

Out of 350,000 high-tech employees in Israel, only 50 are from the Bedouin community

According to a study initiated by the Edmond de Rothschild Foundation, only 135 Bedouin students are currently acquiring education in high-tech fields in the county's academic institutions, of which, according to past experience, 60-70% drop out of studies their studies without attaining a degree

By Danny Zaken | Publication date: June 18, 2021

A new study initiated by the Edmond de Rothschild Foundation and published for the first time in *Globes* shows that out of 350,000 individuals employed in Israel's high-tech industry, only 50 are from Bedouin society.

According to the study initiated by the Foundation, which works to reduce gaps in Israeli society through improving access to higher education, the Bedouin community in the south faces large gaps resulting from a low level of education in the Bedouin education system, which impairs basic knowledge and skills from an early age.

As a result, in Israel today there are only about 50 high-tech employees from the Bedouin community. The study shows that only 135 Bedouin students are currently studying high-tech fields in academic institutions, of which, according to past experience, 60-70% drop out of their studies without attaining a degree. And despite the great need for employees among high-tech companies, graduates from the Bedouin community face numerous difficulties in integrating into employment in the field, even after completing their academic studies.

The research study was based both on data from official sources – the Ministries of Education and Economy and Labor, the Innovation Authority, academic institutions, and civil society organizations, and on about 40 in-depth interviews with experts in the field and with Bedouin high-tech employees.

The basic conditions impair the Bedouin society's ability to integrate into scientific fields

According to the study, the deficient basic conditions impair and reduce the abilities of the Bedouin society's youths to be accepted into and complete academic studies in order to successfully integrate into the field of science in general, and into the high-tech industry in particular. Other struggles that young people from Bedouin society cope with are lack of experience and familiarity with the high-tech world, a conservative discourse, the lack of employment opportunities in the Negev, the lack of a network of relevant personal connections, and few success stories. All of these constitute additional barriers blocking of the Bedouin society youths from integrating into commensurate employment.

The latest State Comptroller's report states in this context: "In order to ensure the continued definition of the State of Israel as a 'start-up nation', the relevant government bodies ... should

address the removal of barriers towards achieving this goal ... in integrating populations that are currently underrepresented in it, and can be said of as being excluded from it: First and foremost, there is a lack of representation of women, but also of the Arab and Haredi populations.” And the Bedouin population is the most excluded of all.

The report based on the research study states that there is not a single point of failure, but a whole process, starting from home conditions, the poor level of education in schools up to the matriculation exam preparation, as well as the difficulties of Hebrew and English language skills, digital literacy, and advanced thinking skills, skills which are not addressed within Bedouin society; and more.

Along with all of this, there has also been evidence from field organizations as well as from Bedouin high-tech employees about the Bedouin society's suspicion of the high-tech industry, which was considered a closed 'friend brings friend' club and connected to the defense industry, in which they felt less welcomed. There is great difficulty for these young people to integrate into the industry even after acquiring the appropriate education. This difficulty stems from both the relatively few employment opportunities in the Negev region, from exclusion and discrimination in the workplace, as well as from accessibility problems – physical as well as cultural – which make it difficult to integrate into companies. The conservative discourse in Bedouin society does not encourage young people, especially young women, to work in a field that is considered 'Jewish', 'masculine', and 'security-related', and which requires long working hours, work in the evenings, traveling abroad, and so on.

On the other hand, it seems that even within the companies there are difficulties in understanding and containing the challenges that the integration of Bedouin workers creates for a company that did not formerly employ individuals from this population, and field research has raised allegations of discrimination, derision, and insensitivity.

And back to the academic studies stage. Only in recent years have several projects started in Bedouin society to strengthen STEM studies – the combination of mathematics, science, engineering and technology, which directs learners to higher technology studies at universities and colleges. They reach only about 3% of Bedouin students, and are not highly effective; that is, there are no success metrics for graduates of these programs. The research study has also revealed that there is no coordination between the various programs and almost no interfaces and collaborations.

The state of infrastructure in the Bedouin villages is yet another challenge

Ahmad Mwassi, Manager of Arab Community at the Edmond de Rothschild Foundation, told *Globes* that the challenge is at multiple ages, including both early childhood education, empowerment of primary and secondary school students, and targeted training for youths as well as personal assistance to students to prevent drop-out during the studies.

In the simplest sense, such assistance starts begins by addressing the difficulty of getting to school, and this is what one of the research interviewees, the resident of an unrecognized Bedouin village who is currently employed at a high-tech company, said: “[To get to college] I had to walk 40 minutes to the bus station every day, in the rain, in the sun ... I would leave the

muddied boots at the bus stop, change into shoes and travel to college ... In the village, there was no electricity in the evenings (only solar-generated power), and during the studies this was very difficult because I had to finish everything by 4 pm. I sometimes had to work from the university during the studies.” The dilapidated physical, electricity, transportation, and basic internet infrastructures are among the most challenging factors for the Bedouin student.

Following the findings of the study, the Edmond de Rothschild Foundation recommends the establishment of a single integrative system in the Collective Impact model, which will unite all the players and activities taking place in the field – the government, the business sector, the social sector, and other relevant bodies under a single roof, in order to develop a shared strategy that includes objectives and goals, synchronization of the activity, and the focus of all resources to achieve the goal. The Foundation notes that there are currently about NIS 20 million invested in this field, but they are scattered among the various factors without coordination and synchronization, and therefore do not bring the desired results.

“Integrating the Bedouin society into the high-tech industry is an important and necessary step”

The Foundation notes that through the appropriate effort, it is possible to increase the number of employees from the Bedouin community in high-tech to 200 within four years, and to 500 within a decade. The study also recommends expanding civil society models; creating strategic partnerships between higher education institutions, the Ministries of Education and Economics, regional clusters and local authorities; harnessing employers, i.e., the high-tech companies; establishing a network of Bedouin high-tech fellows who will become role models for youth and provide mutual support.

The infrastructure issue should also receive special government attention, and appears to some extent in the new five-year plan for the Bedouin society promoted by Ra’am (the United Arab List), which is a coalition partner and many of its voters are from the Negev.

Mwassi concludes: “Integrating the Bedouin community into the high-tech industry is an important and necessary step to reducing gaps and realizing the potential. I sincerely hope that the research will form the basis for policy-shaping by decision makers en route to changing the situation and significantly increasing the numbers integrating into high-tech. This is a considerable and very important challenge that will benefit the Bedouin population, as well as the population of the Negev and the state.”

Elli Booch, Director of Philanthropy at the Edmond de Rothschild Foundation, notes: “The research study aims to reflect the state of Bedouin society, and also to provide recommendations for action. The data analysis will assist institutions to define measurable goals and methods of action for integrating the Bedouin community into the high-tech and information-rich industries. The past year has posed challenges to Israeli society and its academia, and this is the time to implement the researchers’ findings and recommendations and bring the various players to work together to enable additional populations to succeed in academic studies and translate them into integration into appropriate and productive employment.”