U.S.-GEORGIA PARTNERSHIP

HUMAN CAPITAL DEVELOPMENT FOR ECONOMIC GROWTH

MILLENNIUM CHALLENGE CORPORATION GEORGIA COMPACT II

Millennium Challenge Account – Georgia



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MILLENNIUM CHALLENGE ACCOUNT GEORGIA

MILLENNIUM
CHALLENGE CORPORATION
UNITED STATES OF AMERICA



HUMAN CAPITAL DEVELOPMENT FOR ECONOMIC GROWTH



MCA-Georgia was created with the mission to implement Georgia's second Compact with the Millennium Challenge Corporation (MCC). MCC is an innovative and independent U.S. foreign aid agency that is helping lead the fight against global poverty.

The Compact has been the largest investment in Georgia's education sector since the country's independence, and aimed at developing Georgia's human capital for economic growth and poverty reduction. The $140 million Compact was implemented over five years, starting on July 1, 2014 and ending on July 1, 2019. The Compact was an international agreement signed between the Government of Georgia and MCC, and ratified by the Parliament of Georgia.

Studies have shown that human capital is a driver of economic growth for countries with developing economies. Recognizing this, Georgia has achieved significant progress in human capital development over the last decade. In 2012, the inadequate quality of human capital was identified as a major constraint to economic growth. The human capital deficit was particularly acute in science, technology, engineering, and math (STEM) fields. To tackle this challenge, the Government of Georgia, represented by the Millennium Challenge Account-Georgia, with funding from the U.S. Government's Millennium Challenge Corporation, has implemented projects in general, vocational, and higher education focusing on improving education quality and developing Georgia's human capital in STEM fields.

The MCC Georgia Compact II Improved Learning Environment Infrastructure Activity aimed at rehabilitating schools in rural areas of Georgia and the creation of a sound Operations and Maintenance system for all Georgian schools to ensure that infrastructure in schools is of adequate quality and receives long-term, sustainable oversight. As a result, 91 public schools in the regions of Georgia were fully rehabilitated, equipped with science labs, and a school operation and maintenance system was introduced and piloted. Also at the school level, professional development of 17,800 teachers in STEM subjects and English language was successfully carried out and institutional capacity-building of up to 2048 public school principals and facilitators was achieved through trainings and leadership academies. The Compact enabled Georgia to participate in international assessments (TALIS, TIMMS, and PISA) which allow impact measurement of the education policies and implemented activities and reforms. The overall goal of all of these activities and projects in general education sector was to improve the learning outcomes of students and to better prepare them for future challenges.

A vocational education improvement activity - the Industry-led Skills and Workforce Development Project– was successfully carried out with Compact II funding. Through competitive program improvement grants, 51 new technical and vocational education and training (TVET) programs were launched with 10 vocational education providers in Georgia. Activities for strengthening sector policy and provider practice in vocational education were successfully carried out, resulting in issuance of small grants promoting industry engagement in vocational education, TVET awareness-raising campaigns, and more. Three annual TVET conferences were organized and a TVET National Awards program was launched and implemented for three years, all of which resulted in the increase of public awareness towards the TVET sector.

The STEM Higher Education Project launched international standard higher education programs in STEM fields in Georgia and created a new cohort of highly skilled, professional, and internationally competitive engineers and technology specialists. This was achieved through a partnership with San Diego State University (SDSU) in Georgia, and included building the capacity of local partner universities to obtain U.S. accreditation of its STEM programs. Over $21 million was invested into state of the art science labs and educational infrastructure for the SDSU programs in Georgia offered at three Georgian partner universities.

Recognizing that gender inequality can be a significant constraint to economic growth and poverty reduction, MCA-Georgia has implemented activities promoting social and gender integration into all Compact programs at every stage of implementation to ensure equitable access and benefits and contribute to inclusive growth. MCA-Georgia integrated internationally-accepted principles of environmental and social sustainability into the design and implementation of all Compact activities.

You can read more about the achievements of the MCC Georgia Compact II in this report.

On behalf of the MCA-Georgia team, we are proud to have been able to contribute to the economic growth and development of Georgia and are thankful to the U.S. Government, MCC, and the American people for continuous support of Georgia over two MCC Compact programs.

We wish success to Georgia in its development agenda and hope that the successful collaboration between the United States of America and Georgia continues for many years!

MAGDA MAGRADZE

Chief Executive Officer

Millennium Challenge Account – Georgia



MCC has been working in Georgia since 2005 and has invested nearly $600 million in infrastructure, private enterprise competitiveness, and human capital development. Our current $140 million Compact, which ends in July 2019, is one of the most successful in our agency's 15-year history. It is also MCC's first Compact to focus exclusively on education and workforce development and the first to include a higher education component.

The Georgia Compact was designed as a holistic and strategic response to private and public sector demand for a better-qualified STEM workforce. It includes investments across the entire spectrum of the education system – general, vocational, and higher education – and, thus, has helped build a whole pipeline of better-educated students with the skills Georgia's economy needs to grow, especially in all-important STEM fields.

When I reflect on key Compact achievements, I think of the more than 90 public schools we have fully rehabilitated, which have completely transformed and breathed new life into communities across Georgia. I think of the nearly 20,000 school teachers and principals we trained in how to employ hands-on, student-centered learning techniques so kids are excited to go to chemistry and physics class. I think of the millions of dollars we leveraged from Georgian private and public sector to introduce dozens of newly accredited professional degree programs and enable hundreds of talented Georgian students to earn a U.S. STEM degree from San Diego State University right here in Georgia. Finally, I think of all the ways our Compact reached and benefitted girls and women, ethnic minorities, the socially vulnerable, and other traditionally underserved, but deserving, populations.

Over the past five years, MCC has successfully partnered with the Georgian Government and private sector, the U.S. State Department, and other international donors and partners to amplify the impact of our Compact on inclusive and sustainable economic growth here in Georgia. Going forward, we look to these same partners – and the Georgian Government in particular – to build on our joint investments in education and workforce development and follow through on its commitment to significantly increase education spending over the coming few years.

On behalf of MCC, I am so proud of what we have collectively accomplished under the Georgia Compact to improve education quality and create a better-qualified STEM workforce. Continued human capital development, especially in STEM fields, will be key for the future growth and prosperity of this beautiful country and the Georgian people.

Sincerely yours,

JENNER EDELMAN

Resident Country Director, Georgia

Millennium Challenge Corporation

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LIST OF ABBREVIATIONS

ABBREVIATIONS	DESCRIPTION
ABET	Accreditation Board for Engineering and Technology
ACS	American Chemical Society
CCD	Compact Closure Date
CCP	Compact Closure Period
CED	Compact End Date
CS	Construction Supervision
DLP	Defect Liability Period
E&S	Environment & Social
EASA	Education Assessment Support Activity
ESIDA	Education and Science Infrastructure Development Agency
ESMP	Environmental and Social Management Plan
FA	Fiscal Agent
FAP	Fiscal Accountability Plan
GBPR	Government, Business, and PR
GoG	Government of Georgia
GSI	Gender and Social Inclusion
GTU	Georgian Technical University
IE	Implementing Entity
IEA	Implementing Entity Agreement
IFC	International Finance Corporation
ILEA	Improved Learning Environment Activity
ISO	International Standardization Organization
ISU	Ilia State University
ISWD	Industry-led Skills and Workforce Development
ITT	Indicator Tracking Table
M&E	Monitoring and Evaluation
MCA	Millennium Challenge Account
MCC	Millennium Challenge Corporation
MESCS	Ministry of Education, Science, Culture and Sports
MoF	Ministry of Finance
MRDI	Ministry of Regional Development and Infrastructure
NAEC	National Assessment and Examination Center
NCEQE	National Center for Education Quality Enhancement
O&M	Operations and Maintenance
OHS	Occupational Health and Safety
OM	Operational Manual
PA	Procurement Agent
PCG	Program Closure Guidelines
PCP	Program Closure Plan
PIP	Procurement Implementation Plan
PIRLS	Progress in International Reading Literacy Study
PISA	Program for International Student Assessment
PIU	Program Implementation Unit
POC	Point of Contact
PPG	Program Procurement Guidelines
PPR	Procurement Performance Report
QFR	Quarterly Financial Report
RAP	Resettlement Action Plan
SDSU	San Diego State University
STEM	Science, Technology, Engineering and Mathematics
TALIS	Teaching and Learning International Survey
TIMSS	Trends in International Mathematics and Science Study
TPDC	Teachers' Professional Development Center
TSU	Tbilisi State University
TVET	Technical and Vocational Education and Training



COMPACT GOALS ACHIEVEMENTS AND CHALLENGES

The Government of Georgia (GoG) conducted an analysis of constraints to economic growth in the spring of 2011 and identified the low quality of human capital as a significant constraint to economic growth. The lack of human capital then was particularly acute in the STEM fields. Thus, the MCC Georgia Compact II (the Compact) aimed to reduce this human capital constraint to economic growth by means of targeted investments into the Georgia Education Sector in following directions:

(i) the Improving General Education Quality Project

(ii) the Industry-led Skills and Workforce Development Project, and

(iii) the STEM Higher Education Project.

While the long-term goals serve to reduce the poverty by means of increased knowledge in STEM areas and reduced mismatch in supplied skills at the labor market, the short and mid-term key outcomes are summarized in the below table.

Table 1: *Short and mid-term outcomes of the Compact as of June 10, 2019*

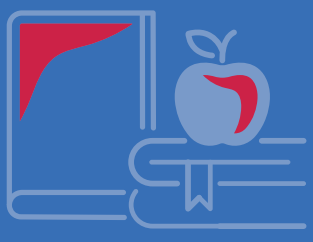
Name of the Outcome	Actual	Target	Complete
Improving General Education Quality Project			
Number of Rehabilitated Schools	91	91	100.00%
Number of Schools Equipped with Laboratories	91	91	100.00%
Number of Students in Rehabilitated Schools	39,830	37,450	107.00%
Number of School Principals Trained	1,718	1,668	106.36%
Number of Teachers Trained in:			
Teaching Methodology Module	14,859	14,578	101.93%
Subject Module	13,829	14,578	94.86%
School Facilitators Trained	1,409	1,528	92.21%
Number of International Assessments	5	5	100.00%

Name of the Outcome	Actual	Target	Complete
STEM Higher Education Project			
Number of Students Enrolled	642	2,008[1]	31.97%
Student Transition rate	77,18%	80%	96.48%
Number of Instructors Trained	131	150	87.33%
Number of Teaching Faculty Members Trained:			
Georgia Based Training	105	75	140.00%
U.S. Based Trainings for Georgian Faculty of Partner Universities	91	75	121.3%
Amount in U.S Dollars leveraged - Public	$12,450,000	N/A	
Amount in U.S Dollars leveraged - Private	$ 3,139,836	N/A	
Industry-led Skills and Workforce Development Project			
Number of Students Enrolled	1,935	1,500	129.00%
Number of Conferences Held	3	3	100.00%
Number of Instructors Trained	473	40	1,182.50%
Industry co-investment in TVET provision	$ 5,967,379	$ 1,800,000	331.52%

[1] The number of 2008 students was proposed by San Diego State University in its original proposal to MCA-Georgia. The assumption of anticipated students' body was based on the maximum amount of funding provided by the Government of Georgia to SDSU-Georgia students, i.e. maximum 500 students per cohort.

MILLENNIUM CHALLENGE ACCOUNT-GEORGIA

GENERAL EDUCATION



Project budget
$ 71.7 MLN.

VOCATIONAL EDUCATION



Project budget
$ 15.6 MLN.

HIGHER EDUCATION



Project budget
$ 36.2 MLN.

U.S. Government's Support for Human Capital Development in Georgia

The second $140 MLN. U.S. Millennium Challenge Corporation (MCC) Compact is being implemented during 2014-2019 with the aim of supporting economic growth in Georgia


JUVENTUS

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IMPROVING GENERAL EDUCATION QUALITY PROJECT

1.1 Improved Learning Environment Infrastructure Activity

Within the lifecycle of the Compact II, MCA-Georgia aimed to improve the learning environment of over 37,000 students, achieved through rehabilitation of 91 public schools in Georgia's regions. Rehabilitation entailed complete renovation of existing infrastructure and equipping schools with STEM laboratories. Through co-financing, the GoG ensured ancillary works of the perimeter outside the schools were completed and new furniture installed in schools.

Total budget of the school rehabilitation project was $54 million and covered the period of 2014-2019.

ILEA involved internal and external rehabilitation of selected school facilities, utility upgrades, and provision of laboratories- addressing the key elements correlating with improved educational performance, including human comfort, indoor air quality, and adequate lighting. The selection of schools was developed by an independent evaluator hired by MCC and agreed with the Government of Georgia. Evaluation criteria consisted of two phases. Phase one comprised of 1692 schools in total, selected through following criteria: Only public schools were eligible for rehabilitation; Schools located in the Capital were not eligible; Schools with serious infrastructural flaws were not eligible; Schools that pertained to MoESCS 2014-2019 rehabilitation plan were not eligible. For phase two a total of 312 schools were selected using following formula:

$$\text{Ranking Score } i = (\gamma\ 0.5\lambda + \ 0.1\gamma\ \gamma\ 0.3\mu + 1.5\beta\ \gamma\ 0.3\sigma)/5$$

The formula prioritized schools according to the following criteria:

λ = School Condition (aggregate which includes roof, windows, exterior walls, etc.)

γ = % Socially vulnerable students, $\left(\frac{\text{\# Socially vulnerable}}{\text{Total \# of students}}\right)$

$\mu = M^2$ per student, a measure of underutilization $\left(\frac{\text{Total facility } M^2}{\text{Total \# of students}}\right)$

β = Total # of students

σ = Standard deviation across each school $\lambda, \gamma, \mu, \beta$

Rehabilitation works were carried out in 3 phases, covering 9 regions of Georgia and 91 schools total.

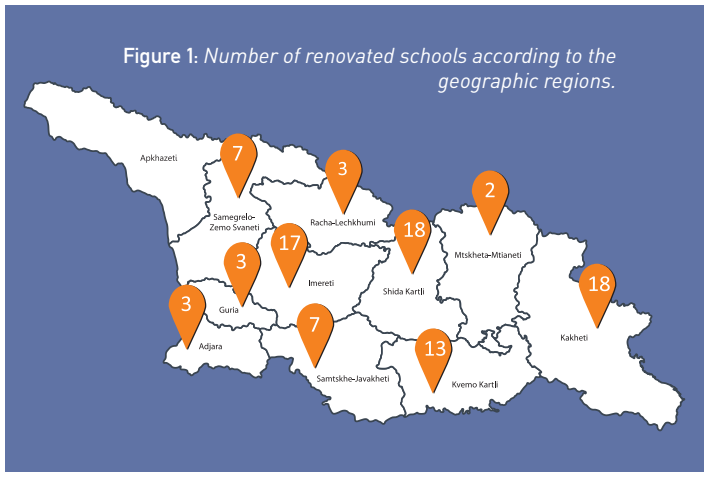


Figure 1: *Number of renovated schools according to the geographic regions.*

Phase 1: in the years 2016-2017, 30 public schools were rehabilitated in Shida Kartli (18 Schools), Mtskheta-Mtianeti (2 schools), Samtskhe-Javakheti (7 schools), Racha-Lechkhumi (3 schools) and Kvemo Svaneti regions (3 schools).

Phase 2: In the years 2017-2018, MCA-Georgia rehabilitated 31 public schools in Kakheti (18 schools) and Kvemo Kartli (13 schools) regions, namely:

The schools are as follows by name and region:

1. Dzegvi Public School, Mtskheta-Mtianeti
2. Tianeti #1 Public School, Mtskheta-Mtianeti
3. Kheledi Public School, Racha-Lechkhumi
4. Okureshi Public School, Racha-Lechkhumi
5. Oni Public School, Racha-Lechkhumi
6. Bebnisi Public School, Shida Kartli
7. Gori #2 Public School, Shida Kartli
8. Gori #5 Public School, Shida Kartli
9. Gori #9 Public School, Shida Kartli
10. Kavtiskhevi Public School, Shida Kartli
11. Kekhidjvari Public School, Shida Kartli
12. Khashuri #9 Public School, Shida Kartli
13. Kheltubani Public School, Shida Kartli
14. Khidistavi Public School, Shida Kartli
15. Okami Public School, Shida Kartli
16. Pkhvenisi Public School, Shida Kartli
17. Sagholasheni Public School, Shida Kartli
18. Sakasheti Public School, Shida Kartli
19. Shindisi Public School, Shida Kartli
20. Skra Public School, Shida Kartli
21. Tiniskhidi Public School, Shida Kartli
22. Tkviavi Public School, Shida Kartli
23. Zerti Public School, Shida Kartli
24. Gandza #1 Public School, Samtskhe-Javakheti
25. Kartikami Public School, Samtskhe-Javakheti
26. Satkhe Public School, Samtskhe-Javakheti
27. Akhalkalaki #4 Public School, Samtskhe-Javakheti
28. Akhaltsikhe #1 Public School, Samtskhe-Javakheti
29. Tsagveri Public School, Samtskhe-Javakheti
30. Vale #1 Public School, Samtskhe-Javakheti
31. Akura Public School, Kakheti
32. Apeni #1 Public School, Kakheti
33. Busheti Public School, Kakheti
34. Ganjali Public School, Kakheti
35. Gurjaani Public School, Kakheti
36. Kakabeti Public School, Kakheti
37. Kolagi Public School, Kakheti
38. Sagarejo #2 Public School, Kakheti
39. Lagodekhi #1 Public School, Kakheti
40. Patardzeuli Public School, Kakheti
41. ZemoAlvani #1 Public School, Kakheti
42. Ruispiri Public School, Kakheti
43. Telavi #9 Public School, Kakheti
44. Vejini Public School, Kakheti
45. Bolnisi #5 Public School, Kvemo Kartli
46. Gardabani #4 Public School, Kvemo Kartli
47. Kachagani #1 Public School, Kvemo Kartli
48. Kesalo Public School, Kvemo Kartli
49. Marneuli #5 Public School, Kvemo Kartli
50. Martkofi #2 Public School, Kvemo Kartli
51. Rustavi #15 Public School, Kvemo Kartli
52. Rustavi #28 Public School, Kvemo Kartli
53. Rustavi #4 Public School, Kvemo Kartli
54. Sartichala #1 Public School, Kvemo Kartli
55. Talaveri #1 Public School, Kvemo Kartli
56. Tazakendi #1 Public School, Kvemo Kartli
57. Tsereteli Public School, Kvemo Kartli
58. Vardisubani Public School, Kakheti

Phase 3: In the years 2018-2019, MCA-Georgia rehabilitated 33 public schools in Imereti (17 schools), Guria (3 schools), Samegrelo-Zemo Svaneti (7 schools), Adjara (3 schools), and Kakheti regions (3 schools) namely:

59. Amaghleba Public School, Imereti
60. Baghdati Public School #2, Imereti
61. Chiatura Public School #1, Imereti
62. Dilikauri Public School, Imereti
63. Khoni Public School #3, Imereti
64. Kutaisi Public School #10, Imereti
65. Kutaisi Public School #13, Imereti
66. Kutaisi Public School #17, Imereti
67. Kutaisi Public School #30, Imereti
68. Kutaisi Public School #32, Imereti
69. Kutaisi Public School #33, Imereti
70. Kutaisi Public School #36, Imereti
71. Kutaisi Public School #5, Imereti
72. Terjola Public School #2, Imereti
73. Vani #2 Public School, Imereti
74. Zestaponi Public School #6, Imereti
75. Zestaponi Public School #7, Imereti
76. Dzimiti Public School, Guria
77. Laituri Public School, Guria
78. Nigvziani Public School, Guria
79. Darcheli #1 Public School, Samegr.-Z. Svaneti
80. Inchkhuri Public School, Samegr.-Z. Svaneti
81. Ingiri Public School #2, Samegr.-Z. Svaneti
82. Kirtskhi Public School #1, Samegr.-Z. Svaneti
83. Zugdidi Public School #10, Samegr.-Z. Svaneti
84. Zugdidi Public School #4, Samegr.-Z. Svaneti
85. Zugdidi Public School #8, Samegr.-Z. Svaneti
86. Kobuleti Public School #2, Adjara AR
87. Batumi Public School #18, Adjara AR
88. Legva #2 Public School, Adjara AR
89. Gamarjveba Public Schoo, Kakheti
90. Tibaani Public School, Kakheti
91. Zemo Kedi #2 Public School, Kakheti

In total, 217,500 square meters of educational facilities were rehabilitated with the total cost of $ 42,700,000 for over 39,000 students.



EQUIPPING SCHOOLS WITH SCIENCE LABS

The goal of the activity was to equip all rehabilitated public schools with science labs to ensure that STEM subject teaching could include experiments and hands on experience for students. Since MCA-Georgia was unable to locate a state standard of science labs, with its initiative a special working group was created under the Ministry of Education and Science of Georgia consisting of experts from the curriculum department and the following legal entities of public law: Teachers Professional Development Centre (TPDC), Education and Science Infrastructure Development Agency (ESIDA) and Education Management Information System (EMIS). The goal of the working group was to develop standards for equipping schools with science labs. Based on national curriculum requirements, an optimal list of hands-on equipment was developed, which was aimed at providing a multifunctional lab (for physics, chemistry and biology). The list consisted of more than 140 items per laboratory including safety equipment. Apart from developing a list of equipment, the group also worked on modern room designs for MCA-Georgia's rehabilitated/beneficiary schools. The working group developed a policy paper, a recommended list of experiments, equipment, and consumables as well as an optional room design. Based on these documents, MCA-Georgia procured furniture, equipment and chemistry consumables and equipped all MCA-Georgia rehabilitated schools with science labs. Each rehabilitated school also receives one year's stock of consumables. As a result students in these schools have an opportunity to learn by doing and by experimenting resulting in better learning of STEM subjects.

In order to ensure that teachers are using science labs safely and efficiently, MCA-Georgia, under Training Educators for Excellence Activity, developed training modules in Lab Safety and Lab Methods. The lab safety module was developed in close collaboration with the Lab Safety Institute based in Washington, D.C. A total of 336 teachers received school-based training in lab methods. MCA-Georgia also developed a "Guide on the Use of Lab Equipment and Conducting Experiments" for physics, chemistry and biology. The guides are available for free and can be downloaded from the website of TPDC (http://tpdc.gov.ge/geo/---11/347).



The value of the O&M ***Incentive Fund*** *is* $ 5,731,572.5
with the GoG contribution of $3,647,992.2
and the Compact contribution of $2,083,580.35

1.2 Public Schools Operation and Maintenance Incentive Fund

The establishment of an Operations and Maintenance (O&M) program in the Georgian public school system was considered critical for ensuring the sustainability of the Compact investment and more broadly to the viability of the Georgian public schools infrastructure. The Government of Georgia (GoG) committed to developing and funding a strategy to address school O&M and a plan for its implementation.

The development and implementation of a comprehensive School O&M Plan, maintenance standards, institutional arrangements and budgetary process were recognized as the critical elements of this component. To support its implementation, the GoG and MCC created an Incentive Fund (IF) for financing initial preparatory works, such as inventory and software design, renovations and rehabilitations of Georgia's public schools in pilot municipalities, condition assessment and piloting implementation of O&M activities in the selected public schools. The GoG allocated up to $2,500,000 and MCC agreed to allocate a matching amount of up to $2,500,000 to initiate school O&M activities to support one-time and continuous interventions aimed to start and sustain the public school O&M strategy.

MCA-Georgia's project partner organization - Education and Science Infrastructure Development Agency (ESIDA) hired dedicated O&M staff, while MCA-Georgia hired long-term consultants and engaged several contractors for designing the O&M Framework Plan, developing technical standards, training designated O&M staff and conducting public schools' condition assessments and development of a school mapping system. The School O&M Framework Plan for the entire public school system, jointly developed by MCA-Georgia and ESIDA, as approved by the GoG, promotes long-term maintenance for MCA-Georgia and GoG rehabilitated schools in order to maximize the useful life of investments. MCC and the Government worked together to introduce and institutionalize the best O&M management practices to increase the sustainability of infrastructure investments.

The pilot O&M program was designed for a three-year period covering 2017–2019. Between the inception period in early 2017 and through the end of the Compact, MCA-Georgia and ESIDA have successfully implemented key activities for the purpose of developing, piloting and eventually institutionalizing the Whole School O&M Framework Plan.

Program Highlights:

- In 2017, MCA-Georgia outsourced consultancy work to design the O&M Framework Plan, which is the strategy that defined and budgeted all necessary works and activities required to set-up the foundation for the whole public schools' O&M. The consultants also developed the guidelines for the Incentive Fund and other technical documents, such as technical standards for O&M implementation. In late December 2018, MCA-Georgia revised and modified the O&M Framework Plan to align it with the decentralization policy adopted by the GoG in early 2018, which, among other changes, shifts many responsibilities for school infrastructure oversight from ESIDA/MESCS to regional municipalities. The revised O&M Framework Plan was approved by the GoG in January 2019.
- In 2018, ESIDA outsourced the design of customized software, called "MNE", which is an online tool for O&M planning, management, supervision and data storage. The software was designed and is being populated with data, such as condition assessment and asset inventory, as well as school and municipality-level O&M plans.
- In 2017-2018, ESIDA conducted a real property asset inventory to establish the basis for full-scale facilities planning and improved budgeting processes. The assessment and data entry into the e-school system were completed in late 2018. In early 2019, the inventory data was populated in the O&M software "MNE".

- In 2018-2019, MCA-Georgia contracted public schools condition assessments to equip the GoG with data, which form the basis for full-scale facilities' planning, allowing long-term, as well as short-term planning, and is complementary to real property asset inventory data. The works commenced in 2018 and concluded by the end of the Compact.
- In 2019, MCA-Georgia procured public schools GIS mapping software, which is another powerful tool for education planning at all levels and for the whole MESCS. The software is housed by EMIS and is managed by the assigned EMIS staff and5 trained by the contractor.
- In 2018, ESIDA selected Kazbegi and Tianeti municipalities to deliver O&M rehabilitation and renovation works in all schools (20) of these municipalities. Works commenced in February and will be completed in August 2019.
- In April 2019, ESIDA contracted preparation of design packages and construction works for up to 40 additional schools in 8 municipalities / 5 regions. Procurement of actual works was done in June and works will be conducted in the summer of 2019.
- To pilot O&M strategy implementation, MCA-Georgia together with ESIDA identified a list of the pilot schools, Education Resource Centers (ERCs) and municipalities, which included all 91 MCA-rehabilitated schools, all schools in the Kazbegi and Tianeti municipalities and schools recently rehabilitated by ESIDA between 2015-2018. The pilot anticipated provision of general orientation training for all involved parties, i.e. school principals and school facility managers, the heads of 45 ERCs and staff from the infrastructure units of the 45 pilot municipalities. A total of 330 individuals participated in the trainings held in February and March 2019 organized in collaboration with the Zhvania School of Public Administration and ESIDA.
- In April 2019, MCA-Georgia, in collaboration with TPDC, provided individual consulting and mentorship to all pilot schools and municipalities to help them finalize their school O&M plans and start to use the software "MNE" which has been designed to help manage public schools' O&M processes.
- ESIDA set aside an O&M fund to finance municipalities addressing needs and requests identified through development of individual school O&M plans during June – December 2019 period.
- In April and May 2019, MCA-Georgia procured minor renovation works for several MCA-rehabilitated schools to provide additional support to resolve O&M issues, such as equipping schools with wastewater treatment plans to address sewage treatment issues and conducting additional repairs and HVAC works.

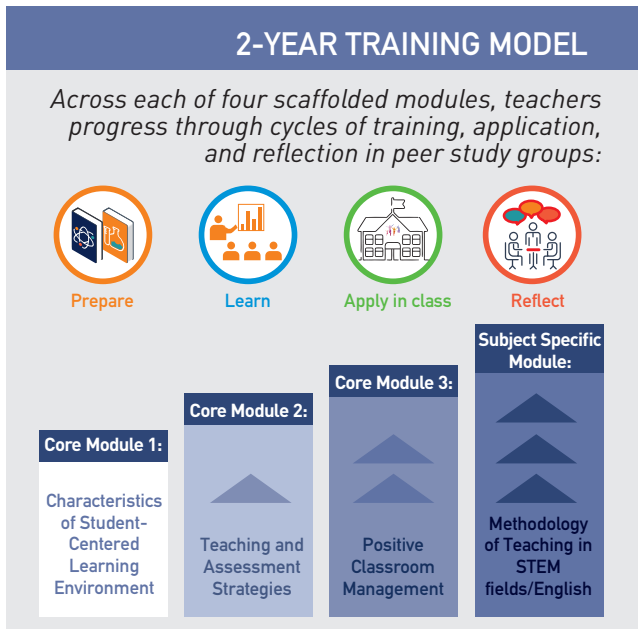
The overall estimated value of the O&M Incentive Fund as of May 2019 is $ 5,684,948.5 where the GoG contribution is estimated at $3,647,992.2 and the Compact contribution is estimated at $2,036,956.3.

1.3 Training Educators for Excellence Activity

The objectives of the Training Educators for Excellence (TEE) Activity were to: (1) improve math, science, geography, and English teaching and learning in Grades 7-12; (2) improve school management and (3) support development of the school-based professional development system for educators (school-based professional development facilitators). Training also included a gender module designed to reduce teachers' gender bias in the classroom (identified in the study on gender barriers affecting girls and women who wish to pursue STEM education and/or occupations).

The project aimed to achieve the first objective by training up to 18,000 math, science, geography, and English language teachers and improving the existing system of continuous professional development. To improve school-based professional development, the Activity financed the training of at least one school-based professional development facilitator per public school (there are a total of 2085 public schools in Georgia). To meet the second objective, this Activity supported the development of a continuous professional development framework for school principals and delivered training to 2,083 public school principals.

The TEE Activity sets out to improve student skills and knowledge in STEM and English by preparing Georgia's population of STEM, English and geography teachers to use teaching practices that improve student learning, including increasing teachers' knowledge and ability to practice student-centered instruction that integrates technology and classroom assessment.



Total budget of TEE project was US $11,677,295

The TEE program was implemented by TPDC with technical support from MCA-Georgia-hired international consultant, IREX. Implementation ran from December 2015 through the end of June 30, 2019, with the intention to improve students' skills and knowledge in STEM by enabling English and geography teachers and school administrators to use teaching and school management practices that improve student learning.

Table 2: *Expected outcomes of the TEE project:*

	Outcomes of TEE	Corresponding TEE Activities
TEACHING PRACTICE	• Teachers use effective, student-centered teaching methods free of gender and ethnic stereotypes and bias • Teachers use lab equipment safely and effectively • Teachers collaborate to enhance teaching	• Face-to-face Teacher Training • Classroom Assessment • Study Groups • Online Teacher Training • Virtual Labs
SCHOOL MANAGEMENT	• School leaders collaborate with each other to enhance school management • School leaders use effective management practices to create a positive and safe school climate that is conducive to student-centered teaching	• Leadership Academy • Quarterly Meetings
INSTITUTIONAL CAPACITY	• TPDC has a network of skilled trainers with knowledge and skills in student-centered learning methodologies and in STEM subject teaching • TPDC has a network of module writers with knowledge and skills in training design and principles of adult learning • TPDC has an improved system to organize, implement and track trainings and staff who can manage it • TPDC has increased capacity to offer professional development and support to teachers and principals in student-centered learning, STEM instruction, reflective practice and collaboration	• Training of Trainers • Trainers as Learners • Online Module Writer Training • Online Module Facilitators Training • Quality Assurance • Training Management System



Over 10,000 teacher study group meetings were organized, enabling 10,459 teachers to participate in collaborative and reflective learning.

As a result following major results were achieved:

- Over 17,800 STEM teachers attended training in student-centered learning methodologies
- Nearly 14,859 STEM teachers trained in subject specific methodologies
- 337 of STEM teachers from MCA-Georgia's refurbished schools trained in lab methods and safety
- Over 10,363 study groups convened to reflect on successes and challenges
- 216 contact hours[2] of curriculum developed in student-centered learning, assessment, positive classroom management, subject specific application and lab safety and methods
- Publication and adoption of Classroom Assessment and Differentiated Instruction Handbook as a core text in university-level teacher pre-service programs
- Nine teacher training modules adapted and accessible via online pedagogy platform
- 340 teachers enrolled in online course pilots
- Over 90% of secondary school principals (2048 principals) trained on instructional leadership and school management
- 160 contact hours of curriculum developed for principals and school professional development facilitators
- 271 trainers trained to model student centered learning approaches for teachers
- 127 trainers trained to facilitate Leadership Academy
- 480 of quarterly meetings for principals conducted
- 1,411 of facilitators trained in Leadership Academies
- 59 ERC staff participated in the Leadership Academies
- Two international conferences in school leadership conducted with over 300 participants
- International conference for STEM teachers organized with over 300 participants
- Edmodo - social platform for teachers translated into Georgian, adopted and piloted among Georgian educators
- Online Course Facilitator module developed
- Online Course Developer module developed
- 29 webinars conducted for STEM teachers
- Training Management System developed and adopted at TPDC
- Online resources for STEM teachers developed
- Journal for school principals developed and 5 issues published
- Capacity of professional associations for teachers and principals built through offering grants programs to organize quarterly meetings.

TEACHERS PROFESSIONAL DEVELOPMENT

For the first time secondary school teachers were offered a coordinated series of modules that – over the course of 20 months – first built core pedagogical knowledge and then introduced intensive subject-specific training to ensure that teachers tailored their newly acquired skills to their subject area.

TEE developed 216 contact hours of teacher training curriculum, which was translated and delivered in four languages[3]. Core modules 1–3 introduced the characteristics of student-centered learning environments, teaching and assessment strategies and positive classroom management. The fourth module, available in Biology, Chemistry, Physics, Geography, English & Math specializations, applied these concepts to teachers' subject specific contexts. TEE subsequently developed Lab Safety and Methods training courses for teachers in schools that received refurbished labs as part of MCA-Georgia's Improved Learning Environment Infrastructure (ILEI) activity.

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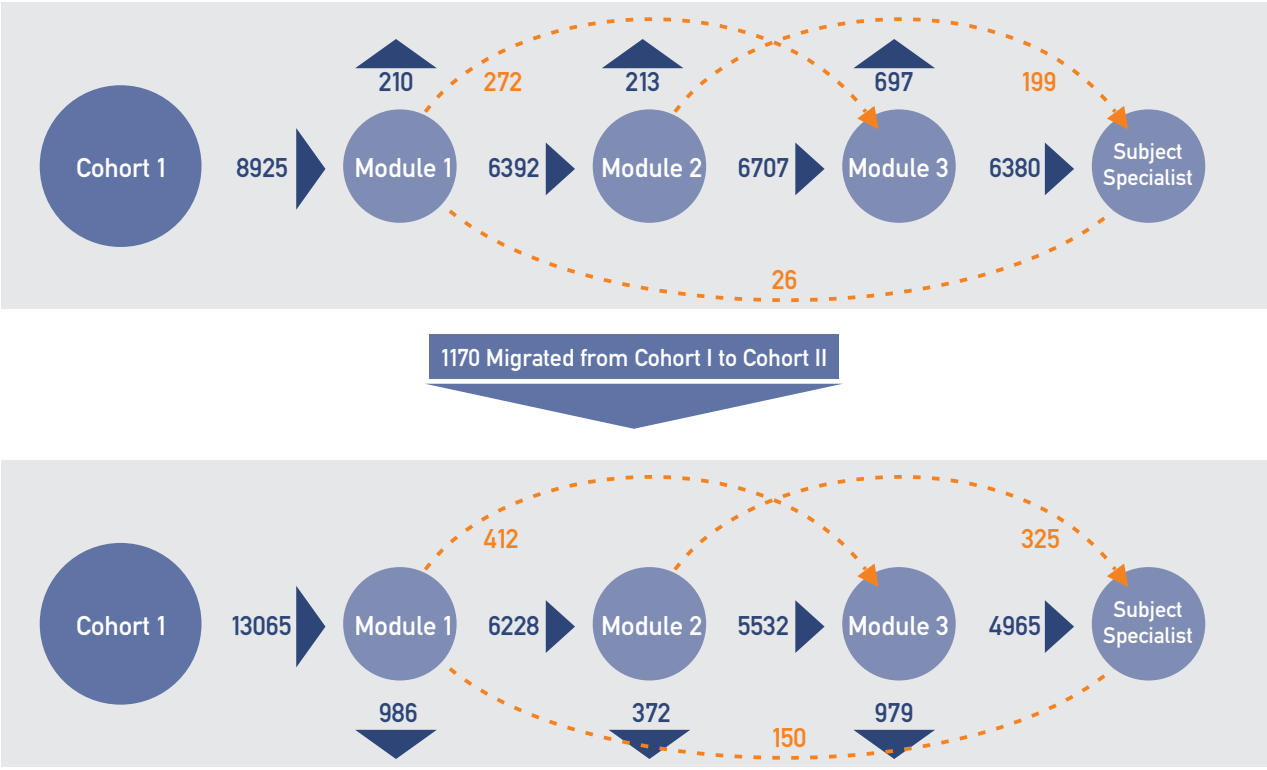
[2] In addition, the curriculum included 195 hours of non-contact activities, amounting to 411 total hours.

[3] Georgian, Azerbaijani, Armenian and Russian.

Over 17,800 teachers completed at least one module, with 11,829 of those completing the full teacher training cycle (3 core modules plus 1 subject module). 92% (348) of teachers in MCA-Georgia's rehabilitated schools subsequently completed lab safety training and 79% (337) completed lab methods training[4].

Modules could be taken as individual or "standalone" units. The figure below shows flows of participants between modules. While some took only one module (448 in Cohort I and 986 in Cohort II), the vast majority took two or more with 5651 completing all four modules in Cohort I and 4692 completing all four modules in Cohort II. Notably, 1170 trainees migrated from Cohort I to Cohort II to "make-up" modules they had missed, increasing the overall number who completed all 4 modules to 11,513.

Figure 2: *Teacher professional development scheme*



STUDY GROUPS

The establishment of Teachers' Study Groups was integral to the project strategy. Teachers could participate in eight study groups (two per module) which provided a platform to discuss homework, share knowledge and experience, plan classroom activities and crucially, to share their experiences and challenges in introducing new practices, including classroom assessment, differentiated instruction and project-based learning. For each module, a study group guide provided step by step instructions for facilitators[5].

Over 10,000 teacher study group meetings were organized, enabling 10,459 teachers to participate in collaborative and reflective learning.

CLASSROOM ASSESSMENT

Formative assessment and differentiation were cross-cutting themes throughout TEE teacher training and the teacher training modules were developed in a manner to ensure integrated discussion of classroom assessment and differentiation approaches throughout. This work was informed by four focus groups[6] with teachers, in fall 2016, designed to test a range of formative assessment and differentiation tools.

ONLINE TEACHER TRAINING

The conversion of teacher training modules into an online format became a significant activity of the project and is seen by involved stakeholders as an opportunity to scale teacher professional development in a financially sustainable way. All three core modules and the six subject specific modules have been converted into online format for delivery on the OpenEdX platform, by the Guivy Zaldastanishvili American Academy in Tbilisi (GZAAT) in close partnership with the MCA-Georgia and TPDC project team. The modules have been converted with attention to the pedagogical adaptations required for this transition.

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[4] Study Groups were principally facilitated by School Based Professional Development Facilitators (SPDFs). 1176 SPDFs were engaged in study group management.

[5] Two schools were located in Tbilisi and two schools in rural areas: Karaleti School in Gori and Kakabeti School in Sagarejo.

[6] Two schools were located in Tbilisi and two schools in rural areas: Karaleti School in Gori and Kakabeti School in Sagarejo.

VIRTUAL LABS

As part of its effort to provide online resources that will allow teachers and their students continued use of resources, GZAAT established a simulated virtual environment for inquiry-based learning. Aimed at grades 7-12 science teachers and students, it includes high-quality Web-based Virtual Labs (WVL) in physics, chemistry and biology.

In addition to supporting inquiry-based teaching and learning and real-life experience in a more flexible and convenient format, virtual labs have the added benefits of providing opportunities for flexible and safe lab practice, which creates space for trial and error and reduces risks to teacher or student health; maximizing the use of teaching time since virtual experiments can be completed more quickly than those in physical labs; and reducing costs and compensating for the absence of laboratory equipment in many Georgian schools. Students and teachers also have the opportunity to acquire or improve the technology skills vital for lifelong learning.

For each subject, a series of activities form an Inquiry Learning Sequence (ILS) that is being developed by GZAAT. The virtual simulated environment will provide opportunities to conduct interactive experimental activities targeted at attaining the science standards established by Georgia's National Curriculum. The labs are hosted using an existing and free and open source product, Go-Lab (https://www.globabz.eu/), which will include a Teacher Space Container that allows teachers to design new ILS or find, adapt and use already existing ILS at (http://graasp.edu). This content will be linked to the educational portal www.el.ge, which will host a description of each of the labs and recommendations and tips for their usage.

SCHOOL MANAGEMENT

The major results of the Leadership Academy aimed at training school leaders were as follows:

SCHOOL MANAGEMENT TEE Outcomes	TEE Outputs
• School leaders collaborate with each other to enhance school management • School leaders use effective management practices to create a positive and safe school climate that is conducive to student-centered teaching	• Leadership Academy training materials and resources developed under TEE are maintained and used • Principals and SPDFs maintain and continue applying the knowledge and skills developed through TEE training • Educational leaders continue using one another as resources (through quarterly meeting, Edmodo, or other similar)

LEADERSHIP ACADEMY TRAINING

TEE developed 160 contact hours of curriculum[7] for principals and SPDFs[8], developed through a rigorous process of module writer training, drafting and piloting (discussed further in the section below). Three levels of training were provided over the course of two years, providing a sustained, structured professional development opportunity. In total, 4,183 secondary school principals and SPDFs engaged with the Leadership Academy by completing at least one course.



Leadership Academy 1 (40 hours)
- Characteristics of a 21st Century School
- Effective Principal from Theory to Practice
- Financial Management
- Human Resource Management, Time Management, and Legal issues

Leadership Academy 2 (80 hours)
- Shared Leadership and Adult Learning
- Mentoring of Instruction
- Leadership and Supervision
- Development of Learning Communities 21st Century Classroom Part II

Leadership Academy 3 (40 hours)
- Empowering Students through Assessment and Use of Technology
- Leadership and Team Dynamics

[7] LA1, 40 hours; LA2, 80 hours; LA3, 40 hours.

[8] SPDFs joined principals for Level 2 and 3 training.

QUARTERLY MEETINGS

The project organized five cycles of quarterly meetings for principals. Taking place approximately two months following each Leadership Academy course, they provided principals with a unique opportunity to meet with other school leaders in small groups to reflect on school leadership challenges, apply learning from the training and learn from one another. Over the course of the Leadership Academy, over 1624 principals participated in Quarterly meetings, representing 87% of secondary school principals in Georgia.

INSTITUTIONAL CAPACITY

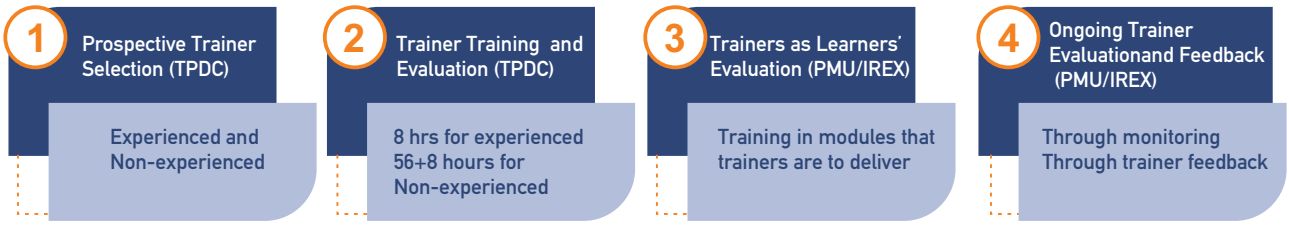
One of the major factors for the success of the project is the partnership between MCA-Georgia, IREX (international consultant of the project) and GoG (represented by TPDC). The project has resulted in various institutional capacity outputs as presented below.

ROBUST CURRICULUM DEVELOPMENT AND TRAINER PREPARATION PROCESSES

The teacher training and leadership academy curriculum were informed by the design of MCA-Georgia's international consultant - GOPA - but then further developed and contextualized through a strategy meeting organized by IREX and including specialists from PMU, the National Curriculum Department and IREX staff and a rigorous process of module writer training, drafting, piloting and redrafting. 23 module writers received intensive training in the development of practical curriculum that modeled student centered teaching and learning practices.

TEE therefore had multiple gateways through which trainers had to pass in order to be certified to deliver TEE content. In combination with continuous monitoring, this combined to create a robust quality assurance procedure as depicted in the figure below.

Figure 3: *TEE gateways*



TECHNICAL RESOURCES DEVELOPED UNDER THE PROJECT

Face-to-Face Training

- Core (modules 1-3) courses:
  - Characteristics of Student-Centered Learning Environment
  - Teaching and Assessment Strategies
  - Positive Classroom Management (in Georgian, Russian, Azerbaijani and Armenian)
- Subject Specific Courses (6 subject) Biology, Chemistry, Physics, Geography, English, Math (in Georgian, Russian, Azerbaijani and Armenian)
- Lab Safety and Methodic Training Course (in Georgian, Russian, Azerbaijani and Armenian)

Guides and Resources

- Classroom Assessment Handbook (in Georgian, Russian, Azerbaijani and Armenian) http://tpdc.gov.ge/ptk_files/_ckuploaded/310397.pdf
- Study Group Guide for Teachers and Principals in Georgia (in Georgian)
- Laboratory Guides for Science Teachers in Biology, Chemistry and Physics. http://tpdc.gov.ge/geo/---11/347
- Additional Resources for Biology Teachers (PBL and lab activities, resources with CER and I2 methods)
- Additional Resources for Physics Teachers (lab activities for schools with low resources)
- Translated Foreign Literature (for chemistry, biology, physics, math and geography)

Online Instruction

- Online Core (modules 1-3) Courses:
  - Characteristics of Student-Centered Learning Environment
  - Teaching and Assessment Strategies
  - Positive Classroom Management (Core module 2 is under revision as government revises training approach with teachers)
- Online Subject Specific Courses (6 subjects) Biology, Chemistry, Physics, Geography, English, Math Additional Online Teacher Resources

  Virtual Labs

All online instructional material is hosted on Edx.emis.ge Virtual Labs are hosted on Phet and Go-Lab and should be linked to EL.ge

LEADERSHIP ACADEMY

- Leadership Academy courses (LA 1-3) (in Georgian, Russian, Azerbaijani and Armenian)
  - LA 1: Characteristics of a 21st Century School; Effective Principal from Theory to Practice; Financial Management, Human Resource Management, Time Management and Legal issues
  - LA 2: Shared Leadership and Adult Learning; Mentoring of Instruction; Leadership and Supervision; Development of Learning Communities; 21st Century Classroom part II
  - LA 3: Empowering Students through Assessment and use of Technology; Leadership and Team Dynamics

All curriculum materials are placed on the PMU/TPDC Training Management System.

INSTITUTIONAL CAPACITY

- Online Facilitator Course
- Online Content Development Course http://www.golabz.eu
- Training Management and Reporting System (with built-in: professional development program / module design, monitoring (trainee feedback and trainer observation), databases and analytical component)
- Servers to host Open edX & Data Analytics
- Edmodo in Georgian, for parents and for mobile phone versions being translated to GE. https://www.edmodo.com
- Spotlight in Georgian, repository of content. Teachers can create and sell resources. This can be another location to share certain TEE project resources.

All online instructional material is hosted on Edx.emis.ge.

MATERIALS/PRODUCTS CREATED IN COOPERATION WITH PROFESSIONAL ASSOCIATIONS

- Journal "School Management" (5 issues) both e- version and copies are available in Georgian http://tpdc.gov.ge/ptk_files/_ckuploaded/818355.pdf
- Web portal www.chemclub.edu.ge Young Chemists' Club (in Georgian)
- Thematic materials for each cycle of the study groups meetings (varies from Association to Association)
- Study groups supplementary reading materials per selected topic of the meeting for the participant teachers, lesson plans, chemistry experiment protocols, conference materials - presentations, posters (in Georgian)

CONFERENCES

- Teacher International Annual Conference: June 9, 2018, Tbilisi, "Student-Centered Instructional Methods in STEM Subjects; website: http://www.teec.ge/teachers/
- Principal International Annual Conferences: September 9-10, 2017 Tbilisi, September 22-23, 2018 Tbilisi, "Conference of School Management and leadership" website: http://www.teec.ge/principals/?lng=eng



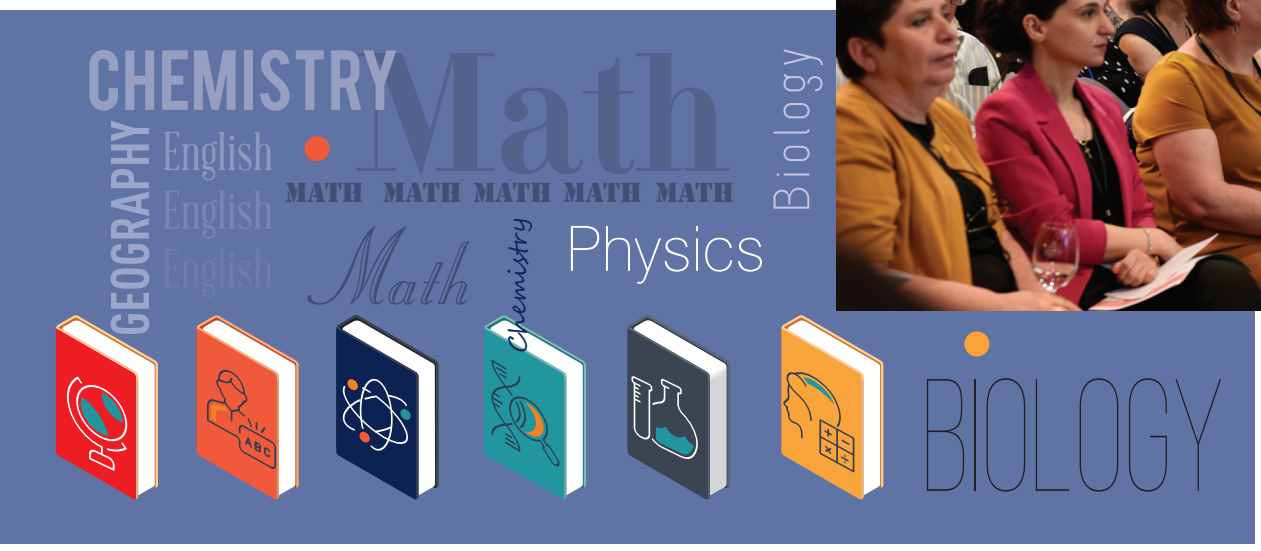


Table 3: *TEE training recipients*

Training Description	Target Recipients (completion)	Actual # of recipients completing courses to date
Leadership Academy 2	School-based professional development facilitators	1,244
Leadership Academy 3	School-based professional development facilitators	1,409
Leadership Academy 1	School principals	1,820
Leadership Academy 2	School principals	1,621
Leadership Academy 3	School principals	1,718
Teacher training course: 3 core modules (36 contact hours) + 1 subject (24 contact hours)	All subject teachers	12,339
Core Module 1	All subject teachers	15,373
Core Module 2	All subject teachers	15,125
Core Module 3	All subject teachers	15,213
A Subject Module: math, chemistry, physics, biology, geography, English	Teachers as per their subjects	14,859
Lab Safety	Teachers (biology, chemistry, physics)	337
Lab Methodics	Teachers (biology, chemistry, physics)	278

1.4 Education Assessment Support Activity

The objectives of the Education Assessment Support (EAS) Activity were to carry out (1) national secondary school mathematics, biology, chemistry, physics and Georgian as a second language assessments and, (2) international assessments, aimed at measuring student and teacher performance in secondary school math, science, and ICT by participating in OECD's "Program for International Student Assessment" (PISA), Institute of Education Science's "Trends in International Math and Science Study" (TIMSS) and "Teaching and Learning International Survey" (TALIS). One of the objectives of the project was to build capacity of local staff at NAEC in assessments.

The Education Assessment Support Activity was implemented in partnership with the National Assessment and Examination Center (NAEC). The total budget of EAS Activity was $4,074,587.

NATIONAL AND INTERNATIONAL ASSESSMENTS

During the Compact 2 cycles of TIMSS, 2 cycles of PISA, 2 cycles of TALIS, and one cycle of PIRLS were implemented in Georgia. Starting from 2016, Georgia also started to participate in electronic assessments, such as e-PIRLS and e-TIMSS.

1. TIMSS, 1st cycle in 2015 for grades 4 and 8 students: the assessment was completed and the reports were produced:

   https://naec.ge/uploads/postData/KVLEVEBI/TIMSS_2007-2015.pdf

   https://naec.ge/uploads/postData/KVLEVEBI/TIMSS_bunebismetyveleba-2007-2015.pdf
2. TIMSS/eTIMSS, 2nd cycle in 2019 for grades 4 and 8 students: the second cycle administration and data hand-over was completed. The report to be published after Compact end date.
3. PISA, 1st cycle in 2015 for 15 years old students: the assessment was completed, the report produced:

   https://naec.ge/uploads/postData/KVLEVEBI/PISA-2015-angarishi.pdf
4. PISA, 2nd cycle in 2018 for 15 years old students: the second cycle administration and data hand-over was completed. The report to be completed beyond the Compact.
5. TALIS, 1st cycle in 2014 for teachers and principals: the assessment was completed and the report produced:

   https://naec.ge/uploads/images/doc/SXVA/talis%20final%20report_ready_print%20links.pdf
6. TALIS, 2nd cycle in 2018 for teachers and principals: the second cycle administration and data hand-over was completed. The related report is to be completed after the Compact.



7. PIRLS/ePIRLS in 2016 for grade 4 students: the administration and hand-over was completed. The report will be available in June 2019.

NATIONAL ASSESSMENTS

NAEC carried out following national assessments with Compact funding:

1. Mathematics, 1st cycle in 2015 for grade 9 students: the assessment was completed and the report is available at:

   https://naec.ge/uploads/postData/KVLEVEBI/saxelmtsifo_shefaseba-maTematika-2017.pdf

2. Mathematics, 2nd cycle in 2018 for grade 9 students: the assessment was completed. The report will be available in June 2019.

3-5. Physics, Chemistry and Biology, 1st cycle in 2017 for grade 9 students. Three national assessments were completed. NAEC prepared a unified report for all three assessments, which is available at:

   https://naec.ge/uploads/postData/KVLEVEBI/saxelmwifo-shefaseba-sabunebismetyvelo-sagnebSi-2016.pdf

6. Georgian as a second language, 1st cycle in 2016 for grade 7 students. The assessment was completed. The report will be available in June 2019.

SCHOOL SELF-ASSESSMENT PROJECT

The Compact has funded implementation of a school self-assessment pilot project, covering 13 public schools throughout Georgia with the goal of developing a model for school self-assessment system, tailored to the individual needs at each specific school. The results of the pilot were shared with the GoG at the conference held on June 8-9, 2019 to be considered for national application. At the conference "School Self-assessment for Development" schools presented results of the pilot, study outcomes and recommendations for scaling project up. An online course in school self-assessment was designed available for all schools at edx.emis.ge

CONFERENCES

During the Compact, several national and international conferences were organized on the topic of assessments. The goal of each conference was to inform policymakers, education experts, teachers and principals regarding attained results gathered through assessments. Besides reporting complex data at the conference, recommendations were provided to the policymakers and school principals and teachers on how to improve various policies for improving education quality in Georgia. Together with MCA-Georgia, NAEC selected key topics for conferences, such as: Integrating Technology Into Teaching and Learning, Classroom Assessment, and Testing. International experts were invited to speak about findings and best practices in the field of assessments across the globe. Each conference was attended with more than 200 participants. At the international conferences more than 30 countries were presented. The conferences were as follows:

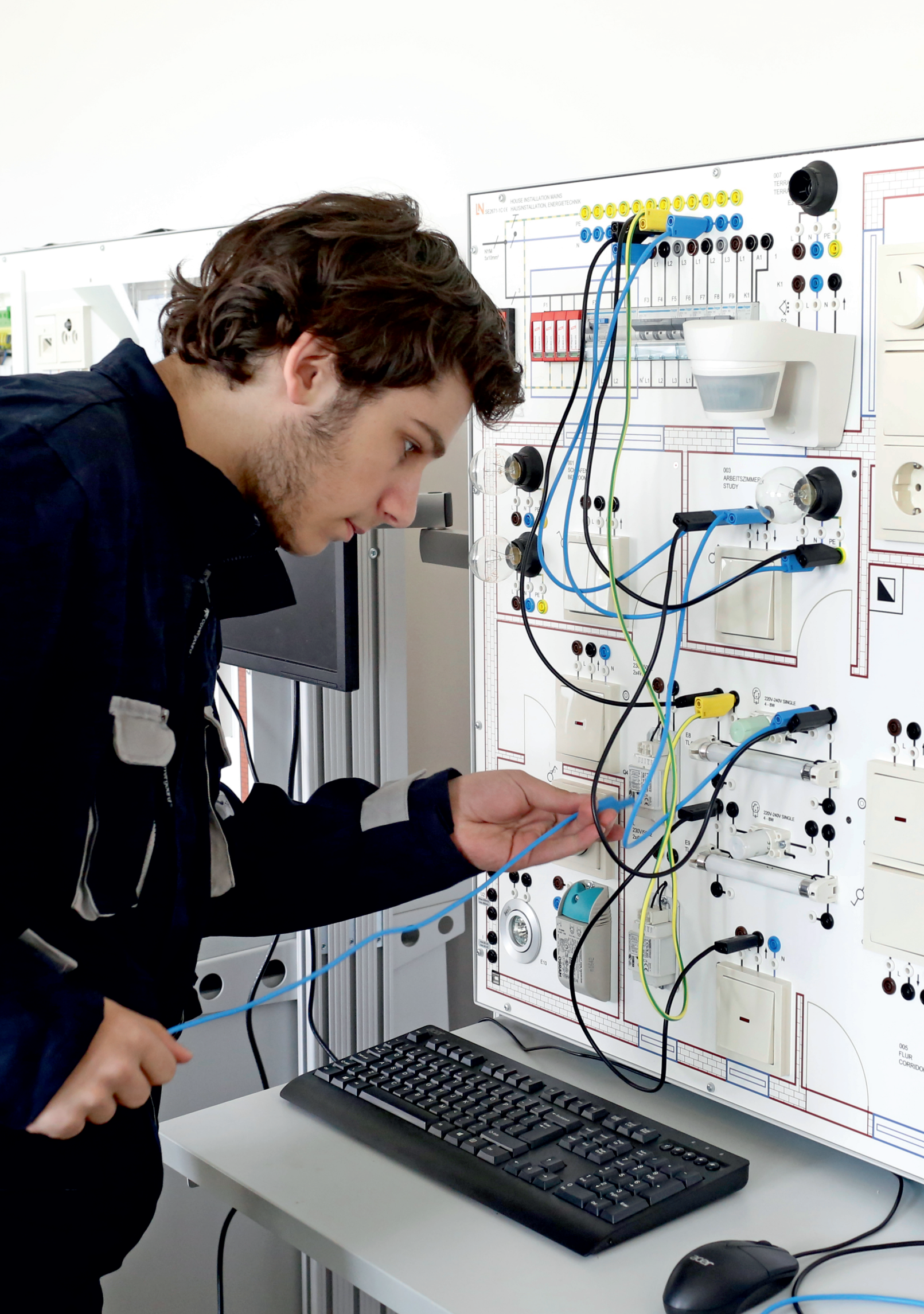
Black Sea Conference held in September 2014 in Batumi, Georgia https://geonaec.com/item/102·

National and International Assessments: Main Challenges of School System held in June 2017 in Tbilisi, https://naec.ge/#/ge/post/1632

National and International Assessments: Main Challenges of School System held in September 2018 in Tbilisi https://naec.ge/#/ge/post/1759

International Association for Educational Assessment's (IAEA) Annual Conference hosted by Georgia on October 2-6, 2017. https://naec.ge/#/ge/post/1847

School Self Evaluation for Development. June 8-9 2019, Tbilisi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INDUSTRY-LED SKILLS AND WORKFORCE DEVELOPMENT PROJECT

The Industry-led Skills and Workforce Development (ISWD) Project aimed to address gaps between the needs of the labor market for skilled workers and the supply of citizens with the technical skills required by companies. This was achieved through investments in technical and vocational education and training (TVET), with an emphasis on supporting skills development for occupations requiring competence in science, technology, engineering and mathematics (STEM) and in agriculture and tourism. The project also aimed at promoting greater gender and social integration.

Expected outcomes for the ISWD project were: 1) meeting identified skill gaps through funding innovative, industry-driven proposals from TVET providers (developed in partnership with employers) in order to develop, expand or improve TVET programs (PICG), 2) strengthen TVET provider practice (STPP) by identifying, documenting, disseminating and replicating the uptake of good practices across the TVET sector in the country, 3) strengthening TVET sector policy with respect to industry engagement in the Georgian TVET sector, 4) promoting TVET through annual TVET conferences.

The total budget of the ISWD project amounted to $16 million. The project duration was 4.5 years and was implemented in collaboration with an internationally procured consultant (PEM CONSULT, Germany).

Development of Competitive TVET Programs

The competitive grant process (total grant fund of over US $11 million) that aimed to develop, expand or improve TVET programs to meet identified skill needs was held by MCA-Georgia. MCA-Georgia solicited and funded innovative, industry-driven proposals from TVET providers (developed in partnership with employers). As a result, ten two-year projects that were led by TVET providers were funded and all successfully implemented. Substantial public-private co-financing was provided by project partners, amounting to approximately $6 million in total, a figure equal to more than 50% of the total grant fund investment. As a result, 51 new TVET programs were launched in Georgia in STEM, agriculture, and tourism. Out of which 38 are new competitive TVET programs and 13 certificate courses all developed based on labor market demands and meeting industry needs (Table 1 for list of programs).

The grantees were: Agricultural University of Georgia; Batumi State Maritime Academy; Georgian Aviation University; Adventure Tourism School; Georgian Technical University; Community College "Phazisi"; Railway Transport College; Vocational College "Tetnuldi"; and Community College "Spektri", Georgian Institute of Public Affairs.



$4.2 million of MCC Compact II funds were invested into Technical and Vocational Education and Training (TVET) infrastructure, new labs, and simulators.

Table 4: *Program offerings by 10 Compact-funded TVET providers*

TVET Provider	Degree programs/certificate courses	Level
Batumi State Maritime Academy	Welding	III
	Welding	IV
	Fishing Vessel Navigation	VI
	Cargo Handling Logistic Operation	V
	Port Logistics Management	V
	Crane Operation	III
	Crane Operation	IV
	Crane Operation - Operational Level	cert
	Crane Operation - Supervision Level	cert
	Fishing Vessel Navigation - Skeeper	cert
	Fishing Vessel Navigation - Fisher -Sailor	cert
Adventure Tourism School	Tracking Guide	III
	Mountain Guide program (Alpine Guide (cert) and Ski Guide (cert) was combined)	IV
	Mountain Guide certificate course ((ski teacher) Alpine Guide (summer))	cert
	Certificate SPRAW course	cert
Community College "Phazisi"	Farming in Fisheries	IV
	Fish Processing	IV
	Laboratory Work in Fisheries	IV
Vocational College "Tetnuldi"	IT Support Specialist	III
	Computer Net Administrator (Zugdidi, Mestia)	V
	Computer Network and Systems Technicians	IV
Georgian Aviation University	Helicopter Pilot	V
	Aircraft Maintenance B1.1	V
	Aircraft Maintenance B2	V
Community College "Spektri"	Welder	III
	Welder	IV
	Electrician	III
	Electrician	IV
	Air-conditioning	IV
	Water Supply Systems Exploitation	IV
	Water Sewage Systems Exploitation	IV
Georgian Technical University	Mechanical Engineer Technician	V
	Industrial Automation Technician	V
	Electrical Technician, High Voltage	IV
	Manufacturing Supervisor	cert
	Mechatronics Technician	V
Railway Transport College	Construction of Railway Track	III
	Railway Power Supply System's Mechanic	IV
	Rolling Stock Mechanic	IV
	Rail Car Maintenance Mechanic	IV
	Rail Carrier	IV
	Rail Signalization, Centralization and Blocking	V
	Locomotive Driver	IV
	Monitoring of Railway Track	III
Agricultural University of Georgia	Farmer/Agribusiness Manager	cert
	Veterinary Service Specialist	cert
	Viticulturist -Oenologist	cert
	Farmer/Agribusiness Manager (Anaseuli)	cert
Georgian Institute for Public Affairs	Occupational Health Safety and Environmental Specialist/manager	V
	Introduction to Risk Assessment	cert
	Health Safety for Managers	cert
	Introduction to Risk Assessment	cert
	Dirt, Noise, Vibration	cert

Over the course of two years, state-of-the art equipment was provided to the ten above-mentioned TVET providers, guidebooks and textbooks were developed to support program delivery, and 473 teachers, lab assistants and administrative staff were trained.

The 38 programs and 13 certificate courses funded through the Compact have higher than expected enrollment numbers, with 1,935 students enrolled as of Spring 2019. 727 students have already graduated and 999 students continuing their studies. As most of the programs in STEM area are directed at occupations where employment is typically dominated by men, special efforts were made to recruit female students. As a result, female enrollment has increased to 13 % of the total student enrollment number, higher than in other STEM-oriented TVET programs.


TBILISI

Table 5: *Total amount allocated to the Competitive Program Improvement Grants*

Industry-led Skills and Workforce Development (ISWD)	MCC Grant ($)	Co-funding ($)	Total
Competitive Program Improvement Grants Activity			
Batumi State Maritime Academy	1,346,409.67	308,257	1,654,667
Advanture Tourism School	562,369	82,222	644,591
Community College "Phazisi"	828,690.22	95,909	924,599.2
Vocational College "Tetnuldi"	395,035	47,925	442,960
Georgian Aviation University	768,897	120,095	888,992
Community College "Spectri"	2,035,985.93	701,287	2,737,273
Georgian Technical University	2,296,764.86	2,898,885	5,195,650
Railway Transport College	2,098,453.3	1,533,339	3,631,792
Agricultural University of Georgia	744,815	111,857	856,672
Georgian Institute of Public Affairs	655,020	67,603	722,623
Total	**11,732,439.98**	**5,967,379**	**17,699,819**



Strengthening TVET Provider Practice

In order to strengthen TVET provision, 27 projects identifying, disseminating and replicating the uptake of good practices across the TVET sector were funded with grants. This initiative targeted all the TVET providers as well as other institutions actively involved in vocational education and training of employed and unemployed adults and young people. There were three rounds of the competitive small grants and a total of $510,447 was allocated. Each grant amount varied between $10,000 and $25,000.

Strengthening National Policies in TVET Sector

Technical assistance was provided to the MESCS and its agencies to assist policymakers and implementers in strengthening national policy with respect to industry engagement in the Georgian TVET sector. Technical assistance was provided in the following areas:

- Increased industry engagement in TVET, including public-private partnerships, sector skills councils and education-business partnerships
- Improved quality and attractiveness of TVET, including capacity building support for delivery of modular TVET provision, quality assurance, career education and guidance, improved TVET communications and other policy measures
- Enhanced qualifications opportunities for adults, through an adult learning policy review and the validation of non-formal and informal learning
- Capacity-building trainings provided to staff of the relevant public agencies and private and public TVET providers

Various guides and documents have been developed relevant to each of the policy area, accessible at this web-site: http://www.iswd.ge/eng/page/51

In addition, 11 development briefs were created to encapsulate the work that has been done at the policy level, helping ensure the sustainability of ISWD Project results and identifying further steps necessary to continue the TVET modernization process. Development briefs are publicly available at:

http://iswd.ge/uploads//Development%20Brief%20final.pdf



National TVET Awards, with gala awarding ceremonies made a visible impact on improving the image of vocational education and promoted vocational professions among Georgian public



Table 6: *List of development briefs in TVET sector developed by MCA-Georgia*

N	TVET Development Briefs
1	Public-private partnerships as a basis for industry engagement in TVET
2	Sector skills councils and the importance of a sectoral approach
3	Reinforcing industry links through education/business partnerships
4	Centers of Excellence in TVET
5	Popularizing TVET – the importance of effective TVET communications
6	Career education and guidance
7	Developing a new model of TVET financing
8	Teacher professional development for competence-based training and assessment
9	Adult learning and qualification opportunities
10	Validation of non-formal and informal learning (VNFIL)
11	TVET Quality Assurance (QA)

Promoting TVET

The project also aimed to promote TVET more generally and provoke debate among stakeholders through targeted information management, communication and outreach activities, especially aimed at business organizations, employers and the private sector. Three Annual TVET Conferences were held in 2016, 2017 and 2018 by MCA-Georgia. The conferences were marked with international participation, high level government and private sector speakers were invited. Senior representatives of industry and public administration actively participated in the events. In 2018, the conference was organized in the context of a Week of Skills which also included Open Door events organized at 10 TVET providers, funded by the Compact II, offering new TVET programs.

In 2017 MCA-Georgia launched a first ever nationwide competition in TVET - National TVET Awards. A total of two awards competitions were organized. The aim of the National TVET Awards was to raise the profile and reputation of TVET and bring the improvements resulting from recent systemic reforms and modernized TVET practices to the attention of the Georgian public. National TVET Awards was established as a platform to acknowledge excellence in TVET in four nominations: TVET Student of the Year; TVET Professional of the Year; TVET Provider of the Year, and TVET Business Partner of the Year. The National TVET Awards will continue to exist through funding from private sector.

The Industry-led Skills and Workforce Development Project has succeeded in offering new TVET programs that are labor market demanded, high quality, developed in partnership with industry, has resulted in broadening the TVET community and provoking widespread recognition of the need for strong private sector and industry engagement in Georgia's TVET system.

51 new labor market demand TVET programs in engineering technology, agriculture and tourism developed



Results of the ISWD project are:

- 38 competitive TVET programs and 13 short-term certificate courses
- 10 modernized TVET providers, with state-of-the art facilities and equipment; with well-trained teachers, lab assistants and administrative staff, providing up-to-date learning programmes for in-demand occupations, which have been actively supported by international and private sector partners
- 1,935 students enrolled in new and modernized programs/certificate courses. Female students comprise 13% of total student number
- 473 trained teachers, lab assistants and administrative staff, including 161 females
- 11 development briefs created to ensure sustainability of the project results and identifying further steps necessary to continue the TVET modernization process
- The cumulative amount of disbursed grants amounted to US $11,732,440. In addition, co-financing amount of US$ 5,967,379. In total, US$ 17,699,819 was allocated to create modern, competitive TVET programs and increase the capacity of the TVET providers in the country
- Three Annual TVET Conferences, held in 2016, 2017 and 2018 with international participation, high level government and private sector speakers strongly contributed to the increased visibility and improved image of the TVET in the country
- Two National TVET Awards competitions for excellence in TVET in 2017 and 2018, with gala award ceremonies made a visible impact on improving the image of vocational education and promoted vocational professions among Georgian public


Tamar

3



SAN DIEGO STATE UNIVERSITY

Georgia

STEM HIGHER EDUCATION PROJECT

Georgia has had a critical shortage of science, technology, engineering and mathematics professionals, educated to current international standards, graduating from Georgian institutions of higher education. To address this problem, MCA-Georgia procured services and contracted a U.S. University – San Diego State University - to provide an American university education in Georgia focused on STEM disciplines. In doing so, SDSU partnered with three state universities: Tbilisi State University, Ilia State University and Georgian Technical University. The project, entitled "SDSU–Georgia 2020" had several expected outcomes, namely:

- Offer American bachelor's degree programs in STEM in Georgia
- Build capacity in the partner universities: renovate infrastructure and train local faculty, and support international accreditation or certification of partner university programs

Overall, SDSU-Georgia program was successful in two fronts:

- Increasing STEM awareness in Georgia and preparing highly qualified STEM professionals
- Initiating reforms in STEM subjects in Georgia and having international accreditation concepts take root in the public universities in Georgia

In more detail, within the project's lifecycle following has been achieved:

- Four cohorts of 642 students were enrolled in six internationally accredited bachelor degree programs offered by SDSU in Georgia: Chemistry, Computer Science, Computer Engineering, Electrical Engineering, Civil Engineering, and Construction Engineering
- Students at SDSU-Georgia performed at or above the level of their peers on the main campus, California, USA
- Tbilisi State University completed its preparations for the ABET accreditation of its electrical engineering and computer science programs
- First cohort of up to 58 students graduated SDSU-Georgia programs in June 2019
- A Public Private Partnership Fund (PPPF) has been created with the initiative of MCA-Georgia in order to generate resources to provide scholarship funds for successful, socially vulnerable students. Approximately $ 3,289,836 was raised from the private sector

A total of $21 million was invested into educational infrastructure for SDSU-Georgia programs in Tbilisi, including a new four-story STEM building constructed in partnership with Ilia State University, with a total enclosed space of more than 5,000 square meters.

PROJECT ACTIVITIES

ABET accreditation and ACS certification of Georgian university programs

In order for STEM degree programs to gain more credibility in Georgia and ensure the international competitiveness of its graduates, international accreditation is considered a key milestone. Therefore, assisting Georgian partner universities as they work towards international accreditation was paramount in the SDSU-Georgia project. Hence, SDSU-Georgia, with the help of MCA-Georgia worked with the three state universities to develop STEM programs which corresponded to the international quality assurance standards, specifically of ABET or ACS[10] and gain accreditation. In this context, the core methodology proposed by SDSU-Georgia, was to overlay SDSU's existing and accredited, curricula onto the program framework at the partner universities. As the project progressed, an alternative pathway was also developed, which allowed programs to be developed independently from the SDSU curriculum and still be considered for ABET accreditation. As a result, three programs at TSU, four programs at ISU and five programs at GTU are on a pathway to ABET accreditation. Meanwhile, ACS Certification of TSU Chemistry / Biochemistry program is planned for 2021.

GRADUATES OF SDSU-GEORGIA

SDSU-Georgia recruited a total of 642 students in four cohorts for six degree programs: Chemistry/Biochemistry, Computer Science, Computer Engineering, Electrical Engineering, Civil Engineering, and Construction Engineering. SDSU-Georgia maintains a 40% female student population.

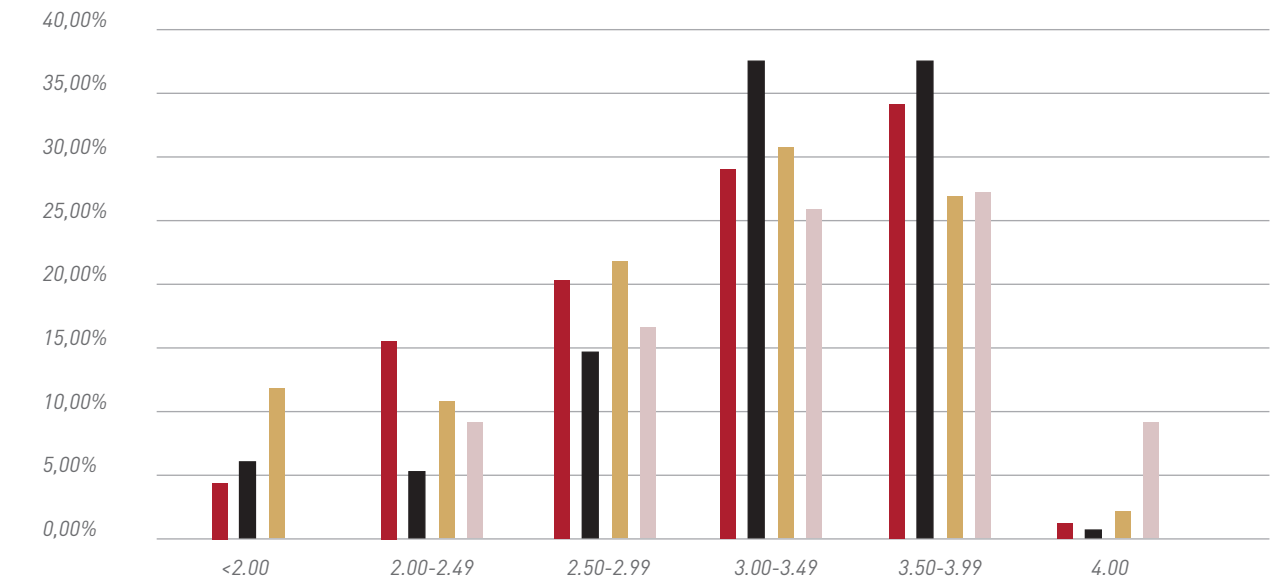
There are 530 students currently active at SDSU-Georgia programs, described in detail in the table below. A fifth cohort of approximately 150 U.S. degree students is expected to enroll in the fall of 2019.

Table 7: *Student enrollment numbers by program as of the end of fall 2018 semester*

Program name	2015-16 Cohort 1	2016-17 Cohort 2	2017-18 Cohort 3	2018-19 Cohort 4	TSU	ISU	GTU	Total
Electrical Engineering	14	13	24	19	52	14	4	70
Comp Engineering	27	22	25	50	94	26	4	124
Chemistry/Bio-Chemistry	16	24	28	59	127	0	0	127
Comp SCI	1	32	44	75	151	1	0	152
Civil Engineering	0	2	19	17	1	0	37	38
Construction Engineering	0	2	10	7	0	0	19	19
# of Students as of Nov. 2018	55	95	150	227	425	41	64	530

Although not high in numbers, SDSU-Georgia students demonstrate very high achievements. The students are amongst the top at NAEC university entrance exams, and later demonstrate high academic performance, having higher GPA then that of the average SDSU home campus-based students in the same fields in California, USA. Over 35% of the first graduates of SDSU-Georgia programs have received summa cum laude, magna cum laude and cum laude diplomas.

Figure 4: *Academic performance of the SDSU-Georgia students across four cohorts (GPA)*



Cumulative GPA by Cohort

GEORGIAN FACULTY DEVELOPMENT

Georgian faculty development activities are being conducted as a part of the capacity-building strategy. Each semester, Georgian faculty nominated by their respective partner universities are selected to visit home campus for a professional development program to build familiarity with SDSU curricula, develop teaching skills within specific courses that they might later assist with or teach in Georgia, develop laboratory skills, gain an understanding of SDSU's assessment practices, and build collaboration with SDSU faculty, both in terms of teaching and research. During these visits, each of the visiting faculty members are paired with a faculty member in their discipline on home campus. The SDSU host serves in a mentoring capacity during the visit and afterwards, when the Georgian faculty starts teaching in the SDSU-G programs. A first cohort of Georgian faculty visited SDSU home campus in summer 2014. There have been ten cohorts since. A total of 91 Georgian faculty members were trained at SDSU.

NEW STATE OF THE ART SCIENCE AND EDUCATIONAL INFRASTRUCTURE IN GEORGIA

Through the facility rehabilitation portion of the project, up to 4,000 square meters of classroom and laboratory spaces have been constructed and rehabilitated at TSU and GTU. In addition, new four-story STEM building was constructed in partnership with ISU, with a total enclosed space of more than 5,000 square meters. As a result Georgia has received laboratories and classrooms equipped with the state of the art equipment.



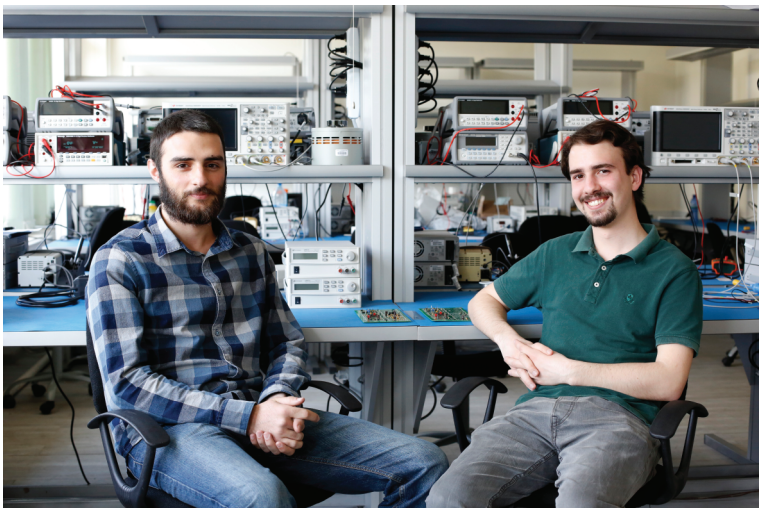


Table 8: *Areas renovated/constructed at partner university facilities*

Partner Institution	TSU	ISU	GTU
Classroom space (m^2)	951	587	291
Office space (m^2)	240	887	14
STEM laboratories (m^2)	1,438	844	262
Library (m^2)	78	144	0
Other (m^2)	716	2,056	158
TOTAL	3,422	4,517	725

After 2019, as the Compact II ends, SDSU Partner Universities will offer number of programs in partnership with SDSU and curriculum will be based on SDSU ABET and ACS accredited programs. More specifically, TSU will have eight new and/or updated STEM programs out of which two programs will go through the ABET accreditation process and one program will seek for ACS certification. At ISU, six programs are created in collaboration with SDSU, out of which four programs will go through the ABET accreditation process. At GTU, out of eight updated and/or new programs, five programs will be considered for the ABET accreditation. The universities will utilize state-of-the-art laboratories and infrastructure and new teaching practices and curricula adopted as a result of SDSU-Georgia project.

The total budget of Georgia – SDSU 2020 project is $66,056,852. The Compact allocated $33,482,000, and the GoG allocated $26,351,104 to the project, in addition to the above-referenced $3,130,245 through the PPPF. The remaining $3,930,503 represents tuition fees collected from Georgian and international students.





$ 21 MLN of MCC Compact II funds were invested into new state of the art laboratories, infrastructure, and new building for SDSU programs in Georgia

4 BUDGET


31142.45
+ 3542.55
+ 1352.14
+ 2100.36
+ 854.94
38992.44
1312.25
954.36
874.48
689.45
30589.68

The overall budget of the MCC Georgia Compact II of $140 million was distributed according to following budget per each activity:

Table 9: *Program Budget*

	Project / Activity	USD
1	Improving General Education Quality Project	71,706,439.09
1.1	Improved Learning Environment Infrastructure Activity	55,852,907.19
1.2	Training Educators for Excellence Activity	11,683,531.90
1.3	Education Assessment Support Activity	4,170,000.00
2	Industry-led Skills and Workforce Development Project	15,656,000.00
2.1	Competitive Program Improvement Grants Activity	11,732,440.02
2.2	Strengthening Sector Policy and Provider Practice Activity	3,923,559.98
3	STEM Higher Education Project	36,184,286.64
4	Monitoring and Evaluation	2,033,274.27
5	Program Management and Oversight	14,420,000.00
	Total	**140,000,000.00**



5



MONITORING AND EVALUATION

Each Compact financed by the MCC is subject to comprehensive monitoring and evaluation aiming to ensure successful implementation of the respective projects as well as to define the quality and level of desirable outcomes.

To measure success of the investments made into the Georgia Education Sector under the Compact rigorous impact as well as performance evaluations has been set for 2015–2023 years for each Compact project and activity as shown below:

- Improving General Education Project – The Improving Learning Environment Infrastructure (ILEI) Survey represents a rigorous impact evaluation study employing Randomized Control Trial (RCT) method, which was designed by the independent evaluator, Mathematica Policy Research, in close collaboration with the MCA-Georgia M&E Department. The initial survey includes five-year data collection rounds from March 2015 to June 2019 which shall be extended to June 2020. IPM has been contracted to perform local data collection, while NAEC has been assigned to conduct learning assessment for the evaluation purposes.
- Improving General Education Project – TEE Survey represents a mixed method study involving performance evaluation and matched comparison group design, prepared by the independent evaluator, Mathematica Policy Research, in close collaboration with the MCA-Georgia M&E Department. The initial survey included two-year data collection rounds from April 2017 to June 2018 which shall be extended to December 2020. IPM has been contracted to perform local data collection for the evaluation purposes.
- Industry-led Skills and Workforce Development Project – The ISWD Survey employs performance evaluation method designed by the independent evaluator, Mathematica Policy Research, in close collaboration with the MCA-Georgia M&E Department. The initial survey consists of two-year data collection rounds under MCA-Georgia management from March 2018 to June 2019 and two-year collection rounds under MPR's direct supervision from December 2019 to June 2021.

STEM Higher Education Project:

- ABET Readiness Assessment is being performed by ABET Foundation Inc., which started in September 2017 and was completed in May 2019.
- STEM Education Project survey represents a mixed method study involving performance evaluation and matched comparison group design, prepared by the independent evaluator, RAND Inc., in close collaboration with the MCA-Georgia M&E Department. The initial survey includes six months data collection round until June 2019, which shall be extended to June 2023. ACT has been contracted to perform local data collection for the evaluation purposes.




BAKUMA
AUTO DARKENING
HELMET
COMFORT

6

GENDER AND SOCIAL INCLUSION

The goal of gender and social inclusion (GSI) strategy of MCA-Georgia is to reduce obstacles, develop opportunities in STEM education and professions for every segment of population, and expand quality education for children disadvantaged by gender stereotypes, poverty, social affiliation and disability.

MCA-Georgia commissioned studies in 2012-2013 to identify real root causes and constraints to more inclusive development of women and disadvantaged persons and dive deeper into the barriers to girls and socially disadvantaged groups while pursuing STEM education and careers.

Study findings showed that despite of the superior performance in mathematics and science, fewer girls than boys apply to and graduate from STEM programs, which deprived Georgia of these highly performing students. Socially disadvantaged students underperform in STEM areas.

Key "take-aways" from the studies: girls' achievements and interest in STEM are shaped by the environment around them; teachers and parents are less supportive of girls than boys with respect to STEM; negative stereotypes about girls' abilities in STEM can measurably lower girls' self-perception and aspirations for STEM careers; the study recommended that teachers support development of girls' confidence in their ability to learn and succeed.

GSI Goals in Training Educators' for Excellence project were: to improve teaching and curricula to attract more talented youth to STEM studies, regardless of gender, disability and social disadvantage; to change educators' attitudes; to promote inclusive classroom management and pedagogy with attention to gender-sensitive approaches; and to involve minorities in the programs.

Changing educators' attitudes required raising awareness on gender and social inequalities. Trainings of teachers and school principals on equity in education focused on raising awareness in sustaining equality. The trainings were available for minority populations.

MCA-Georgia's partnership with UN Women led to additional training of 200 teacher trainers in gender equality.

The GSI goal for the ISWD Project was to identify and address stereotypes that hinder TVET providers from attracting, training, and job-placing talented youth regardless of gender, social disadvantage or disability.

To address gender disparity issues and find methods to engage more young women in vocational education programs MCA-Georgia has facilitated TVET provider-led development of recruitment plans and strategies that: embrace female learners' interests and pursuits; identify and address limiting stereotypes; work with TVET providers to design and implement evidence-based strategies for inclusion; showcase examples of innovative approaches for training and placing women and men in non-traditional occupations; and support the provision of job/career counseling.

Industry partnerships helped TVET providers improve the competitiveness of their programs. The most vibrant partnerships had industry partners offering equipment, laboratory space, student placement for internships and on-job training. Female TVET students participate in internships programs as part of a women's economic empowerment program.

GSI goals for the STEM Higher Education program were: to increase relative and absolute numbers of young women and disadvantaged youth in STEM higher education and professions; to change stereotyped perceptions about professions appropriate for girls; and to assist student champions to popularize STEM education among youth.

Student recruitment activities and interventions featured targeted messages and approaches for attracting more girls and socially disadvantaged youth to the SDSU program. Project implementers worked with STEM teachers to more proactively encourage girls to choose STEM and disseminate information about scholarship possibilities.

Combined, these activities resulted in 34% total enrolment of female students in SDSU programs, 20% of the first SDSU-Georgia students' cohort to graduate the class of 2019 Summa Cum Laude, and 50% of the best performing students being women.

An "Empower Women" students' club was established by SDSU Georgia girl students to promote STEM education in Georgia. Female students, who are strongly motivated to engage in various academic, professional, social and charity activities, were unified to see themselves making devices, innovative projects, solving problems and what's most important, making difference in people's health, functionality and life.

SDSU Georgia's female students were provided a unique opportunity of counseling through the "Women in Science" (WiSci) 2018 Camp in Tbilisi, where high school age female campers from Georgia, Armenia, Azerbaijan and the U.S. were exposed to science, technology, engineering, arts and mathematics (STEAM). The SDSU female counselors served as role models to the young women campers.





Gender equality and social inclusion are priorities for the Millennium Challenge Account-Georgia

Accessible environment was created for students in the rehabilitated public schools

School principals, teachers and TVET educators were trained on the importance of creating equal learning environment



Memorandums of Understanding signed with UN Women, APM Terminals and the Federation of Business Leaders - "Women for Tomorrow" to support women's economic empowerment

The first international camp "Women in Science - 2018" was held in Tbilisi in the framework of partnership with the U.S Department of State, UN Foundation program Girl up, Millennium Challenge Corporation, Google, Intel, Microsoft and American Society for Microbiology

"Business for Gender Equality" - competition was initiated to support women's professional development at work places


12FEET
3.5m

7

ENVIRONMENTAL AND SOCIAL PERFORMANCE

Protection of the environment, social issues and health and safety during implementation of Compact Projects were one of the priorities of MCA-Georgia.

All MCC Compacts are subject to the requirements of the IFC Performance Standards on Environmental and Social Sustainability. The Standards aim to avoid adverse impact on the environment, local communities, and workers and where avoidance is not possible, to minimize, and where residual impacts remain, compensate for the impacts.

In order to manage environmental and social risks and impacts related to the implementation of all the Compact Projects and meet the requirements of IFC standards MCA-Georgia has developed Environmental and Social Management System (ESMS).

The goal of the ESMS was to identify potential adverse environmental and social impacts were likely to occur during the implementation of rehabilitation and construction works and provide guidance for developing project specific environmental, social and health and safety documentation that would provide further details on mitigation measures and identify key entities responsible for implementation, supervision, monitoring and reporting.

MCA-Georgia has developed Stakeholder Engagement and Consultation Framework and Grievance redress mechanism as part of ESMS to provide core principles for stakeholder engagement and consultation processes for the Compact as a whole, and for the individual Projects. MCA-Georgia has also developed involuntary resettlement and livelihood restoration plan as well to make sure that all project affected persons and /or small businesses are identified during the design phase and are compensated accordingly.

All project-specific environmental and social performance documentation have been developed based all the requirements of IFC performance standards and main principles provided in the ESMS.

Before the commencement of the rehabilitation or construction activities the design companies developed environmental and social management plans and health and safety documentation. During the pre-bid meetings the construction companies were informed about the environmental and social requirements of the project as well. The training sessions have also been conducted for the management of the companies.

To meet the contract requirements, the construction contractors were required to hire qualified environmental, social and health and safety specialists, develop site specific environmental and health and safety documentation, conduct trainings and provide respective personal protective equipment for the workers, organize construction sites and provide regular reporting to the supervising companies.

To meet the common contract requirements and good practices, general waste management plans (WMP) have been developed for the projects. The main purpose of WMP was to provide overall guidance on removal, temporary storage, transportation and final disposal of hazardous and nonhazardous waste.

During the design phase of the Improving General Education Quality Project, condition assessments have been conducted at each school to be rehabilitated. Based on the findings site specific waste management plans with specific guidance have been developed by the design consultant companies. The construction contractors were required to follow the guidelines provided in the waste management documentation.



During implementation, the Improving General Education Quality Project stakeholder engagement plan and respective engagement mechanisms were developed. The purpose of the mechanism was to establish stakeholder committees at schools and through regular meetings ensure the involvement of representatives of schools and local communities in the different stages of the project cycle: pre-design phase, design phase, school rehabilitation and construction phase, operation and maintenance of the new facilities phase. During the stakeholder engagement process the school rehabilitation draft designs have been reviewed and necessary adjustments have been made. After the completion of the works the results of the rehabilitation process have been discussed.

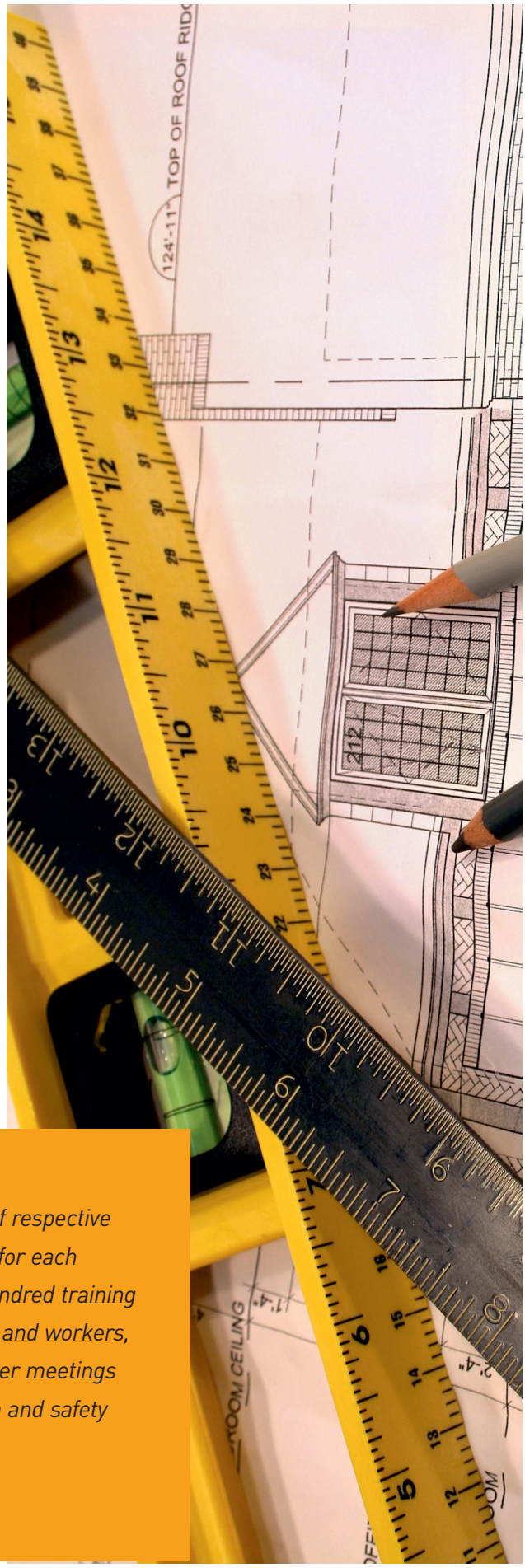
For the schools where temporary physical displacement of small businesses cafeterias, after school classes was needed, resettlement action plans with respective calculations have been developed. Affected owners of small businesses were compensated.

The ISWD Grant Manager provided Environmental and social performance related trainings at the information, orientation and application stage as well as to the awarded organization during project implementation stage.

The ISWD technical evaluation panel members provided a detailed template and technical assistance in the adoption and implementation of Stakeholder Engagement Plan and the Grievance Redress Mechanism for grant beneficiaries.

Infrastructure renovation projects were visited regularly by Grant Manager ESP experts together with Infra specialist to ensure that all risks were properly analysed and understood by the Grant Beneficiaries and respective mitigation measures have been implemented.

The set of environmental and social documentation have been developed by the design companies for infrastructure related activities under the higher education project to ensure the compliance with the Compact requirements. Dedicated ESP staff member has been hired by SDSU to make sure the ESP oversight during the implementation of SDSU project, regularly reporting MCA-Georgia. All ESP related activities have been documented and communicated with MCA-Georgia ESP team.



MCA-Georgia ensured the development of respective environmental and social documentation for each Compact project, organizing up to one hundred training sessions for the construction contractors and workers, organizing up to three hundred stakeholder meetings and the regular environmental and health and safety coverage of the construction sites.

PROCUREMENT 8

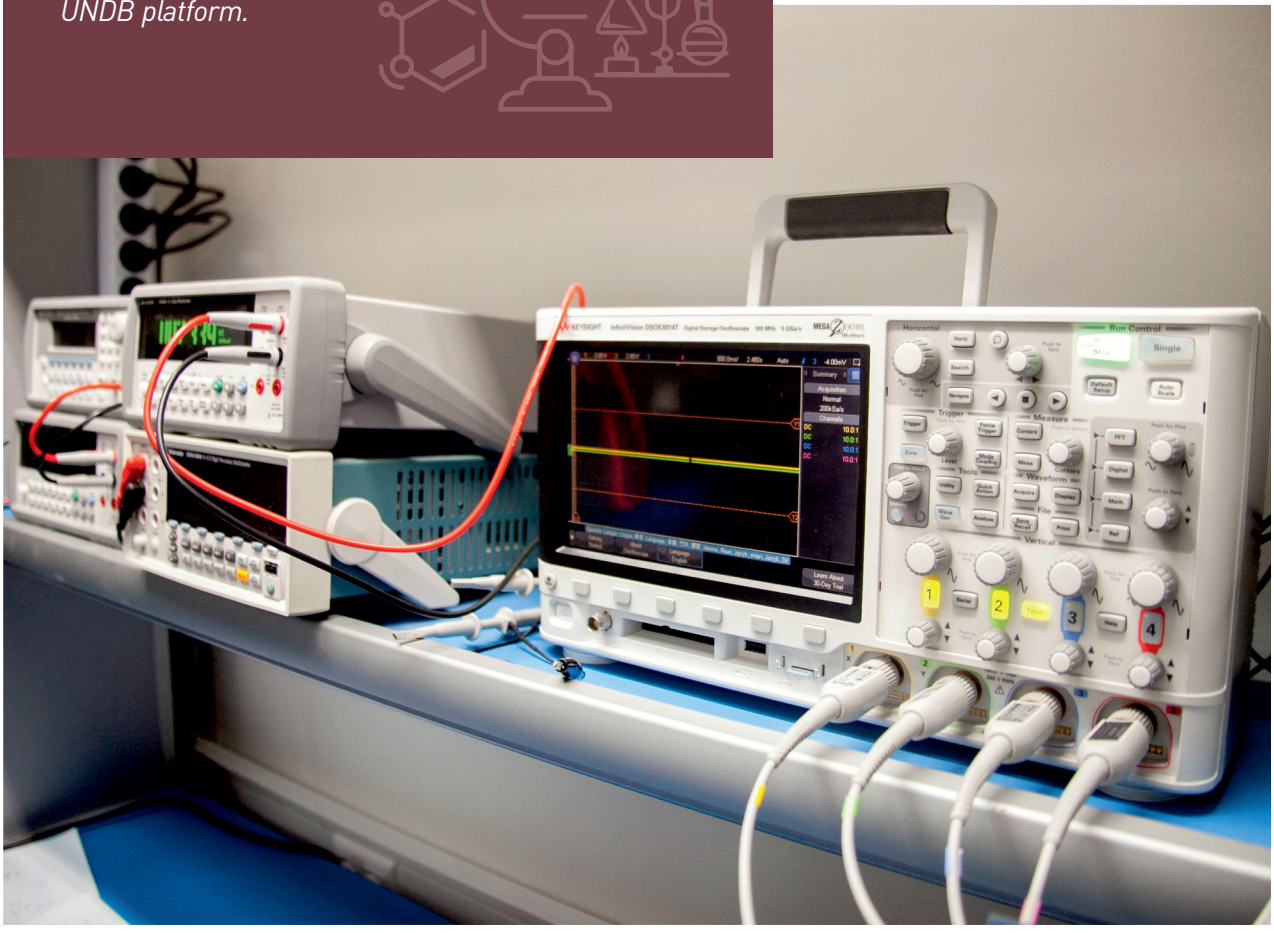
The GoG issued a special decree (N968 on May 24, 2012) stipulating that the projects and activities to be implemented under the Compact II between MCA-Georgia and MCC shall be governed according to MCC Program Procurement Guidelines. Therefore, all procurements implemented by MCA-Georgia were carried out in accordance to the principles, rules and procedures set out in the (MCC) Program Procurement Guidelines updated from time to time on the following website (https://www.mcc.gov/resources/doc/program-procurement-guidelines).

By June 2019, MCA-Georgia has signed up to 160 successful contracts. Executed procurements varied from consulting and non-consulting services to goods and rehabilitation works contracts. About half of the active contracts are for public school rehabilitation works under the Improving General Education Quality Project. The remaining contracts were related to Fiscal Agent and audit services, San Diego State University, TVET Grant Manager, ABET accreditation readiness assessment services, data collection and evaluation services, school rehabilitation works supervision contracts, individual consultant contracts for O&M and infrastructure activities, school science laboratory furniture and consumables and various goods and non-consulting services for General Education and TVET Projects.

During the compact implementation period, MCA-Georgia conducted two large outreach events, "Doing Business with MCA-Georgia," in 2015 and 2017, informing the companies about the upcoming procurements and procedures for participation. In addition to these large outreach activities, MCA-Georgia conducted very detailed and comprehensive pre-proposal and pre-bid conferences for each major procurement, where the companies had a platform to ask questions, review submission requirements and learn about the evaluation criteria.

MCA-Georgia procurements have been widely advertised on local and international platforms, such as United Nations Development Business (UNDB), dgMarket, State Procurement Agency, tenders.ge, MCA-Georgia website and jobs.ge websites.

In 2017, MCA-Georgia was named among the top five MCC countries posting the biggest number of procurement advertisements on UNDB platform.





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GOVERNMENT BUSINESS AND PUBLIC RELATIONS

The objectives of the Government, Business and Public Relations of the MCA-Georgia were to ensure seamless dissemination of information regarding MCC Compact II activities, including major achievements among key stakeholders and a wider audience. An integrated communications approach adopted by MCA-Georgia included meetings with the media representatives, ensuring fast and open communications with key beneficiaries through various channels of communications, thereby contributing to transparency and accountability to the people of Georgia, American taxpayers and the governments of the United States of America and Georgia.

Besides traditional channels of communications and media, MCA-Georgia established a Stakeholders' Committee with members from both public and private organizations. **Stakeholders' Committee members provided valuable advice to, most importantly, support establishment of partnerships with the private sector**. Based on the shared value proposition principles, MCA-Georgia achieved significant success in private sector engagement for its educational projects and activities. In close collaboration with the MCC counterparts, the Compact created a manual for successful private sector engagement as well as open solicitation procedures, enabling all interested parties locally and internationally to start partnerships with MCA-Georgia aimed at supporting the sustainability of Compact-funded projects.

Through very active public relations activities, the MCC Georgia Compact II success and achievements were widely promoted, and created strong two-way communications between direct beneficiaries as well as the public and private sectors, thus strongly contributing to MCA-Georgia's private sector engagement and partnerships.

One of the main goals of the MCA-Georgia, together with its implementing partners, was to increase awareness of STEM disciplines in Georgia, promote the need of high-quality STEM education among the youth and rehabilitate the image of vocational education damaged by the Soviet legacy. In addition, after meetings and consultation with the stakeholders and MCA-Georgia beneficiaries, it was clear that the Compact had to bridge the gap between students, educational institutions and employers. Consequently, through an integrated communications approach, with strong support by the GoG and the U.S. mission's representatives in Georgia, this goal was successfully achieved, and currently the Compact projects have significant number of partner companies, businesses, organizations. Most importantly, STEM has started to regain its importance and obtain an improved image.

MCA-Georgia has held school opening ceremonies, international and national conferences, national TVET awards, business for gender awards, opening of ISWD funded TVET centers and schools, opening of SDSU-Georgia new laboratories and building, SDSU-Georgia students commencement, convocation ceremonies, Millennium Innovation Awards competition events, and many more. At least one large scale event was organized every month of the five year Compact with smaller scale events at least twice per week.

MCA-Georgia had held rigorous social media campaign and outreach activities to ensure that resources created through MCC Georgia Compact II were widely spread amongst the Georgian as well as U.S. public. Quarterly newsletters, MCA-Georgia annual calendars with various commissioned STEM and education related themes were published and widely distributed along with annual reports both in print and video formats.

In order to strengthen human capital, support the beneficiaries of the projects and to formalize partnerships, MCA-Georgia has initiated partnerships with leading organizations, future beneficiaries of Georgia Compact II results.

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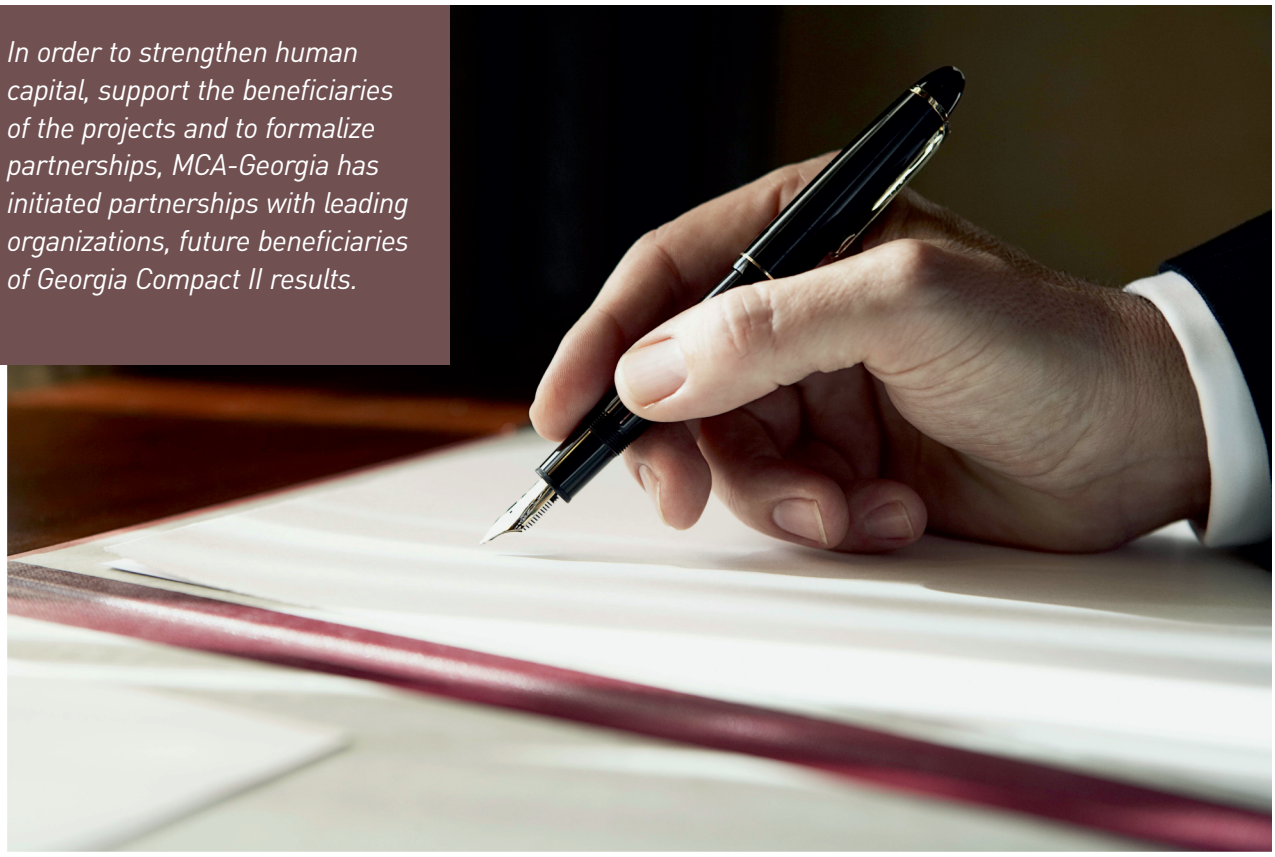


As a result various memoranda of understanding with private and public organizations were initiated and signed. The main goal of each memorandum was to promote STEM education and enhance partnerships. The participation of the Georgian private and public sectors in reinforcing educational programs promotes the establishment of effective, long-term partnerships and gives access to qualified human resources and thus these partnerships have had a paramount importance for the success of the MCC Georgia Compact II and MCA-Georgia's overall activities.

The students of the SDSU and Compact-funded TVET programs possess unique opportunities to participate in the events put forth in the memoranda of understanding. They have access to additional financial resources for funding their studies, and additional vehicles that may lead to their ultimate employment.

During 2014-2019 MCA-Georgia has initiated partnerships with the leading organizations operating in Georgia and signed following Memoranda of Understanding:

Organization Name:
JSC Sinergy Capital
www.sinergy.ge

Date signed: 25.06.2019

THE MEMORANDUM OBJECTIVE:

The aim of the Memorandum is to enhance the cooperation between the parties in order to develop human capital, which will contribute to the economic growth of Georgia.

The Memorandum envisages training personnel through various internship programs. In this regard, it also aims to cooperate with public and private sectors. Moreover, the Memorandum seeks to provide short-term internships for the students enrolled in the SDSU Georgia Bachelor Programs and the vocational education programs funded by MCA-Georgia. One of the key goals of the partnership is to help the human capital to get involved in STEM fields.

Organization Name:
Poti Sea Port, Technical University of Georgia, public colleges "Spektri", "Phazisi", "Tetnuldi", Batumi State Maritime Academy and the Georgian Institute of Public Affairs.

Date signed: 05.04.2019

THE MEMORANDUM OBJECTIVE:

The development of human resources in accordance with labor market demands through facilitating and promotion of vocational education quality; Promoting women's economic empowerment by offering them practical trainings and internship programs; Getting women involved in vocational education programs, particularly in the following programs of technical vocational education: Information Technology Support Specialist, Crane Operator, Welder, Mechanical Engineer, High Voltage Electrician, Specialist of Labor Safety and Environmental Technologies.

Organization Name:
Tbilisi City Municipal Assembly
www.tbsakrebulo.gov.ge

Date signed: 24.04.2019

THE MEMORANDUM OBJECTIVE:

The goal of the Memorandum is to strengthen the cooperation between the parties in order to provide short-term internships for the students enrolled in the SDSU Georgia Bachelor Programs and the vocational education programs funded by MCA-Georgia; The memorandum envisages to popularize the STEM fields, to deepen cooperation and preparation of joint activities for training personnel in accordance with the market requirements.

Organization Name:
Parliament of Georgia
www.parliament.ge

Date signed: 24.10.2018

THE MEMORANDUM OBJECTIVE:

The goal of the Memorandum is to promote human capital development for the country's economic growth.

The Memorandum seeks to arrange cooperation with SDSU Georgia, which will allow the students to start internships and practical trainings at the Georgian Parliament. Its goal is the promotion of STEM fields and the deepening of the cooperation in organizing and implementing joint activities.

Organization Name:
Gudavadze-Patarkatsishvili Foundation
www.gpf.ge



Date signed: 19.07.2018

THE MEMORANDUM OBJECTIVE:

The aim of the Memorandum is to promote human capital development and popularize STEM fields for Georgia's economic growth.

The Memorandum activities include: Supporting vocational education programs financed through the SDSU – Georgia and the Millennium Challenge Account; funding students of San Diego State University; Sponsoring the Annual TVET Conference.

Organization Name:
Business Leaders' Federation – Women for Tomorrow
www.womenfortomorrow.org



Date signed: 15.06.2018

THE MEMORANDUM OBJECTIVE:

The aim of the Memorandum is to create employment opportunities, empower women employed in business, as well as promote their future career advancement, which, in turn, will strengthen the private sector efficiency leading to the creation of economic prosperity in the country.

Millennium Challenge Account – Georgia and Women for Tomorrow have been jointly organizing a competition "Business for Gender Equality" since 2019.

Organization Name:
JSC Anaklia City,
LTD Anaklia Development Consortium

Date signed: 01.06.2018

THE MEMORANDUM OBJECTIVE:

The goals of the Memorandum are to: train personnel in accordance with the labor market requirements through internships and practical trainings; deepen the cooperation with public-private sectors; implement joint activities.

Within the framework of the Memorandum, short-term internships will be arranged for the students enrolled in the SDSU-Georgia and the vocational education programs funded through the MCA-Georgia. The Memorandum also seeks to popularize STEM field and encourage the employment of the trained personnel in accordance with the market requirements.

Organization Name:
International Education Center
www.iec.gov.ge

Date signed: 14.05.2018

THE MEMORANDUM OBJECTIVE:

The aim of the Memorandum is to create a foundation for educational and academic cooperation. It seeks to support the cooperation between International Education Center, Millennium Challenge Account – Georgia and San Diego State University. The Center and SDSU will provide jointly funded M.S. and PhD programs for graduates of SDSU-Georgia programs based on a defined selection criteria.

Organization Name:
LTD Sakkorggazi (Socar)
www.socar.ge

Date signed: 15.12.2017

THE MEMORANDUM OBJECTIVE:

The goal of the memorandum is to support the country's economic growth through the development of human capital; to prepare personnel to meet the job market requirements through internships and practical trainings.

In order to train personnel, the Memorandum seeks to deepen the cooperation with public and private sectors and to organize joint activities. One of its goals is to provide short-term internships in various structural units of the company for the students enrolled in the SDSU Georgia Bachelor Programs and the vocational education programs funded by MCA – Georgia; another goal of the Memorandum is to promote STEM field and to encourage future employment of the trained personnel in accordance with the market requirements.

Organization Name:
LTD Georgian Water and Power
www.gwp.ge

Date signed: 13.10.2017

THE MEMORANDUM OBJECTIVE:

The goal of the Memorandum is to support the country's economic growth through the development of human capital; to prepare personnel for the job market requirements through internships and practical trainings.

In order to train personnel, the Memorandum seeks to deepen the cooperation with public and private sectors and to organize joint activities. One of its goals is to provide short-term internships in various structural units of the company for the students enrolled in the SDSU Georgia Bachelor Programs and the vocational education programs funded by MCA – Georgia; another goal of the Memorandum is to promote STEM field and to encourage future employment of the trained personnel in accordance with the market requirements.

Organization Name:
Ministry of Sport and Youth Affairs of Georgia (Ministry of Education, Science, Culture and Sport of Georgia)
www.msy.gov.ge

Date signed: 03.04.2017

THE MEMORANDUM OBJECTIVE:

The aim of the Memorandum is to strengthen the cooperation in arranging youth trainings and promoting healthy lifestyle. It seeks to fund the lectures and presentations about the MCA implemented projects at youth camps and other events, which will help promote STEM field and American Bachelor Programs at SDSU, popularizing vocational education programs relevant to the labor market requirements among young people.

Organization Name:
Ministry of Energy of Georgia (Ministry of Economy and Sustainable Development of Georgia), LTD Georgian State Electrosystem, LTD Electricity Market Operator, LTD Energotrans, LTD Georgian Oil and Gas Corporation, LTD Energo-Pro Georgia
www.energy.gov.ge

Date signed: 10.01.2016

THE MEMORANDUM OBJECTIVE:

The goal of the Memorandum is to develop human capital in STEM fields and retrain personnel in accordance with the labor market demands in the energy field through internships and practical trainings.

The Memorandum envisages the deepening of relations with the private sector, implementation of joint activities, promoting STEM fields and the future employment of retrained personnel in accordance with the labor market demands.

Organization Name:
LEPL National Investment Agency of Georgia
www.investingeorgia.org

Date signed: 05.12.2016

THE MEMORANDUM OBJECTIVE:

The aim of the Memorandum is to train personnel in the STEM field, in accordance with the requirements of the potential investors and hence, retrain the personnel through internships and practical trainings, carry out joint activities, including business forums and conferences.

The Memorandum envisages the popularization of STEM fields and the promotion of employment relevant to the market demands.

Additionally, the investors will gain access to the information about the STEM industry demands in Georgia, as well as the information on human resources provided within the framework of the Higher Education Program.

Organization Name:
UN Women
www.georgia.unwomen.org

Date signed: 20.11.2015

THE MEMORANDUM OBJECTIVE:

The goal of the Memorandum is to enhance the cooperation to empower women and girls in order to encourage their participation in STEM educational programs and to increase the number of female students.

The Memorandum seeks to inform the providers of vocational education about gender equality issues, provide them with relevant training materials, disseminate UN Women Empowerment Principles among the providers of vocational education and their business partners.



Over 10 MoUs signed by MCA-Georgia with leading private and public organizations with the aim of providing STEM human capital.

Throughout five years, MCA-Georgia has held over fifty events in support to the investments and effort put in building education system in Georgia.

2019-05-24	*"Leadership Academy" draws to a close: 1 800 School Principals were Awarded Certificates*
2019-05-21	*The PM Mamuka Bakhtadze visited newly rehabilitated Kutaisi #33 Public School*
2019-05-16	*MCA – Georgia announces National TVET Awards 2019*
2019-05-16	*MCA – Georgia Announces Campaign #SchoolCare*
2019-04-24	*Meetings held with International Donor Organizations and Memorandum of Understanding Signed between Tbilisi City Municipal Assembly, Millennium Challenge Account - Georgia and San Diego State University*
2019-04-15	*Georgian Delegation Attends the San Diego University President Adela de la Torre Inauguration Ceremony*
2019-04-05	*Millennium Challenge Account - Georgia Signs Memorandums for Women's Economic Empowerment*
2019-03-29	*Millennium Innovations Award 2019 Winners Revealed: Young Georgian Inventors Will be Travelling to NASA*
2019-03-13	*Millennium Challenge Account awards companies supporting gender equality*
2019-03-07	*MCA-Georgia and Gudavadze-Patarkatsishvili Foundation hold a meeting with NGOs*
2019-03-05	*The winners of the "National TVET Awards 2018" go to a one-week study trip to Germany*
2019-02-28	*Two schools rehabilitated by the Millennium Challenge Account-Georgia were opened in Kutaisi*
2019-02-21	*Roundtable discussion held on Promoting Gender Equality in Vocational Education*
2019-01-30	*MCA Georgia launched competition "Business for Gender Equality"*
2019-01-22	*Zestaphoni #6 and #7 Public Schools, rehabilitated by MCA-Georgia were officially opened*
2019-01-14	*MCA – Georgia Initiates the Project for Operation and Maintenance of Public Schools*
2018-12-24	*Shortcut to employment - 2 new projects implemented with the financial support of MCA – Georgia*
2018-12-08	*Launch of SDSU Career Development Center and Scholarship Award Ceremony*
2018-12-06	*Presentation of the Handbook for Teachers - "Formative Assessment and Differentiated Teaching"*
2018-11-26	*The Prime Minister of Georgia visited fully rehabilitated Telavi N9 Public School*
2018-11-20	*2018-2019 Millenium Innovations Award was Announced*
2018-11-12	*The Winners of 2018 TVET Award are Revealed*
2018-11-07	*New building of Georgian Technical Training Center (GTTC) opens with modern vocational technologies*
2018-11-05	*Week of Skills Opened with the International TVET Conference*
2018-10-24	*The Memorandum of Understanding was signed between the Parliament of Georgia, Millennium Challenge Account-Georgia and the U.S. San Diego State University*
2018-10-24	*Donor Coordination Meeting held at Tbilisi City Municipal Assembly*
2018-09-25	*Mamuka Bakhtadze met with the Acting Chief Executive Officer of Millennium Challenge Corporation*
2018-09-24	*International Conference on School Leadership and Management was Held for School Principals*
2018-09-21	*Opening ceremony of public schools of Rustavi N4 and Gardabani N4*
2018-09-21	*San Diego State University- Georgia Welcomed 230 Freshmen Students for the New Academic Year*
2018-08-27	*Girls' International Camp "Women in Science" Closing Ceremony was Held*
2018-08-23	*Vice President of the Millennium Challenge Corporation, Cynthia Huger visits Georgia 2018-08-24 The Vice President of the Millennium Challenge Corporation, Ms. Cynthia Huger Visited the Railway Transport College*
2018-08-22	*The Vice President of the Millennium Challenge Corporation, Ms. Cynthia Huger and the Prime Minister of Georgia, Mr. Mamuka Bakhtadze Held a Joint Meeting*
2018-08-15	*For the First Time, Georgia to Host UN Foundation's International Camp "WiSci Girls STEAM Camp"*
2018-07-27	*Kutaisi Public School #5, Kutaisi Public School #33, village Inchkhuri Public School of Martvili Municipality Opened*



2018-07-19	*Gudavadze-Patarkatsishvili Foundation Offers Full Scholarship to 10 Successful Students of San Diego State University*
2018-06-29	*The Millennium Challenge Account-Georgia has been Carrying out Full Rehabilitation Works in 8 Public Schools of Kutaisi*
2018-06-19	*U.S. Government is to Fund New Projects Promoting Vocational Education in Georgia*
2018-06-15	*Memorandum of Partnership has been signed between the Millennium Challenge Account-Georgia and Business Leaders' Federation Women for Tomorrow*
2018-06-12	*The Millennium Challenge Account-Georgia Held a Meeting on Gender Equality in TVET Sector*
2018-06-11	*Teachers' Conference on Student-Centered Approach to STEM Teaching*
2018-06-05	*A Partnership Memorandum signed between the Millennium Challenge Account-Georgia, San Diego State University, Anaklia Development Consortium and Anaklia City*
2018-06-01	*The Millennium Challenge Account-Georgia begins rehabilitation works in 30 public schools of western Georgia*
2018-05-18	*Teachers will be able to advance their professional development through online courses starting in 2019*
2018-05-10	*The Millennium Challenge Account-Georgia launches a campaign #მოუვაროთსკოლას(#SchoolCare)*
2018-05-08	*National TVET Awards 2018 has been announced*
2018-05-05	*With the financial support of MCA – Georgia National Assessment and Examinations Center organize a conference "National and International Assessment: Main Challenges of General Education."*
2018-05-04	*The Memorandum of Understanding has been signed between the Millennium Challenge Account-Georgia, San Diego State University and International Education Center*
2018-04-27	*Technical Assistance in TVET Sector*
2018-04-20	*Fully Rehabilitated Public School has opened in Kartikami*
2018-04-13	*The Winning Team of the Millennium Innovations Awards has been Revealed*
2018-03-29	*The US Government continues funding partnership between Georgian TVET Institutions and Industry*
2018-03-21	*The Winners of Business for Gender Equality Competition Awarded at Gala Ceremony*
2018-03-07	*MCA Georgia has launched documentary film series in observance of Women's History Month*
2018-03-06	*For the first time in Georgia, teachers will have access to the Online Professional Development Courses*
2018-03-01	*THIRD ROUND OF SMALL GRANTS SCHEME FOR STRENGTHENING TVET PROVIDER PRACTICE LAUNCHED*
2018-02-07	*$ 68 Million Grant for Development of Educational Infrastructure from Millennium Challenge Corporation*
2018-02-06	*Registration of speakers for "School Management and Leadership Conference" announced*
2018-01-30	*Topping-out Ceremony of San Diego State University's new academic building at Ilia State University*
2018-01-22	*Gender Equality in business competition*
2018-01-12	*The first training center of Adventure Tourism School opened in Gudauri*
2017-12-24	*A photo exhibit – STEM Legacy in Georgia opened by Millennium Challenge Account – Georgia*
2017-12-13	*Fully rehabilitated Akhaltikhe Public School N 1 opened by Millennium Challenge Account – Georgia*
2017-12-12	*Millennium Challenge Account - Georgia and Khidistavi Public School jointly organized an event dedicated to the 16 Days of Activism campaign against gender violence.*
2017-12-01	*Millennium Innovation Award 2017 - 2018 was announced*
2017-11-01	*National TVET Awards Winners Revealed*
2017-10-31	*Second Annual International TVET Conference "Skills for Future" Organized in Georgia*
2017-10-31	*The public exhibition of 45 new TVET programs is opened*
2017-10-20	*Millennium Challenge Account-Georgia supports and holds a roundtable on gender equality in the education field*
2017-10-13	*MCA Georigia and San Diego State University in Georgia organized an event dedicated to International Day of the Girl Child*
2017-10-04	*Georgia to host the 43rd Annual Conference of the International Association for Educational Assessment*
2017-09-29	*STEM educational programs will receive international accreditation for the first time*



2017-09-27	*MCA Georgia takes part in International Science and Innovations Festival*
2017-09-25	*US Ambassador to Georgia and Deputy Minister of Education open Oni's newly rehabilitated public school*
2017-09-18	*The Millennium Challenge Fund completed the rehabilitation and equipment with STEM labs of 30 public schools in 2016-2017*
2017-09-15	*The first National TVET awards announced in Georgia*
2017-09-12	*Tbilisi mayor meets with members of the San Diego delegation*
2017-09-10	*Two-day conference on School Management and Leadership held for school principals*
2017-09-04	*MCA Georgia conducted meetings in youth camps*
2017-08-10	*Modern Aviators will be trained with the financial support from Millennium Challenge Account*
2017-07-07	*MCA – Georgia Completed the Rehabilitation of Public Schools in Okureshi and Oni*
2017-07-06	*Increasing Awareness of Educators on Gender Equity in Education*
2017-07-05	*An Example of Private-Public Partnership – Starting from Fall 2017 the Georgian Technical Training Center will Begin Admitting Students to Its Professional Programs*
2017-06-21	*The Chief Executive Officer of MCA – Georgia Acquainted herself with the Ongoing Projects in the Autonomous Republic of Adjara in the Framework of the Compact*
2017-06-21	*MCA – Georgia and the Ministry of Education, Culture and Sport of Adjara Signed a Partnership Memorandum*
2017-06-20	*Students of San Diego State University visited GMP Pharmaceuticals*
2017-06-13	*Hackathon for Rugby*
2017-06-05	*The U.S. Ambassador to Georgia Awarded Six San Diego State University Students with Stipends*
2017-05-18	*MCA Georgia took part in the conference "TVET Driven Economy"*
2017-05-11	*Students from Senaki Visited the NASA Space Center University*
2017-04-26	*San Diego State University Opened a Georgian Corner*
2017-04-24	*Georgian Days Opened in San Diego*
2017-04-23	*Millennium Challenge Account - Georgia awarded the winners of Industry Led Skills and Workforce Development Small Grant Program*
2017-04-11	*Millennium Challenge Account Georgia Supervisory Board Meeting*
2017-04-03	*A Partnership Memorandum Signed between MCA-Georgia, the Ministry of Sport and Youth Affairs of Georgia, and San Diego State University – Georgia*
2017-03-09	*MCA Georgia awarded three companies with "Business for Gender Equality" prize*
2017-02-17	*Introduction of Millennium Challenge Account - Georgia's work to the students of Gldani-Nadzaladevi Public School #113*
2017-02-07	*San Diego State University in Georgia presented new B.S academic programs*
2017-01-31	*Business for Gender Equality Award Announced*
2017-01-17	*Information Session on the II Round of Strengthening TVET Provider Practice Grant Scheme*
2017-01-11	*New operations and maintenance system for the rehabilitated public schools*
2016-12-19	*SDSU - Georgia and Ilia State University Held a Presentation of a New Building Project and Bachelor's Programs*
2016-12-06	*Increasing Awareness of Educators on Gender Equity in Education*
2016-12-05	*MOU among Georgian National Investment Agency, San Diego State University Georgia and Millennium Challenge Account - Georgia*
2016-11-18	*Series of Roundtable Meetings on Gender Equality in General Education*
2016-10-03	*The Millennium Innovation Award Competition Has Been Announced*
2016-09-28	*Gori #5 Public School Opened in the Framework of the Millennium Challenge Compact*
2016-09-27	*A U.S. $12 Million Investment in the Development of Vocational Education*
2016-09-17	*The Renovation of 12 Public Schools Has Been Completed*
2016-08-03	*New Training Modules Developed for the Professional Development of Approximately 20,000 VII-XII Grade Teachers*


MILLENNIUM
EXIT

2016-07-18	*International Conference: "Vocational Education's Role in Economic Development"*
2016-07-07	*MCC - Funded Project Beneficiaries Discussed Their Success with John Kerry*
2016-06-24	*Kakha Kaladze, the Georgian Vice-Premier, Met with San Diego State University Students and Discussed the Importance of the Technological and Natural Science Sectors*
2016-06-10	*Memorandum of Understanding signed between the Ministry of Energy of Georgia, MCA Georgia and San Diego State University*
2016-04-26	*Team Solar's Success at the Conrad Foundation's Spirit of Innovations Summit*
2016-04-21	*The U.S. Government Allocates a 250,000 USD Grant for Strengthening the Partnership between Vocational Education and the Private Sector*
2016-04-07	*A Meeting-Presentation regarding the Schools' Operation and Maintenance (Q&M) Program*
2016-04-05	*Jenner Edelman, the New Resident Country Director of the Millennium Challenge Corporation, Visits Rehabilitation Works at Gori N5 and Tiniskhidi Public Schools*
2016-04-01	*SDSU Students Participated in Professional Coaching Session*
2016-03-21	*Training Educators for Excellence Project International Consultancy*
2016-02-12	*Georgian MIA Winner Team "Solar" to Visit NASA*
2016-02-11	*San Diego State University Georgia Announces Bachelor of Science Degree Programs for 2016-17 Academic Year*
2016-02-08	*Over 37 thousand Beneficiaries will Receive Improved Learning Environment*
2016-02-04	*Millennium Challenge Corporation Invests in the Future of Georgia*
2016-02-03	*Training Educators for Excellence Project Launch*
2016-02-03	*MCA-Georgia and SDSU Celebrate White Ribbon Campaign*
2016-01-21	*MCA-Georgia is Announcing Bloggers Fellowship Program for Students*
2015-12-17	*54 mln USD Investment of the U.S. Government for Rehabilitating Public Schools in Georgia*
2015-11-20	*Princeton University Lecturer Advises MCC's Second Compact to Georgia on Gender and Social Integration*
2015-11-20	*MCA-Georgia and UN Women Sign a Memorandum of Understanding*
2015-11-19	*U.S. Ambassador Ian Kelly Meets with Advisory Board of San Diego State University – Georgia*
2015-10-02	*Millennium Challenge Account - Georgia Kicks off a New Millennium Challenge Award*
2015-09-17	*San Diego State University – Georgia Launches its Programs for the First Academic Year*
2015-09-10	*Program Improvement Competitive Grants Consultation Meeting*
2015-07-22	*Launch of 12 Million US$ for Industry-led Skills and Workforce Development Competitive Grants (PICG) Program*
2015-06-08	*Partnership for STEM Higher Education Development*
2015-04-30	*MCA-Georgia received Social and Gender Assessment Training*
2015-04-21	*The US Millennium Challenge Corporation $60 Million grant for the development of educational infrastructure*
2015-04-17	*MCA Georgia Presents Higher education Opportunities in STEM Fields to Ethnic Minority Students of Ninotsminda, Marneuli and Sadakhlo*
2015-02-12	*Two Students of the Akhaltsikhe Public School #6 and the Mzeka Public School, with their Innovative Project, to Represent Georgia at NASA Kennedy Space Center*

Some statistics with regards to the media and social media coverage is also impressive.

Activity on the MCA-Georgia Facebook page is the following:

Likes - **14,384**
Page visits - **47,900**
Post views - **479,327**
Access to the posts - **3,069,886**

In addition, media coverage counts over 2,000:

Online and printed media: over **1,500**
TV: over **500**
Radio: over **100**

10 SPECIAL PROJECTS



10.1 Millennium Innovations Award

In September 2014, MCA-Georgia has launched a nationwide competition for youth – Millennium Innovations Award (MIA). The project has been implemented with the financial support of the U.S. Embassy in Georgia and Georgian private sector partners. MIA is the largest nationwide challenge that aims to promote STEM education and innovations among 13-18-year-old students in Georgia. Another goal of the project is to match MIA winner and participant teams with relevant field experts and private sector representatives for future collaboration, knowledge and experience-sharing. The project is organized in collaboration with MESC and NASA Space Center.



MIA aims to select the three top performing teams throughout the country with the innovative projects in the fields of science, engineering and technologies.

MILLENNIUM INNOVATIONS AWARD
ათასწლეულის ინოვაციის კონკურსი

Five rounds of the MIA were successfully implemented during 2014-2019. The winning teams in 2015 and 2016 took part in the Conrad Foundation's "Spirit of Innovations Challenge" (SoIC) held at NASA Kennedy Space Center and winners in 2017-2019 years competition participated in Space Center University at Houston (Texas) Space Center.

The main sponsor of MIA is the U.S. Embassy in Tbilisi, Georgia. During the project implementation period, outstanding partnership opportunities were established with public and private organizations. The largest private companies operating in Georgia have been supporting the Millennium Innovations Award and its participant teams financially and professionally. Public organizations: The Georgia's Innovations and Technologies Agency, DELTA, The Oil and Gas Corporation, Sakpatenti have created professional growth and training opportunities for MIA finalist students.

MCA-Georgia raised over $69,580 during 2014-2019 from Georgian companies who believe in investing in innovations and youth. These sponsors are: Georgia's Innovations and Technology Agency (GITA), TBC Bank, Geocell and Silknet.



Up to 1,500 students from all regions of Georgia have participated in the project

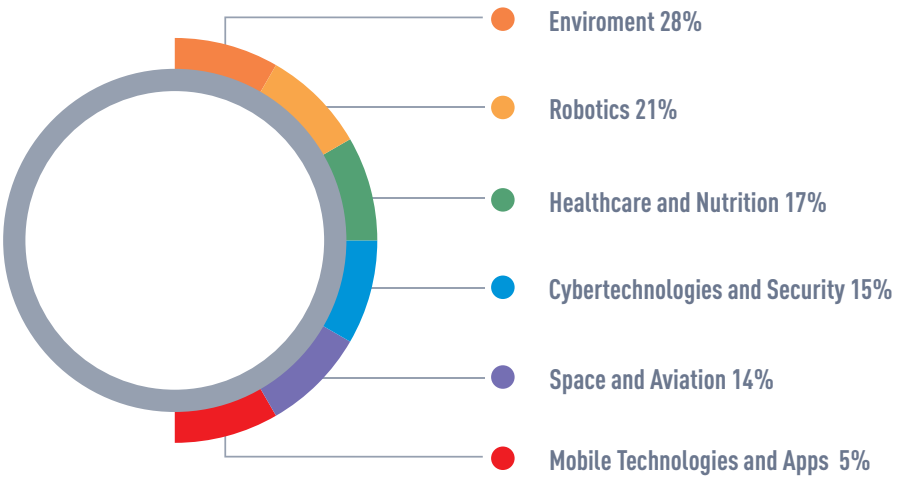
Project Partners

1 Adjara Group
2 Business Leaders' Federation "Women for Tomorrow"
3 DELTA (State Military Scientific-Technological Center)
4 East Point
5 Experimentorium
6 Georgian Farmer's Association
7 Georgian National Museum
8 Georgian Oil and Gas Corporation
9 IDS Borjomi
10 IT Academy STEP
11 Leterato
12 Liberty Bank
13 McDonald's
14 Ministry of Education, Science, Culture and Sport of Georgia
15 Microsoft
16 NASA Space Center Houston
17 National Geographic Georgia
18 Sakpatenti
19 San Diego State University – Georgia
20 Tbilisi City Assembly
21 Tbilisi City Hall
22 Tegeta Motors
23 TBC

During 2014 – 2019:

- 1,286 students in 363 teams have participated in the MIA nationwide challenge
- 309 schools from 9 regions of Georgia have registered

Figure 5: *Project Categories*



Winning Projects

MIA 2014 – 2015

Project:	Multiclimatizator
Project Description:	Multiclimatizator is a device for farmers to measure soil humidity and salinity and forecast weather.
Team Members:	Irakli Kapanadze, Karlo Khutsishvili
Schools:	Public School #6, Private School Mzeka | Akhaltsikhe

MIA 2015 – 2016

Project:	Innovative Technology of Increasing Solar Power Efficiency
Project Description:	The project aims to increase solar cells' efficiency to 3%.
Team Members:	Beka Mikadze, Giorgi Margiani, Giorgi Nioradze, Vakhtang Kontridze
Schools:	Private School AIA – Gess, New Lyceum | Tbilisi

MIA 2016 – 2017

Project:	Geological Threats
Project Description:	Geological Threats is a messaging system for landslide zones.
Team Members:	Gvantsa Chikovani, Alex Tkebuchava, Natia Shamatava, Dea Chitaia, Lika Kokaia
Schools:	St. Alexi Shushania Gymnasium | Senaki

MIA 2017 – 2018

Project:	Lab Robot
Project Description:	Lab Robot is a software enabling students to carry out STEM experiments distantly.
Team Members:	Ani Tetrashvili, Nini Khundzakishvili, Tamar Mikeladze
Schools:	Green School of Tbilisi, Private School AIA-Gess | Tbilisi

MIA 2018 – 2019

Project:	Barney's Smart Labyrinth
Project Description:	The project makes lab research and observation process automatic to get more precise results.
Team Members:	Mariam Gamrekelashvili, Giorgi Rigishvili, Alexandre Kajaia, Sophio Chikhladze, Iona Iobidze
Schools:	Private School AIA-Gess, The Guyvi Zaldastanishvili American Academy in Tbilisi, School Progress | Tbilisi, Kutaisi



Millennium Innovations Award promotes innovations and STEM education in youth of Georgia.

10.2 Take Care of Your School - Action

In May 2018, MCA-Georgia introduced a "school care" initiative for Compact-rehabilitated schools throughout the regions of Georgia to promote the implementation of the school O&M Plan, directed at encouraging best practices in public schools operation and maintenance (O&M). The goal of the project is to raise awareness among the students, teachers, school administrations and local communities and encouraging a sense of shared responsibility in school cleanliness.

The 2018 campaign highlighted three public schools that had developed and implemented a long-term, consistent plan of school care (including the maintenance of both the school building and the yard).



The campaign was implemented in two stages. At the first stage, the schools rehabilitated through Millennium Challenge Account – Georgia submitted an application proposing various activities and concepts for school care. At the second stage, the schools had to implement the proposed plan and invite the committee which evaluated the implemented activities. Winning schools were revealed and awarded with prizes during the Teacher's Conference on Student-Centered Approach to STEM Teaching in June, 2018.

The second round #School care campaign was announced in May 2019 for all 91 MCA-Georgia rehabilitated schools. The campaign serves to disseminate the best practices of students, personnel and community in caring for schools and encourage the implementation of best practices throughout Georgian schools.

10.3 Business for Gender Equality Awards

Women make enormous contributions to economies worldwide, whether in business or through work at home. However, women are disproportionately affected by poverty and discrimination. Oftentimes the work of women is not recognized. Investing in women's professional development and economic empowerment promotes gender equality, but it also sets the path to inclusive growth of economies as well as successful and sustainable companies.

In 2016, with the aim of promoting women's empowerment principles and encouraging women's full participation in economic life across all sectors and throughout all levels of economic activity, MCA-Georgia established an annual competition among businesses.

The competition was implemented in partnership with the UN Women in Georgia. Among the seven principles established by UN Women and the UN Global Compact, MCA-Georgia chose to highlight Principle 4 in the competition, i.e. the principle of education, training, and career development of women, as it most closely dovetails with the Compact's education activities. Over four years MCA-Georgia has organized this competition and awards event, with more than 150 companies participating. Each year, three companies were recognized for investing in workplace policies and programs that opened avenues for the advancement of women at all levels and across all business areas as well as encouraging women to enter non-traditional careers.

Held during March Women's History Month, businesses that demonstrated promising practices in promoting women's empowerment and gender equality through career advancements and equal opportunities were recognized at a final award ceremony. Among the winning companies that spanned the spectrum in terms of size and sector were banks, universities, insurance and telecommunication companies, hospitality and construction industry, wine production, and technology and energy companies.

For many companies, the "Business for Gender Equality" competition served as a catalyst for putting principles into practice and operationalizing the principles of women's economic empowerment. This was achieved through public commitments to advance equality and non-discrimination in their workplaces, often through their CEO's statement of support.

The competition "Business for Gender Equality" served as a good resource for MCA-Georgia to understand what is required for the business sector to shift policies, practices, and attitudes to achieve gender equality and break down the barriers that traditionally limit women to certain jobs and certain industries. Another important achievement of the competition was highlighting diversity in the workplace and providing examples of how firms can increase diversity.



While women and girls represent half of Georgia's workforce, they still face barriers to education and employment that significantly impair progress. Competitions like "Business for Gender Equality" go a long way in recognizing the gender and inclusion innovators in the business community and rewarding them for their courage and dedication.

GENDER EQUALITY IN BUSINESS

For the 2019 competition, MCA-Georgia partnered with — and passed the baton on to — the Business Leaders' Federation "Women for Tomorrow" to ensure the smooth continuation of the competition in the coming years ahead.

2016 Winning Companies	- BP Georgia, Georgian Wine, TBC Bank, Livingstone
2017 Winning Companies	- Geocell, Black See University, DIO
2018 Winning Companies	- GPI Holding, Adjara, Professional Training Center
2019 Winning Companies	- Energo Pro Georgia, Gepra, Leader



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STANDARDS AND GUIDELINES DEVELOPED BY MCA-GEORGIA

During the course of the Compact implementation, MCA-Georgia, in collaboration with international and local consultants and the GoG, developed the following standards and guidelines:

For Improved Learning Environment Activity

1) Selection Criteria for Schools to Undergo Rehabilitation
2) School STEM Laboratory Standards, including:
    a. Summary memo on science labs
    b. Policy Paper developed by MES working group
    c. Estimated costs for the science labs list of science lab equipment
    d. List of science lab equipment
    e. List of chemistry consumable
    f. Lab Methodology Manual in Physics
    g. Lab Methodology Manual in Chemistry
    h. Lab Methodology Manual in Biology
    i. Lab Methodology Training Manual in Physics
    j. Lab Methodology Training Manual in Chemistry
    k. Lab Methodology Training Manual in Biology
    l. Lab Safety Training Modules
3) Design Consultant Selection Criteria for Public Schools Rehabilitation
4) Construction Works Contractors Selection Criteria for the Public Schools Rehabilitation
5) Public Schools Rehabilitation Design Criteria
6) Public Schools O&M Program
    a. Analysis of Public Schools' O&M System
    b. Public Schools' O&M Policy
    c. Comprehensive Framework-plan of Public Schools' O&M Program
    d. Guidelines for Public Schools' O&M Program Incentive Fund
    e. Public Schools O&M Standards and Guidelines
    f. Public School Mapping

Training Educators for Excellence Activity

1) Certificate Program for Trainers of Teachers and School Principals
2) Certificate Program for Online module writer training
3) Online Resources: Formative Assessment Handbook
4) Guidebook for Study Group meetings
5) Intensive training courses for STEM and English language subject teachers' professional development (Curriculum and Modules' Syllabi)
6) Intensive training courses for Public School Principals' professional development (Curriculum and Modules' Syllabi)

Millennium Innovations Award

1. Guideline for MCA-Georgia's Millennium Innovations Award for high school students
2. Application form

Industry-Led Skills and Workforce Development Project

- Programme Improvement Competitive Grants (PICG) Operation Manual
- Strengthening TVET Provider Practice (STPP) Operation Manual
- Annual TVET Conference Manual

Reports prepared under the Technical Assistance component

- TVET Development Briefs
- Career Education and Guidance
- Education and Business Engagement
- TVET Quality Assurance

Gender and Social Inclusion

Gender and Social Inclusion Plan (SGIP)

Environmental and Social Performance

Environmental and Social Management System (ESMS)

MCA-Georgia has also conducted various studies to inform project development, design, and implementation, available on the MCA-Georgia's website, www.mcageorgia.ge

HUMAN CAPITAL DEVELOPMENT FOR ECONOMIC GROWTH

Millennium Challenge Account – Georgia

www.mcageorgia.ge