerbaijani and Russian languages. Instructions were specified in the survey and were additionally explained in person in each classroom.

Besides demographic questions on gender, university and degree program, we asked two

types of questions to respondents. First was to understand the preferences of the students over regions and salaries while second was to understand barriers for working in regions and additional support mechanisms that may make position in region attractive for them. To understand preferences of the students, we asked three ranking questions where we provided respondents with 4 different region-salary bundles (for example: Lerik-500AZN, Yardimli-650AZN and so on) in each question and asked them to rank them based on their preference. These questions were designed to help us to understand whether the respondents rank according to salary only, or they pay attention to the region as well. Next two questions focused on identifying main reasons for low preferences to schools in regions and additional supports that the potential teachers would like to have in order to consider schools in the regions as an option. We first provided a list of options such as "working conditions in the regions", "living conditions in the regions", "salaries in the regions" and so on, that could possibly be reasons for people not choosing to work in schools in regions and asked respondents to choose the option(s) that could be blocking reason(s) for them. Moreover, we provided list of the options such as "administrative support", "housing support" and so on, that could be added to schools in the rural regions to make them attractive for the potential teachers and asked the respondents to choose the option(s) that would make schools in the regions attractive for them. Finally, we asked students whether they would consider schools in the regions (i) if they score high on teacher placement exam and (ii) if they score low on teacher placement exam. These questions may help to identify students who would want to work in the regions even if they can have opportunities in big cities, and students who consider position in the regions as their last resort. Sample survey

questions is available in Appendix A.

Our study is not without methodological limitations, one of which is availability of respondents as it would be ideal for our analysis to survey the senior students. However, as we mentioned earlier, all senior students were in mandatory internship and thus were unreachable. Another limitation of our paper is that we use self-reported data, as it is usually with most of the survey-based researches. A possible problem with this method is that students may misreport some of the information in a socially desirable way [11]. Although surveys were anonymous, students may still misreport some of the information.

4. RESULTS

The main purpose of the survey was to find out the main barriers that prevent teachers to work in rural schools. Moreover, it will help to propose incentives to encourage candidates to go to those areas. A big majority of the students studying in Education are females: 90% of our sample are females while 10% males. This is in fact consistent with the actual gender distribution of the students in this major.

The table below, summarizes the distribution of the students over majors.

Table 2: Distribution of respondents over degree programs.

Degree Programs/Specializations	Proportion
Azerbaijani Language and literature	16.36%
Biology/Chemistry	8.31%
Physics	6.35%
Primary school	4.58%
English language	40.51%
Mathematics	4.97%
Technology	8.84%
Russian language	2.95%
History	4.06%
Geography	3.07%

As one can note, big majority of the students study English language education. In fact, out of approximately 5000 junior Education students in the country, approximately 1500 of them study this major. Therefore, having such a big majority of respondents from English language major was not surprising. Moreover, this also shows that the distribution of out sample is consistent with the population distribution over degree programs. The other popular majors are Azerbaijani language and literature education and Mathematics education.

4.1 Barriers for choosing schools in rural areas

In order to understand the main reason(s) for teachers not preferring to work in rural areas, we gave them list of options and asked them to rank these possible reasons. The options provided were (i) living conditions, (ii) salary, (iii) family condition, (iv) working condition, (v) social isolation and (vi) no barrier. Since teachers were ranking those options, it is not easy to summarize these data. Therefore, we only focused on the primary reason for each teacher of not being willing to work in rural region. The table below summarizes the distribution of the responses:

Table 3: Distribution of primary barriers for respondents for working in the regions.

Reasons	Proportion
Living conditions	27.53%
Salary	25.79%
Family conditions	15.76%
Working conditions	11.57%
Social isolation	12.47%
No barrier	6.88%

It is seen from the table that living condition and salary are the main reasons for teachers not selecting the schools in rural regions. As we mentioned above, this table only considers the primary reasons. However, if we consider full ranking of the teachers over the reasons, we obtain the table below where average and standard deviation of the rankings are provided. Since the higher the ranking more important the reason is, the smaller average implies that the provided reason is more important factor affecting teachers not choosing schools in rural areas.

Table 4: Summary of basic descriptive statistics of responses on ranking of the importance of the barrier.

Reasons	Mean	St Dev
Living conditions	2.01	0.95
Salary	2.42	1.53
Family conditions	2.75	1.43
Working conditions	2.51	1.10
Social isolation	2.77	1.34
No barrier	1.45	1.08

One can be surprised with the low average for “no barrier” option as only small percentage of teachers (approximately 7% of the teachers as one can see from the Table 2) rank this option as primary reason. However, note that since this is the only option those respondents rank, they usually rank it as primary reason. Moreover, other respondents who list one of the other

options never rank this option of “No barrier” as they do have barriers. Besides this option, all the remaining options pretty much follow the findings in the Table 2.

Although we see from Tables 2 and 3 that there is difference between importance of the barriers, we conduct hypothesis test to understand whether these differences are significant. As it is seen from these tables, “living condition” seems to be the most important reason (barrier) for teachers not selecting schools in rural areas. When we compare its importance to that of “salary”, we see that the difference between the importance levels of these two variables is significant ($t = -8.6$, with $p < 0.001$). The difference between the importance levels of “living condition” and all the other reasons is even more significant: with “working condition” ($t = -12.93$, with $p < 0.001$), with “family condition” ($t = -16.45$, with $p < 0.001$), with “social isolation” ($t = -17.25$, with $p < 0.001$)

Based on the results in Tables 2 and 3, we see that “salary” is the second most important reason for teachers not selecting schools in rural areas. We already know that it is significantly less important than “living condition”. When we compare its importance to that of “working conditions”, we see that the difference between the importance levels of these two variables is somehow (at 5% level of significance) significant ($t = -1.7$, with $p = 0.044$). The difference between the importance levels of “salary” and all the other reasons is even more significant: with “family condition” ($t = -5.49$, with $p < 0.001$), with “social isolation” ($t = -5.81$ with $p < 0.001$).

The third important reason we consider is “working condition”. We already know that it is significantly less important than “living condition” and somewhat less important than “salary” of the teachers. When we compare the importance of this reason to that of the remaining

reasons, we see that there is significant difference between them: with “family condition” ($t = -4.64$, with $p < 0.001$), with “social isolation” ($t = -5.07$ with $p < 0.001$)

Finally, when we compare the importance levels of the remaining two reasons, family condition and social isolation, we see that there is no difference between these two reasons ($t = -0.27$, with $p = 0.393$).

4.2 Additional incentive options

Finally, in order to understand what kind of additional incentives can be provided to attract teachers to the schools in rural areas, we provided several options and asked the candidates to rank them based on their necessity for them. The support types provided were: (i) Mentoring, (ii) Professional development, (iii) Accommodation, (iv) School administration support, (v) Community support and (vi) Support for family members. Once again, since teacher were ranking those options, it is not easy to summarize these data. Therefore, we only focused on the primary incentive option for each teacher. The table below summarizes the distribution of the responses:

Table 5: Distribution of primary incentive options for respondents for working in the regions.

Support types	Proportion
Mentorint	17%
Professional development	18%
Accomodation	10%
School administration support	15%
Community support	7%
Support for family members	33%

It is seen from the table that support for family members is primary support option that should be added. Moreover, mentoring, professional development and school administration support are also important for the teachers.

As we mentioned above, this table only considers the primary reasons. However, if we consider full ranking of the teachers over the support options, we obtain the table below where average and standard deviation of the rankings are provided. Since the higher the ranking more important is the option, the smaller average implies that the provided support type is more desired in order to attract teachers to the schools in rural areas.

Table 6: Summary of basic descriptive statistics of responses on ranking of the importance of the additional incentive options.

Support types	Mean	St Dev
Mentorint	2.05	1.15
Professional development	2.06	0.92
Accomodation	2.27	1.11
School administration support	2.11	0.89
Community support	2.37	0.97
Support for family members	1.84	1.11

One can note that the order of the averages of support types is consistent with the findings in the Table 4. Once again, although Tables 4 and 5 show the difference between importance of the support types, we conduct hypothesis tests to understand whether these differences are significant. We consider the most important four support types for this in detail analysis.

As it is seen from the table above, “support for family members” seems as the most crucial support option for teachers in order to attract them to schools in rural areas. When we compare its importance to that of the other support types we obtain that the difference with each one of them is significant: with professional development ($t = -5.3$, with $p < 0.001$), with mentoring ($t = -4.18$, with $p < 0.001$), with school administration support ($t = -6.2$, with $p < 0.001$)

Next three important support options are “professional development”, “mentoring” and “support from school administration”. While all of them are significantly less important than “support for family members”, they are not that much different from each other in importance: “professional development” and “mentoring” ($t = -0.16$, with $p = 0.43$), “professional development” and “support from school administration” ($t = -1.05$, with $p = 0.14$), “mentoring” and “support from school administration” ($t = -1.02$, with $p = 0.15$).

5. DISCUSSION

It is very important for teachers to have a high motivation to fulfill their duties and responsibilities. As motivation has a key role in teachers' choices of workplaces, it should be considered as a crucial factor in developing strategies for teacher to fill vacancies in remote schools. One should keep in mind that, due to strong preferences of the teachers, vacancies will not be fulfilled unless teachers are intrinsically motivated to choose working in regions. Taking into account the significance of motivation factor in teacher preferences, reconstructing incentive mechanism carries great importance.

The conducted survey revealed that living condition, teacher salary, and working condition are the primary reasons that keep teachers from working or choosing schools in the regions of Azerbaijan. Moreover, support for family members, professional development options, mentoring and support from school administration are also very important factors that can attract teachers to the schools in the regions.

Teacher salary: Currently, teachers in remote schools get less salary than teachers working in urban schools. Since salary of the teachers

depends on their teaching hours, with low number of teaching hours in remote schools, teachers in such schools will obtain low salary. Adequate salary may increase the chances of fulfillment of vacancies in rural schools. One of the questions in the survey was designed to understand the preferences of respondents over region-salary bundles. They were given some bundles and asked to rank them. Survey results revealed that preferences of the teachers are lexicographic: majority care about salary first, and only when salaries are the same, they choose among the regions. As all these results show, potential teachers give importance to the salary amount. Therefore, one may claim that, a proper salary incentive should be provided in order to attract teachers to remote schools. However, practice shows that monetary based incentives work properly only in short term. In this case, various non-monetary incentives can be considered for the permanence of condition in long-run.

Working Condition: Teaching environment is one of the major factors that determine desire of teachers to work in rural schools. Many schools in rural areas lack basic infrastructure and in order to attract more teachers and to improve the standard of education in schools in the rural regions, the government needs to improve their working conditions. Working condition plays a crucial role in the decision of teachers to replace their schools. They accept teaching in rural schools under the condition of availability of school resources: physical facilities, provision of textbooks and teaching materials and properly working heating system. Moreover, administrative and mentoring supports can play decisive roles in attracting and motivating teachers to stay and work in rural areas. This can include demonstrating positive attitude and giving encouraging feedback by principals, opportunities to collaborate with experienced teachers and parents. Collegial mentoring

covers shadowing experienced teachers which can help new teachers to easily and quickly adapt to new school and students.

Living Condition: Improving living condition is one of the key factors for attracting and keeping teachers stay in rural areas. According to the survey results, teachers prefer to be provided with housing. Also, they would like to be accommodated close to their workplaces. In addition, since newly assigned teachers are alone in unfamiliar environment, they have safety and security concern. Construction of teacher campuses next to their workplaces can remove all these issues. Moreover, there may have transport related problems due to difficult acceptability in rural areas. To eliminate this problem, teachers suggest being provided with transportation services.

Social Isolation: Based on the survey results, it can be understood that teachers face problems due to the geographical features of the rural areas. Moreover, teachers can be isolated because of lack of social life and activities-absence of cinemas and theaters in rural areas and lack of health facilities in the regions. Also, weak cell phone reception, slow or no internet connection can cause problems both in personal and professional lives of teachers. Additionally, teachers are exposed to stay away from their family and friends. Suggested solution is the involvement of local community. This is very important for teachers, since it impacts their decision to stay or leave that area. Community support can help teachers to overcome their sense of isolation, adapt to new environment and feel secure.

Family factor: Spouse employment is one such factor. For a married woman to work in a school in rural region may result in separation from her spouse and possibly children for some time, as due to work reasons her spouse may not be able

to move with her. Therefore, most of the female teachers (which is indeed big majority of the people in this profession in Azerbaijan), decide to stay in big cities, together with their families. However, if more work opportunities would become available in the regions, it would be easier to attract young potential teachers to the schools in the regions as cost of living is pretty low in the regions. In addition to having a full-time teaching position, teachers always would like to develop themselves, learn some new teacher methodologies and so on. Therefore, professional development is very important. Career advancement and opportunities can rarely be available in rural areas, which is one of the reasons that keep teachers away from working in rural schools. Developing opportunities for professional career development such as seminars, trainings and workshops for teachers would motivate and constantly improve them.

6. CONCLUSIONS

This paper tried to identify factors that prevent teachers from choosing schools in rural areas of Azerbaijan and propose an incentive mechanism to reduce number of unfilled vacancies in these regions. We surveyed over 2000 junior students studying pedagogy. Based on the survey results, we found that living condition is the primary, followed by the salary and working conditions as the most important barriers for teachers not to choose schools in the regions. Moreover, we also found that support for family members, professional development possibilities, mentoring and support from school administration are desired incentive options to be added to schools in the regions in order to make the vacancies in those schools attractive for potential teachers. Based on our findings, in order to make schools in regions attractive for potential candidates, central planner should take into account abovementioned variables while

building incentive mechanisms. Building teacher campuses in regions can in fact tackle several problems such as living condition, salary (as accommodation will be cheaper), social isolation, and other problems, at once.

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APPENDIX A (Survey)

This survey is conducted for the purpose of providing better conditions for teachers working in rural schools of Azerbaijan. Your responses are very crucial for our research. The survey should take less than 15 minutes to complete. Be assured that all your responses will be kept in strictest confidentiality. Thank you for taking time to take part in this survey. We really appreciate your input!

**University:
Major:**

Gender: Female Male

1. Did you get your secondary education in Baku?
 a) Yes b) No

2. What city/region would you prefer to work at?
 (Please, rank the following options according to your preference from 1 to 4 where (1) is most preferable to you and (4) is least preferable).

Region	Salary	Ranking
Shaki	750 AZN	
Guba	700 AZN	
Gusar	650 AZN	
Sabirabad	600 AZN	

- Please, rank the following options according to your preference from 1 to 4 where (1) is most preferable to you and (4) is least preferable:

Region	Salary	Ranking
Sabirabad	750 AZN	
Lankaran	700 AZN	
Aghsu	650 AZN	
Saathi	600 AZN	

- Please, rank the following options according to your preference from 1 to 4 where (1) is most preferable to you and (4) is least preferable:

Region	Salary	Ranking
Saathi	750 AZN	
Masalli	700 AZN	
Kurdamir	650 AZN	
Jalilabad	600 AZN	

- Please, rank the following options according to your preference from 1 to 4 where (1) is most preferable to you and (4) is least preferable:

Region	Salary	Ranking
Jalilabad	750 AZN	
İmishli	700 AZN	
Lerik	650 AZN	
Yardimli	600 AZN	

- Please, rank the following options according to your preference from 1 to 4 where (1) is most preferable to you and (4) is least preferable:

Region	Salary	Ranking
Lerik	750 AZN	
Yardimli	700 AZN	
Aghdam	650 AZN	
Fuzuli	600 AZN	

3. What are the factors that prevent you from working in the regions? (You can choose more than one option)

- | | |
|--|---|
| <input type="checkbox"/> Salary | <input type="checkbox"/> Working conditions |
| <input type="checkbox"/> Living conditions | <input type="checkbox"/> Social isolation |
| <input type="checkbox"/> Family issues | <input type="checkbox"/> No obstacles |

4. What kinds of support would you need to work in rural areas? (Choose no more than 3 options)

- | | |
|---|---|
| <input type="checkbox"/> Mentoring and Coaching support | <input type="checkbox"/> School Administration support |
| <input type="checkbox"/> Sustainable professional development | <input type="checkbox"/> Local Community support |
| <input type="checkbox"/> Accomodation | <input type="checkbox"/> Employment support for spouse in the same region |

5. In case of getting low score on the exam, whould you prefer staying unemployed to working in regions?
 a) Yes b) No

6. Would you prefer to work in regions in return for getting better job opportunities in Baku after 3 years?

- | | |
|------------------------------|-----------------------------|
| <input type="checkbox"/> Yes | <input type="checkbox"/> No |
|------------------------------|-----------------------------|

7. How long would you agree to work in regions, if required?

8. Additional supports that you would like to offer to work in regions: