

THRESHOLD PROGRAM SUMMARY 2016-2021



MINISTERIO DE ECONOMÍA





THRESHOLD PROGRAM **SUMMARY** 2016-2021







Como Representante Principal de Guatemala ante la Millennium Challenge Corporation, MCC, ha sido un honor administrar desde el Ministerio de Economía, a través del Programa Nacional de Competitividad, el Programa Umbral, que ha sido una pieza fundamental para lograr avances significativos para el desarrollo económico y la competitividad en el país.

Uno de los ejes estratégicos de la Política General de Gobierno 2020-2024 del presidente Alejandro Giammattei es el denominado Economía, Competitividad y Prosperidad, a través del cual propiciamos el crecimiento económico y el aumento sostenible del empleo. Algo que se logra fortaleciendo las capacidades de nuestros jóvenes del ciclo básico y diversificado, así como también de las instituciones que permiten consolidar la inversión en infraestructura para el país, como la Superintendencia de Administración Tributaria y la ANADIE.

La incidencia del Programa Umbral ha sido de gran beneficio para nuestro país, de ahí el motivo que nos interesó acceder a él. Sabemos que solo implementando acciones que transformen la educación del Nivel Medio podremos brindar mejores oportunidades a los jóvenes guatemaltecos, convirtiendo el capital humano nuestro principal activo para que se inserten de forma competitiva en el mercado laboral y tengan acceso a una mejor calidad de vida.

Hoy, a través de la ejecución del Programa y del apoyo financiero de la MCC, podemos contar con una SAT y unas aduanas fortalecidas, con mejores capacidades que han permitido mejorar su eficiencia, con el fin de que podamos contar con más recursos para destinarlos a la inversión productiva del país y asegurar que el comercio en general se dinamice. Asimismo, se ha apoyado la capacidad de estructurar proyectos en modalidad de Alianza Público Privada, que será un motor de atracción de inversión y, por ende, de generación de empleos para los guatemaltecos.

Quiero resaltar que la implementación del Programa Umbral financiado por la MCC ha permitido que Guatemala conozca un modelo de gestión de la cooperación internacional más eficiente y flexible que ha transcendido gobiernos, impulsado procesos transparentes generando así, resultados tangibles en las instituciones y población beneficiada. Por ello, me complace en presentar la presente Memoria de Labores que resume las principales actividades, logros y resultados obtenidos durante el tiempo de vida del programa.

Los beneficios que el Programa Umbral deja a Guatemala son muy grandes y como parte del Gobierno, también tenemos retos que continuar; como el impulso de legislación que permita desarrollar proyectos de APP y asegurar la sostenibilidad de las iniciativas impulsadas en el Ministerio de Educación y la SAT, con el compromiso de procurar para Guatemala mayor crecimiento económico y reducción de la pobreza.

Finalmente, quiero aprovechar la oportunidad para agradecer a MCC por el acompañamiento y asistencia de sus equipos técnicos, así como a las autoridades y equipo de PRONACOM a cargo del Programa Umbral, cuyo esfuerzo, compromiso y dedicación han asegurado que este programa fuera un éxito y alcanzara los resultados esperados.





Antonio Malouf





Ministro de Finanzas Públicas

Es un honor presentar la memoria institucional del Programa Umbral de Guatemala, el cual refleja los principales resultados y logros obtenidos en materia de educación y de movilización de recursos para beneficio de nuestro país. Así como, reflexiones para la sostenibilidad de los cambios que se han iniciado a través de este apoyo a las instituciones beneficiarias. La visión que nos orienta es que, a partir de estos resultados, se cuente con bases para continuar desarrollando programas y proyectos que mejoren las condiciones de vida de los guatemaltecos. Particularmente, de aquellos que se encuentran en condiciones de alta vulnerabilidad social y económica.

Dentro de estos esfuerzos, y por lo que a mi área de trabajo compete, destaco el apoyo recibido en materia de movilización de recursos, tanto para mejorar los procesos y las herramientas de trabajo de la administración tributaria y de aduanas, como para establecer y fortalecer las capacidades de las instituciones que impulsan proyectos de infraestructura estratégica bajo el modelo de Alianzas para el Desarrollo de Infraestructura Económica.

En ambos casos, el Programa Umbral se constituyó en un socio para la implementación de los cambios institucionales emprendidos por las entidades beneficiarias. Con lo cual, creamos sinergias que hoy se reflejan en más y mejores resultados.

En cuanto al trabajo realizado con la Superintendencia de Administración Tributaria (SAT), destacan los siguientes resultados: creación de la Gerencia de Asuntos Internos, mejora de procesos de verificación de la calidad de las auditorías selectivas, desarrollo de una herramienta para la selección unificada de casos, definición funcional de herramientas para modernizar el proceso de devoluciones y compensaciones de crédito fiscal, evaluación de las prácticas de la SAT en materia de gestión de riesgos y recomendaciones para su mejora, identificación de modelos de riesgo y desarrollo del modelo de riesgos de IVA. En aduanas, se avanzó en el desarrollo e inicio de la implementación de varias herramientas para fortalecer, facilitar y transparentar los procesos de valoración, clasificación y control de mercancías que incluyen: nueva Base de Datos de Valor, Descripciones Mínimas, Despacho de Graneles Secos, Análisis Técnico de Clasificación de Mercancías y el nuevo procedimiento de "Duda Razonable" cuya implementación se espera inicie de manera piloto próximamente.

Con respecto al fortalecimiento de la capacidad de formar Alianzas Público Privadas, resaltan la capacitación de una masa crítica de funcionarios públicos, asesoría a ANADIE y Ministerio de Finanzas Públicas para que puedan jugar el rol que les corresponde en la gestión de proyectos bajo este modelo. Además, se completó el estudio de factibilidad para la estructuración del proyecto de "Modernización, Eficiencia y Seguridad del Aeropuerto Internacional La Aurora de la Ciudad de Guatemala".

Agradezco a Millennium Challenge Corporation por su valioso apoyo, no sólo por los fondos donados a nuestro país sino por su continuo acompañamiento, asesoría y supervisión, los cuales han sido claves para la exitosa implementación de este programa, y que nos deja muchas lecciones y retos.

No me resta sino agradecer todo el esfuerzo realizado y renovar nuestra voluntad de trabajo conjunto y compromiso con el fortalecimiento de las instituciones, para beneficio de la población guatemalteca; las cuales son una visión compartida con nuestros socios de Millennium y del Gobierno de los Estados Unidos de América.

Alvaro Gonzalez Rico MINISTROCOE FIMANZAS PUBLICAS

El Ministerio de Educación de Guatemala, en el marco del Programa Umbral de la Millenium Challenge Corporation (MCC), agradece el apoyo a la educación de este país en beneficio de los jóvenes del Nivel de Educación Media, para el desarrollo de las capacidades que les permitan una exitosa inserción laboral y participación social.

El trabajo realizado por MCC, está de acuerdo con las acciones estratégicas en favor de la educación, contempladas en la Política General de Gobierno 2020-2024, en cuanto a mejorar la calidad de la educación pública, mediante la preparación y actualización de los docentes, a través del financiamiento del Programa Académico de Profesionalización Docente para el Ciclo Básico (PADEP/CB).

En la primera cohorte se graduaron más de 1,500 docentes en las especialidades de Ciencias Naturales, Comunicación y Lenguaje, Matemática y Gestión Educativa.

Como un aporte para fortalecer la educación básica, en la segunda cohorte, aproximadamente 600 docentes se especializan en el área de Matemáticas, lo que coadyuva a la implementación de metodologías innovadoras en el aula y, por ende, en la mejora de los aprendizajes de los estudiantes.

En el Ciclo Diversificado, MCC logró la creación e implementación de 6 nuevas carreras de Perito (Acuerdo Ministerial Número 3778-2018) especializados en:

- Desarrollo de contenido digital y software
- Reacondicionamiento informático y sistemas web
- Mecánica y gestión automotriz
- Administración y gestión hotelera
- Alimentos y bebidas
- Administración y gestión turística

Los estudiantes de 13 centros educativos del nivel medio, reciben formación académica por medio de un nuevo sistema de familias ocupacionales y cualificaciones, con la finalidad de favorecer su inserción técnico laboral en la sociedad.

Se agradece al Gobierno de los Estados Unidos y al programa Umbral, por el trabajo realizado a favor de la calidad educativa y beneficio de la juventud guatemalteca.

Ministra de Educació Oremala.



Claudia Ruíz de Estrada

Ministra de Educación



John F. Wingle Guatemala Country Director

This Threshold Program Summary tells the story of MCC's partnership with Guatemala—a partnership spanning three government administrations—to identify and mitigate the constraints to economic growth and poverty reduction. This is a story of dozens of Americans and thousands of Guatemalans working together to build a better future. The Threshold Program Summary recounts in detail the successes and challenges that this partnership has had in improving secondary education, boosting the efficiency of tax administration and using Public-Private Partnerships to provide infrastructure, but I want to mention a few of the highlights.

The quality and coverage of secondary education is essential to Guatemala's ability to build a better future. The Program funded a study to determine what was needed to provide a quality education to Guatemalans, what the education system in the country is currently providing and cost estimates of what would be required to give every Guatemalan child with an opportunity to learn. I hope that these Annual Reports of School Success will serve as a guide and motivator for future investments in secondary education. The most important element is competent teachers. This requires helping current teachers are hired. I want to thank the more 2,000 junior high school teachers that have given up every Saturday for two years to improve their ability to teach—I know this has had a positive impact in the classroom and in the

lives of their students. Creating and delivering these Profesorados de Enseñanza Media was only possible through the tremendous efforts of MINEDUC, Universidad del Valle, UPANA, Universidad Internaciones and USAC. I also want to thank Minister Ruiz for her leadership in improving the quality of secondary teaching, and in particular for signing Ministerial Agreement Number 166-2021, which establishes the norms for the selection of teaching personnel at the secondary education level in public educational centers. I know all Guatemalans want their children to have competent teachers and will support the full implementation of this decree.

No one likes to pay taxes, especially if they do not believe that everyone else is paying their fair share, but tax revenue is essential to provide education, health, infrastructure, security and all of the other services provided by the government. My friends at SAT have one of the most difficult but important jobs. In partnership with the US Treasury Office of Technical Assistance, the program supported SAT to create an internal affairs office to restore public confidence in the integrity of SAT employees and the fairness of tax administration. With new tools such as access to bank records, improved audit processes, and a data warehouse that pulls and compares data from multiple sources, SAT now has the tools to make sure everyone is paying the taxes they owe and is equipped with enforcement control programs for multiple tax regimes. In customs, the program has supported SAT to improve compliance and facilitate trade. We are beginning to see the fruits of SAT's work and tax revenue has strongly increased this year. I hope to see Guatemala use some of this increased revenue to improve secondary education.

I want to thank the team at PRONACOM, past and present, for their dedication, vision, and perseverance. They have been excellent stewards of this investment of the American people and have ensured that all of the projects were managed with transparency, efficiency and effectiveness for the benefit of the Guatemalan people. PRONACOM's efforts and results serve as an exemplar for how a government agency should function and deliver results.

John F. Wingle Guatemala Country Director Millenium Challenge Corporation

The Threshold Program has been a strategic and highly innovative program for Guatemala. First, because its design is based on: a) The analysis of the country's limitations for economic growth and development, and b) Identification of cost-effective investment opportunities to overcome these constraints. Secondly, the Program focused its efforts on supporting institutional and political reforms to improve the quality of lower secondary education, strengthen technical and vocational education and training; and increase tax revenues that allows the Government of Guatemala to allocate more public resources into social programs. Further, the Threshold Program sought to improve the capacities of various governmental institutions to reach those results.

In the course of its implementation, the Program has generated significant results that have positively impacted direct and indirect beneficiaries. This is an important legacy for Guatemala's development. It has also provided successful experiences and valuable lessons on how to address the challenges of secondary education and the urgent need to provide better tools to strengthen the most important asset that our country has: the young Guatemalans.

It is the first time that Guatemala implements a program with the Millennium Challenge Corporation – MCC. The experience has been rewarding; leaving behind relevant lessons on an efficient, effective and highest quality project management model. MCC's added value was reflected through a continuous follow up of every activity and technical assistance in both, administrative and technical areas. The Threshold Program implementation has been a joint effort between MCC, PRONACOM, authorities and technical staff of each benefited institution.

It is worth noting that resilience has been a constant virtue of the team in charge of the Program management. It has had to adapt to various situations generated by the COVID-19 pandemic; such as implementing the last 19 months remotely or in hybrid mode. However, most of the activities have been successfully accomplished; MINEDUC, SAT, ANADIE and PRONACOM have now improved their competences. The appropriation of initiatives has been promoted to ensure their sustainability.

Like any program that ends, the main challenge ahead is to ensure the continuity of the endeavors and projects implemented. Also, a further effort is required to carry on the improvements and / or reforms promoted. This implies a commitment with a longterm vision; communicating and sharing knowledge with different



Francisca Cárdenas

Threshold Program Director

stakeholders and officials. The mission ahead is to guarantee that the historical memory of what has been done, the lessons learned and good practices generated, last over time and serve as a contribution for future interventions.

This Threshold Program Summary presents the work done during the six years of the Threshold Program implementation. Furthermore, it represents the effort of Guatemalans working for a better country. I invite you to explore in detail each of the activities, main achievements and results obtained through this effort.



Francisca Cárdenas Threshold Program Director

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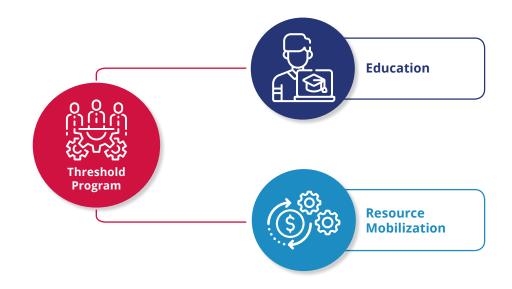
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The United States of America, acting through the Millennium Challenge Corporation (MCC), and the Republic of Guatemala acting through its Government (GOG) agreed to carry on the USD28 million Threshold Program, which aim was to support efforts in order to increase fiscal revenues and reduce opportunities for corruption within tax and customs administration, catalyze greater private funding for infrastructure and to provide Guatemalan youth with the necessary skills to get a job.

Threshold Program was designed to help Guatemala to carry out key policy and institutional reforms to reduce constraints to economic growth; through two projects: Education and Resource Mobilization.

PRONACOM, as the Accountable Entity, has been responsible to coordinate, manage, implement and oversee the program and its projects. MCC, has supervised the execution; providing technical assistance and has contracted an independent program evaluation.

This Threshold Program Summary is presented in compliance with one of PRONACOM'S commitments, as the Accountable Entity. Such commitment was agreed between PRONACOM and MCC in the Closure Plan, as a core element for briefing and communicating with actors and program beneficiaries. The objective is to reflect and inform about the main activities carried out by the program, detailing the goals achieved, change management, as well as improvements and impact achieved through the implementation.



On April 8, 2015, the United States of America, acting through MCC, and GOG, signed the Grant Agreement bringing the Threshold Program to life. The goal of the program was to assist Guatemala in order to become eligible for a Millennium

Challenge Compact, by supporting the implementation of institutional and policy reforms that address binding constraints to economic growth.



In order to provide additional time to complete certain activities and institutionalizing the implemented changes, the program end date was extended several times, the last being an extension to October 31, 2021.



Start of execution of TVET activities to benefit ENCA.

MOU signature between MCC and PRONACOM for monitoring and evaluation post program.

INTRODUCTION

In 2015, the GOG signed the **Threshold Program (THP)** Grant Agreement with the United States of America, acting through the *Millennium Challenge Corporation* (MCC).

The program goal, outlined in the agreement, has been to assist Guatemala in order to be eligible for a **Millennium Challenge Compact**, by supporting in the implementation of fundamental institutional and policy reforms that address binding constraints to economic growth. Likewise, MCC's assistance has striven to strengthen government, economic freedom, and investments in the Guatemalan people by implementing two projects: **Education and Resource Mobilization**.



THP/PRONACOM, MCC and UPANA representatives at Cobán, Alta Verapaz.

The objective of the **Education Project** has been supporting the efforts undertaken by the Guatemalan government in the implementation of institutional reforms, defined in the Proposal for the Transformation of secondary Education and the Critical Path of the Ministry of Education, aimed at providing quality secondary education that prepare Guatemalan youth to be successful in the labor market. Direct beneficiaries of this project have been the Ministry of Education and the National Central School of Agriculture (ENCA). The objectives of the **Resource Mobilization Project** have been: (i) to support government reforms to increase the availability of resources by improving the efficiency of tax and customs administration; (ii) to strengthen the government capacity to finance infrastructure via PPP in order to increase public funding allocated for social investment, mainly education. Direct beneficiaries of the project have been: Superintendence of Tax Administration (SAT) and the National Agency for Partnerships for the Development of Economic Infrastructure (ANADIE).

Throughout its implementation, the Threshold Program has had meaningful achievements and results that have impacted in a positive way both direct and indirect beneficiaries. This leaves a legacy for the development of Guatemala in terms of quality of education for the lower secondary, Technical and Vocational Education and Training (TVET) at upper secondary, strengthening of tax and customs and improvement of capacities for project structuring under the PPP model.

Also, it has given successful experiences and valuable lessons about how to face challenges and goals of secondary school and the urgent need of providing better tools strengthening the most important asset this country has: Guatemalan youth.

The next section provides a general overview of the program and its main achievements and outcomes. Afterwards, in a detailed way, are the main advances and goals achieved by the **Education and Resource Mobilization Projects**, activities implemented by monitoring and evaluation, as well as a rough review of the program management. Finally, short analysis on the post program sustainability.

GOAL, OBJECTIVE AND PROJECTS

Program Goal:

To assist Guatemala to become eligible for a Millennium Challenge Compact.

Program Objective:

Support reforms initiated by the Government to improve the quality and relevance of secondary education in Guatemala and increase fiscal revenues.



Project 1: Education





^(C)

Project 2: Resource Mobilization

PROGRAM GOVERNANCE



MAIN ACHIEVEMENTS AND OUTCOMES

Education Project

Activity 1.1: Improving the Quality of Education in Support of Student Success in Lower Secondary

- Program for Professional Development of Lower Secondary Teachers In-service (PADEP/CB), Principals, Pedagogical and management coaches, designed. Including a Study Plan, Delivery Methodology and Digital Education Resource Plan.
- First cohort of the Teacher Training Program for Lower Secondary with private universities (INTERNACIONES, UPANA, UVG) implemented. Addressed to in-service teachers with specialty in: Communication and Language, Mathematics, Natural Science and Leadership and Educational Management designed for school principals. Second cohort of the Program specialized in Mathematics implemented with Guatemala's public university (EFPEM/ USAC); benefitting 1,913 teachers with a scholarship in the first cohort and 691 teachers in the second cohort; from the departments of Alta Verapaz, Jalapa, Chiquimula, Sololá, Sacatepéquez, Huehuetenango, San Marcos, Quetzaltenango, Totonicapán, Quiché, Guatemala, y Baja Verapaz. Each trained teacher also received a Tablet.







Teacher from UVG Sololá Campus shows her daughter how to use the Tablet delivered by the THP.

- Educational Coaching System (pedagogical and management coaches) developed and implemented. Constant training for coaches who participated in the program.
- More than 100 educational networks for lower secondary school were strengthened and 363 parents councils (PC) were trained as a support mechanisms for the secondary education and Guatemalan youth.
- 44,100 copies of didactic material of the series "I Learn and Teach" designed, printed and delivered in order to support teachers, university professors and professionals from MINEDUC's Department Directorates.

Activity 1.2: Improving TVET in Upper Secondary

In support to the Ministry of Education (MINEDUC):

- New model of TVET degrees developed through the articulation of educational supply and labor demand, based on consultations and dialogues among public, productive and educational sectors. This process allowed to design six new TVET degrees along with the Ministry of Education.
- 6 new TVET degrees in upper secondary designed, instituted and implemented, with the corresponding curricula of the occupational training model in 13 schools selected from the departments of Alta Verapaz, Chiquimula, Jalapa, Sacatepéquez, Sololá and Guatemala. These degrees were designed for the occupational families that generate more employment in the country.
- TVET teachers updating program, designed and implemented by INTECAP.
- 22 textbooks for TVET students, 6 teacher's guides, and training modules for the new TVET degrees designed and printed addressing transversal TVET topics. A total of 13,546 books were donated.



MCC, GOPA and THP/PRONACOM representatives, and Marion G. Bock school with students from the new Digital Content and Software Development TVET degree.

6 New degrees

TVET degrees implemented by MINEDUC in 13 schoools from Alta Verapaz, Chiquimula, Jalapa, Sololá y Guatemala.

- An English program for thirteen schools implementing the new TVET degrees was designed and implemented.
- 2,586 English books for teachers and students who benefit from the program delivered.
- Computer laboratories and specific equipment for TVET delivered at schools implementing the new degrees.

In support to the National Central School of Agriculture (ENCA):

- Agricultural and forestry degrees curricula updated, as well as design the agroindustry degree.
- 24 Teacher's guides and 3 methodological frameworks for the agricultural, forestry and agroindustry degrees designed.
- ENCA and Agricultural and Forestry Schools teachers updated.

Activity 1.3: Strengthening the Institutional and Planning Capacity of the Ministry of Education

- Service standards, also known as lower secondary school learning opportunities (ODA/CB) identified, prioritizing the different educational demands by department and those presenting the need of providing more financial resources for lower secondary in order to provide a quality and equitable education.
- 3 Effectiveness and Efficiency Reports of lower secondary education delivered and its institutionalization at MINEDUC supported.

- Automatic enrollment mechanism pilot for lower secondary designed and implemented.
- New recruitment and selection process for secondary school teachers designed and approved.
- 7 computer programs for the management of educational resources at the Ministry of Education developed.
- Technical assistance for MINEDUC to handle COVID-19 Pandemic: safe return to schools. Studies of best international practices and support in the development of protocols for the education sector.



Lower Secondary students benefited by the THP iniciatives.

Design and approval of a new process for Secondary Teachers recruitment (Ministry Ageement 166-2021).



Project Resource Mobilization

Activity 2.1: Improving Tax and Customs Administration

With the support of the Threshold Program, consulting services were provided for technical assistance to SAT. The actions and results were:

- Establishment of the Internal Affairs Management, in charge of the investigation and reporting of acts by SAT's officers and employees against the law, and of the implementation of measures to prevent and fight corruption. Assistance was provided for its organization and operation, as well as training for its personnel.
- Assistance as well as training was provided to improve the selective audit counter-review process and feedback mechanisms in order to improve audit quality.
- In the customs area, some tools were implemented, including a new value database incorporating a price analysis process, the updating and improvement of the customs risk system, the development of a new procedure



Visit by SAT, OTA and THP/PRONACOM representatives to Puerto Quetzal, December, 2019.

and computer development to manage customs valuation discrepancies (reasonable doubt), implementation of minimum mandatory descriptions for sensitive merchandise segments, computer development to automatize the clearance of dry bulk cargo, implementation of an application for the automatization of technical opinions regarding the classification of goods and certificates of the Fiscal Chemical Laboratory of customs.

• Assistance was provided to improve customs fraud investigation which resulted in a first case duly prepared for submission to start the criminal pursuit.



Customs fraud investigation files being delivered to SAT's customs authority, July, 2021.

Activity 2.2: Strengthening of capacities to form Public Private Partnerships (PPP)

The main results were:

- Technical assistance to form the first PPP for rehabilitation, management, operation, maintenance and complementary works of the Escuintla-Puerto Quetzal Highway.
- Feasibility study for structuring a PPP project to improve the International Airport "La Aurora" in Guatemala City.
- Capacity strengthening of 788 people (public official and other actors) through training activities and coaching.



"APP Expo - sustainable infrastructure development challenge" Forum, October 30, 2019.

788

Public Officers have strengthen their APP knowledge and capacities

Education Project



1. Education Project

The Education Project objective was to support efforts undertaken by the GOG in the implementation of institutional reforms, defined within the **Proposal for the Transformation of Secondary Education (PTNM)**¹ and the **Critical Path of the Ministry of Education**², designed to provide quality secondary education to prepare Guatemalan youth to be successful in the labor market. In order to achieve the sustainability of the Project and to spread it at national level, Guatemala would have to increase the budget for middle school and guarantee the efficient and equitable use of resources.

The **Education Project** consisted in the implementation of three activities:



 Improving the Quality of Education in Support of Student Success in Lower Secondary



2. Improving TVET in Upper Secondary

3. Strengthening the Institutional and Planning Capacity of the Ministry of Education

Following is a description of the activities funded by the grant, as well as the results achieved during the program implementation.

It is important to highlight that, during the implementation of the three activities, the involvement of the Ministry of Education was important, both of the central authorities represented by the Higher Office of Education and the General Directorates, as well as Departmental Directorates of Education and their respective technical teams.

¹ USAID/Classroom educational reform and Ministry of Education, 2014 2 Ministry of Education, 2014

1.1 Improving the Quality of Education in Support of Student Success in Lower Secondary.

The objective of this activity was to provide an intervention package which has the goal of strengthening the teaching capacities and in this way promote the improvement of teaching in lower secondary schools. This activity supported MINEDUC to develop, implement and improve a teacher professionalization program and school networks to improve the professional quality of teachers and principals. The M&E plan supported the management of standardized test applied to lower secondary schools students in the intervention areas of the project and an impact evaluation of this activity is being carried out to enable its subsequent institutionalization at national level.



First school day for PEM's first cohort students in Cobán, Alta Verapaz, 2018.

1.1.1 Main Activities and Results.

To support the implementation of this activity to improve the quality of education for student's success in lower secondary, the Threshold Program financed the consulting firm FHI360; through this firm, technical assistance and advise was provided to MINEDUC as a beneficiary from the education project and PRONACOM as the Accountable Entity.

Following are the main achievements and results of this activity:

Design of an In-Service Program for Professional Development of lower secondary teachers, principals, pedagogical and management coachs.

In 2017, the **"Diagnostic of lower secondary teaching quality and review of teacher education at universities"** was developed, through which an analysis of the existing supply in the country at university level was carried out as an input to design the teacher training program. The most relevant conclusion obtained was to focus the teachers' attention on reading comprehension, mathematics and natural science, as well as basic knowledge for the education of youth; and, consequently, strengthen the training, update and professionalization actions for teachers in such areas of knowledge.

The same year, the academic proposal for in-service training for teachers of lower secondary in four specialties was drafted and presented. This proposal was named: **"Proposal of the in-service academic training for teachers and principals, pedagogical and management coachs of lower secondary school, including the curricula, delivery methodology and digital educational resources plan". The proposal was elaborated by specialists in the disciplinary areas in teacher training from the consulting firm FHI360, with the support and accompaniment from MINEDUC specialists; which was made through workshops and team work. The areas on which**



Sololá teachers interested on applying to teacher training, UVG school.



PEM University's teachers training. central MINEDUC, 2018.

this proposal was worked on were four: Communication and Language; Mathematics; Natural Science and Educational Leadership and Management, which would be offered to teachers and principals from five educational modalities (INEB, Telesecundaria, PEMEM, NUFED and Cooperative Institutes), in the departments of Alta Verapaz, Chiquimula, Jalapa, Sacatepéquez and Sololá.

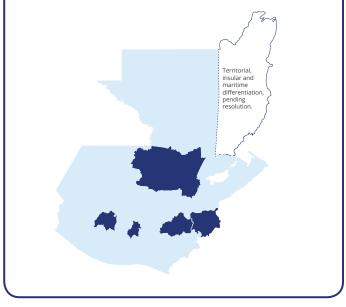
The curricula and training modules of each of the teacher's training were institutionalized through the **Ministerial Agreement No. 2712-2019, dated September 19, 2019.** "Creation of the Program for Professional Development of Lower Secondary Teachers (PADEP/CB)" allowing MINEDUC to replicate it with other cohorts throughout the country.

First cohort of the Training Program for Teachers and Principals of Lower Secondary Schools:

The first cohort of the training program for teachers -PEM- of lower secondary schools was implemented with the support of three private universities contracted by PRONACOM: Universidad del Valle de Guatemala, in Sololá, Universidad InterNaciones, in Chiquimula, Jalapa and Sacatepéquez; and Universidad Panamericana in Alta Verapaz. This program constituted a national effort to contribute to the training of in service teachers and principal of lower secondary through four specialized teacher trainings. The Ministry of Education installed a **High-Level Board** to manage the training program for teachers and principals implemented for lower secondary school.

First cohort of the Teacher Training Program

- Alta Verapaz Campus: San Pedro Carchá, Cobán, La Tinta, Fray Bartolomé de las Casas y Cahabón
- Chiquimula Campus: Chiquimula, Jocotán y Quetzalpeque
- Jalapa Campus: Jalapa, San Pedro Pinula y Mataguescuintla
- Sacatepéquez Campus: Antigua Guatemala
- Sololá Campus: Sololá, Nahualá, Santiago Atitlán y Xejuyup



Guatemala's map.

This board was presided by the Technical Deputy Minister of Education, General Directorates of Quality and Curriculum, FHI360, teacher's union, universities executing the teacher trainings and the Threshold Program/PRONACOM. This board was involved during the implementation of the first cohort of teacher trainings.

An induction **Program for University instructors of the PEM** was implemented, addressed to professors and key personnel from the participating universities. This was carried out in four stages, with a 40-hour duration at central level, addressed to 46 University professors; and 50 hours at departmental level, addressed to 231 professors, for a total of **277 University instructors benefitted**.

A supervision, advising and monitoring plan was developed and executed for the training program for teachers and principals at university classrooms in 16 venues where the four programs took place.

A website with 553 digital educational resources was developed to reinforce the in-service training program for teachers and principals of lower secondary schools. This was used to support the participants. The educational resource bank is posted at the virtual library of MINEDUC, in the teacher resource section (https://campusvirtual.mineduc. gob.gt/search/page#search/1/carpeta:materiales-240).



Teachers on digital resources training.

On April 3 and 4, 2019, FHI360, in coordination with MINEDUC, held the international educational conference: **Teacher training for the improvement of learning at lower secondary schools, for the professional development of in-service teachers**. Its main objective was to promote dialogue, based on evidence, about challenges and opportunities for the lower secondary.



Teachers during diagnose test, 2018.

An evaluation of the knowledge of the teachers and principals enrolled of entry and exit was performed for those participating in the teacher training with the specialties on Mathematics, Natural Sciences, Communication and Language, as well as Leadership and Educational Management. The objective of those evaluations was to contrast the initial level of knowledge of the teachers and principals with the level acquired by the end of the training. The instruments for diagnostic evaluation for each specialty were built jointly with DIGEDUCA, based on the current National Basic Curriculum (CNB) and the professional profiles of the teacher trainings. Likewise, with the advice from DIGEDUCA, the process of design, validation and final definition of instruments was carried out.

Diagnostic assessment of entry knowledge of teachers was carried out on October 27, 2018 at each university venue and applied face-to-face. The integrated report on knowledge from the CNB based on the initial diagnostic test Educational resources web page to support PEM's first cohort teachers and principals "I Learn and Teach" process.



was delivered on February 28, 2019 and submitted to the different participating institutions. **The exit evaluation was carried out on July 17 and 28, 2020**. It was performed in electronic format due to the COVID-19 pandemic. Instruments applied in both evaluations were the same.

At the initial diagnostic test, there were 1,552 teachers and principals participating, representing the 81% of the enrolled in the first semester. At the exit diagnostic test 1,334 teachers and principals participated, representing an 87% of the enrolled in the fourth semester.

According to the results obtained, a **proposal on levelingretention strategies** was developed for the teachers participating. This proposal contained eight strategies. The first part of the proposal focused on actions to the retention of enrollment in teacher training.



PEM's first cohort virtual Graduation certificate, InterNacione's Antigua school.

The second part consisted in the design of 18 booklets to level-up competences of teachers and principals in the areas of Mathematics (6); Natural Science (6) and Language and Communication (6). There were also 4 booklets developed on self-learning on Leadership and Educational Management and 5 booklets on Positive Youth development. There was a total of 27 booklets of the series "I Learn and Teach" distributed to teachers and principals in the program.

At the end of the first cohort of training program for teachers and principals, the experience was systematized, and the **Program Proposal for Teachers and Principals** was modified. This modification was focused on adjustment of curricula, development of course schedules and incorporation of two preparatory courses.



"I Learn and Teach" booklets created and delivered to PEM's first cohort benefited teachers.

Second cohort of the Training program for Teachers of Lower Secondary Schools specialized on Mathematics:

Considering the results from test applied to teachers who studied the teacher training specialized in Mathematics of the first cohort, who obtained a significant improvement by the end of the training program, as well as the impact of the knowledge and management of Mathematics (content and pedagogy); it was agreed to implement a second cohort of the training program for teachers with specialization in Mathematics in departments that had not been benefitted by the program during the first cohort. This training has a duration of 4 semesters and is being co-financed between MCC and MINEDUC.

The second cohort of the training program with specialization of Mathematics, started on May 2021, and is being **taught by the Secondary Teacher Training School (EFPEM) of the Universidad de San Carlos de Guatemala in the departments of Guatemala, Quetzaltenango, Huehuetenango, Quiché, San Marcos and Baja Verapaz**. Also, it has benefitted teachers living in the departments of Quiché and Totonicapán. This program constitutes again, a national stake to contribute to the training of in-service teachers and principals of the lower secondary school and guarantees the continuity of professional training and strengthening of capacities of MINEDUC's teachers.

Some of the objectives to be achieved through the training program are: a) to have better qualified human resources for the area of mathematics, both at the national and local levels; b) to improve the quality of education at the lower secondary school; and, c) the gradual provision of funding for the Continuing Professional Development Program for lower secondary teachers, among others.



Teacher filling out applying form to participate in PEM's second cohort specialized in Mathematics.

For the second cohort of Mathematics PEM, the initial diagnostic test was carried out in a virtual mode. It had the participation of 600 teachers/students, representing an 87% of participants enrolled; as well as 27 professors, 13 coordinators

Second cohort of the Teacher Training Program

- Baja Verapaz Campus: Salamá y Rabinal
- Guatemala
 Campus: Ciudad de Guatemala
- Huehuetenango Campus: Huehuetenango, Jacaltenango, La Democracia y Santa Cruz Barillas
- Quetzaltenango Campus: Quetzaltenango
- San Marcos
 Campus: San Marcos, Tejutla, Ixchiguán, Pajapita y El Quetzal



Guatemala's map.



Tablets delivered to PEM's second cohort specialized in Mathematics students, central MINEDUC, 2021.

and 10 tutors. MINEDUC is committed to apply the test at the end of the teacher training in order to measure the impact of the teacher training program of the second cohort.

At the end of the Program, the second cohort of PEM Mathematics has completed the first semester and has completed the first midterm exam of the second semester. MINEDUC will now be responsible for financing the remaining activities and semesters, as well as for overseeing the quality of the program delivery.

632 tablets delivered to teachers participating on PEM's second cohort specialized in Mathematics to take virtual clases and use the digital resources.

632

The main results of the training program for teachers are:

1,340 in-service teachers and principals of MINEDUC from the different modalities offered in lower secondary schools (telesecundarias, Cooperative Institutes, NUFED, PEMEM and INED) graduated as secondary school teachers in the specialties of Mathematics, Communication and Language, Natural Science and Leadership and Education Management. Implemented by Universidad del Valle de Guatemala, Universidad Internaciones and Universidad Panamericana, in the departments of Alta Verapaz, Jalapa, Chiquimula, Sacatepéquez, and Sololá.

In addition, **702 in-service teachers of MINEDUC**, from the different modalities, enrolled in the second cohort of the training program for lower secondary schools with specialty in Mathematics taught by EFPEM/USAC, in the departments of Guatemala, Huehuetenango, San Marcos, Quetzaltenango and Baja Verapaz.

In order to operate, the following activities were carried out:

- Design of teacher training for which a proposal for the in-service Program of Professional Development of lower seconday teachers and principals (curricula), delivery methodology and digital educational resources plan was developed.
- **1,540** *tablets* delivered to teachers and principals participating in the first cohort of the training program from October 2019 to February 2020, to use virtual platforms; which became the essential learning tool in 2020 (due to Covid-19 effects). Teachers who successfully completed the PEM had the benefit of keeping the *Tablet* for use in teaching.

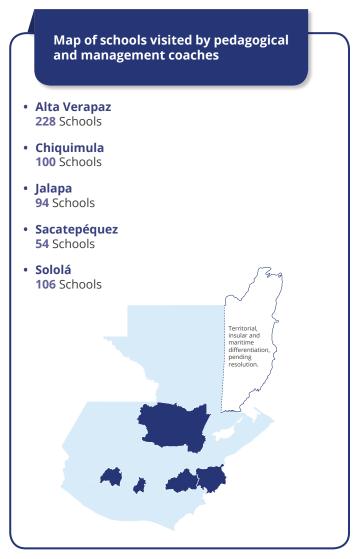
- **632** *tablets* **delivered to teachers participating in the second cohort** so that they receive virtual classes and use the educational platform.
- Teachers/students received pedagogical coaching for the improvement of educational methodologies, endowment of educational tools for classroom support and assistance in the learning communities, and more. Principals/students received advice in management, for a good administration and planning of the schools.
- **277 university professors trained** in the first cohort on active techniques and methodologies, focused on teaching of disciplinary content using didactic sequences.
- 27 "I learn and Teach" booklets elaborated and delivered to teachers and principals of the first cohort of the training program (PEM). Available online, at the website of CNB MINEDUC.

Design of the National System of Pedagogical and Management Coaching for Lower Secondary

The program developed the Proposal of the Educational Coaching System for Lower Secondary, in coordination with the General Directorate of the Educational Quality Monitoring and Verification -DIGEMOCA- of MINEDUC. As a result, a group of pedagogical and management coaches was organized to provide technical assistance and support to teachers and principals at the schools and to the educational community. Sixty pedagogical coaches and 31 management coaches were financed, in addition to five departmental coordinators and one person for the deputy coordination in Alta Verapaz.

The proposal for the Design of an in-service training program for pedagogical and management coaches was elaborated,

which included a training plan with integral focus, with all the basic elements of the coaching system for lower secondary school. The purpose of such a training was to provide the necessary guidance for the development and strengthening of the skills required by any professional who pedagogically accompanies or supports teachers, principals, parents, students and the educational community in general.



Guatemala's map.

In March 2020, during the training process, the national emergency due to COVID-19 emerged. This led to consideration of specific planning and virtual strategies to continue with the technical assistance to teachers and principals/students. The goal was to guide their training so that, during and after lockdown, it was possible to assist students and community members. Coaches were trained in the management of strategies to guarantee a reopening of schools complying with the sanitary protocols required for the pandemic.



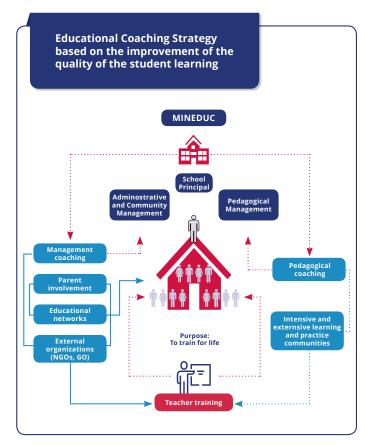
Educational coaching to a teacher in Alta Verapaz.

The development of pedagogical coaching included the following actions: i) visits to classrooms to provide personalized and continuous counseling and technical assistance to teachers; ii) learning and practice communities; iii) extensive learning communities to strengthen reflective learning, the culture of research and innovation in teachers through reflection, dialogue, experience exchange and the joint reconstruction of knowledge; iv) micro workshops or meetings of interlearning, teacher updating workshops; v) internships; vi) peer advise; and vii) accompanying visits in the university classrooms.

To guide the coaches, some protocols and/or handbooks were drafted. **Data collection was done through applications using the Open Data Kit -ODK**-, which allowed the generation of electronic reports in a systematization process.

155 learning and practice communities were organized as a permanent learning strategy to strengthen the reflective learning, the culture of research and innovation in teachers through reflection, dialogue, experience exchange and the joint reconstruction of knowledge. They were linked to the four training programs offered at the five departments, with the participation of all teachers enrolled.

Also, **162 extensive learning communities were created in the territorial level**. These had the participation of teachers who were not enrolled in the training program and 1,270 teachers from the lower secondary schools were benefited from the intervention.



Educational coaching strategy graphic.

417 scholar governments and 110 education networks organized (93 continued during COVID-19 pandemic).





Teachers during educational communities meeting.

Class time monitoring was performed through the pedagogical coaches using the methodology of service standards developed by the World Bank and the measurement of effective class time was performed through the Stallings methodology.

In this matter, **the program developed a digital application** that allows any person (parent, community leader, supervisor or principal) that monitors the class duration, absence of teacher, to report to a database for the corresponding analysis, decision making and resource allocation. This work as a social educational audit mechanism focused to promote trust between the community and teachers/principals of schools and become an incentive for good performance.

As part of the sustainability actions, a Transfer Agreement was signed for the application dedicated to measure the effective class time with the organization *"Empresarios por la Educación"*.

On the other hand, management coaches provided technical assistance to principals of schools to strengthen their leadership and educational management, achieve the organization of 363 PC (Parent Councils) and the effective participation of parents. They facilitated the **organization of 417 school governments and 110 educational networks (93 of which remained during COVID-19 pandemic)** and the participation of the educational community.

The PC were trained to strengthen their role and involvement in substantial activities of the schools. For the organization of educational networks for secondary school, the management coaches focused their efforts in optimizing coordination among primary and lower secondary schools in the territory; promoting the improvement of the institutional climate and established conditions that helped for better human relationships, the exchange among teachers from the educational institutions of lower secondary schools, principals, and sixth grade teachers (allies to the network).



OPF's members trained by the THP in Chiquimula.

Networks also carried out specific activities for automatic enrollment. These activities were intended to help young men and women that graduate sixth grade to enroll in secondary school (seventh grade). Principals, teachers and parents were involved.

The main results after implementing the pedagogical and management advise for lower secondary school through the Threshold Program are:

- **483 lower secondary schools** benefitted from the pedagogical and/or management coaches.
- **95 pedagogical and management coaches** financed for more than two years, who carried out:
 - 9,880 face-to-face visits and 10,656 virtual technical assistance (derived from restrictions ruled by government due to COVID-19). The above was performed with pedagogical coaches.
 - 5,355 face-to-face visits and 7,934 virtual technical assistance in charge of management coaches.
- 2,345 teachers and principals participated in learning and practice communities carried out at the universities and schools with teachers and principals who did not attend the training program.
- **363 PCs with Action plans elaborated**, who were duly trained to elaborate them and then were followed-up to support the implementation.
- **110 educational networks integrated** (93 educational networks during COVID-19) with primary and lower secondary schools. With the participation of principals, lower secondary school teachers, sixth grade teachers, parents and MINEDUC supervisors. These networks also promoted the organization of **417 school governments and carried out the**

automatic enrollment process for the second consecutive year in October, 2020 in order to improve the transition from primary to lower secondary school.

- Audiovisual material to promote enrollment for the 2020-2021 cycle was created and widely distributed.
- Signing of a Transfer Agreement of the application intended to measure the effective class time with the organization *Empresarios por la Educación*, which has committed to continue implementing the system and apply this methodology at schools, at the end of the program.



Students members of Education governments during the work plan presentation.

1.2 Improving Technical and Vocational Education and Training (TVET) in Upper Secondary.

The objective of this activity was to support MINEDUC and other GOs in Guatemala to develop new tools and strategies for TVET in order to respond to the current and projected demand of labor market, just as foreseen in the **Transformation of Secondary School Plan.**



TVET new degrees first cohort students in Carchá, Alta Verapaz.

1.2.1 Main activities, achievement and results.

To support the implementation of the activity to improve TVET, the Threshold Program contracted the consulting firm GOPA *Consultants* through which technical assistance and other services were provided to MINEDUC and the National Central School of Agriculture (ENCA) as beneficiaries of the education project.

The TVET program was designed within the framework of the **National System of Vocational Training (SINAFOL)**.

The main activities, achievements and results from this activity are described as follows.

Ministry of Education (MINEDUC):

The objective was to develop and institutionalize new tools and strategies for vocational training to allow a better alignment between educational supply and labor market demand in the framework of the creation and implementation of the SINAFOL (National System of Vocational Training). To date, MINEDUC has institutionalized the new vocational training model through two ministerial agreements, No. 3396-2018 which creates SINAFOL in the school and out of the school sub-systems, and No. 3778-2018 through which six TVET degrees with innovative curriculum design were created from three occupational families (telecommunications and computing, hospitality and tourism, transport and vehicle maintenance).

Design of Sectoral Studies and Implementation of Round tables with the Private Sector to Identify Needs and Demands of the Current Labor Market in Order to Design New Vocational Degrees.

Three sectoral studies were carried out in three occupational families prioritized by MINEDUC (telecommunications and computing, hospitality and tourism, transport and vehicle maintenance) which were drafted by specialists, based on information available as well as field information gathered by departmental coordinators of TVET. **The Labor Market Observatory of the Ministry of Labor** generated data from occupational families disaggregated by department. Such studies, with inputs from the departmental sectoral round tables, allowed the establishment of gaps in unmet demand for qualifications at levels I, II and III. Therefore, MINEDUC prioritized 18 qualifications of level II and III with unmet demand for which six new technical degrees would be designed. Level I qualifications were meant for out of the school sub-system.

Each sectoral study was organized into the following chapters:

- a) Objectives of the study
- b) Methodology and concepts
- c) Description of an occupational family
- d) Evaluation of demand and supply of vocational training services in upper secondary
- e) Conclusions

TVET new model generated through the articulation of educational supply and labor demand; based on consultations and dialogues among public, productive and educational sectors.



The three sectoral studies and the report on good international practices constitute examples for MINEDUC, especially for departmental directorates, about quantitative and qualitative information required to establish gaps of unmet demand of professional qualifications. Its implementation precedes decisions on the creation or modification of new TVET degrees.

Sectoral, national and departmental round tables were implemented that worked as groups of encounter, discussion and exchange among the private sector, the training sector and other social actors to support the vocational training in a department/territory focused by the program. Among the working objectives are: (a) prioritize professional profiles based on the existing labor demand in a department; (b) analyze the existing labor demand in the department; (c) know,



TVET new degrees formative modules validation through sectoral round tables.

validate and analyze the progress made to make technical degrees of occupational families prioritized functional; (d) knowing the outcomes from the departmental coordination of vocational training, in the strengthening framework of SINAFOL.

Through sectoral round tables spaces for interaction between labor demand and departmental training supply were promoted for which it was possible to feedback the unmet gaps in demand of professional qualifications or working positions. Sectoral diagnosis, qualifications and training modules were reviewed and/or validated.

Design and Implementation of Six New TVET Degrees for Upper Secondary Education

Six new degrees were designed:





TVET Food and Beverage degree students practice.

They consist of a shared basis, called **common core**; and the TVET modules. The latter are divided into cross-disciplinary vocational training modules, specific vocational training modules and workplace training modules.

Curricular innovations of these degrees include: response to a new TVET model according to SINAFOL (jointly drafted with MINEDUC), curricular design of the six new degrees, daily 8-hour school day for three years, TVET training at the workplace in the last two grades, teacher's guides for planning and evaluation of the vocational training, student books consistent with the specific training modules and a handbook to manage and teach at the workplace through an agreement between the school and a workplace.

The new degrees were created through the Ministerial Agreement 3778-2018, and since 2019 thirteen upper secondary schools have been implementing them, located in the departments of: Alta Verapaz, Chiquimula, Jalapa, Guatemala, Sacatepéquez and Sololá. This year 938 students are enrolled.

These technical degrees are 3-year full-time. Graduates will be able to join the labor market, develop productive ventures, or continue their training, either by entering the university or other institutions of technical training.

Map of schools implementing new TVET carreers

1. San Juan Sacatepéquez	Instituto Nacional de Educación Diversificada
2. Chinautla	Instituto Nacional de Educación Diversificada
3. San Miguel Petapa	Instituto Nacional de Educación Diversificada
4. San José Pinula	Instituto Nacional de Educación Diversificada
5. Guatemala	Instituto Nacional de Formación Técnica
6. Guatemala	Escuela Normal para Maestras de Educación para el Hogar "Marion G. Bock"
7. Antigua Guatemala	Instituto Normal para Varones "Antonio Larrazabal"
8. Concepción las Minas	Instituto Nacional de Educación Diversificada
9. Lanquín	Instituto Nacional de Educación Diversificada
10. San Pedro Carchá	Instituto Técnico Diversificado de Bachillerato en Construcción
11. San Luis Jilotepeque	Instituto Nacional de Educación Diversificada
12. San Juan la Laguna	Instituto Nacional de Educación Diversificada
13. Panajachel	Instituto Nacional de Educación Diversificada

Guatemala's map.

In 2019, **the Manual of Strategies for the departmental articulation with productive sectors** was drafted establishing procedures that DIDEDUC must follow for the design of new TVET degrees based on consultations with productive sectors, such as departmental sectoral round tables.

Likewise, the Manual for Training at the workplace was elaborated establishing the figure of **Cooperation Agreement between the school and the workplace**. The objective is that young people studying the new degrees have hands-on training that allow them to improve their skills and get real experience for their career. In the new TVET degrees the training at the workplace starts in the second year of study, in normal times, 2020 would have been the first year of implementation of the cooperation agreements between the schools and the workplace for the 2019-2021 cohort. However, pandemic times have required that MINEDUC postpone the carrying out of the corresponding modules and it is expected that they will resume when face-to-face activities return.



icons colors will serve to differentiate elements associated to one of the three occupational families.



TVET Food and Beverage, and Digital Content and Software Development degrees students showing the text books they've received.

<u>Communication campaign to promote the transition from</u> <u>lower secondary to TVET degrees emphasizing on gender</u> <u>gaps.</u>

As a previous stage to student registration in the new degrees, during the second semester of 2018 and the beginning of 2019, a communication strategy was implemented including activities such as: placement of informative vinyl banners at schools, meetings with parents, informative meetings with students of 9th grade; physical distribution of trifolds and flyers and images in social networks; paging in Spanish and Mayan language through loudspeakers, among other. Messages with inclusion and gender equity approach intended to attract both young men and women who had completed lower secondary school.

The strategy also included the preparation of information for contacts from DIDEDUC and departmental coordinators of TVET on aspects such as: new schedule and the differences between the new degrees and the previous high school with vocational orientations.

Enrollment of new degrees reflected the interest from students and parents who considered this new educational offer as an opportunity to obtain a more solid training for work and continue university studies. Also, the program focused on **boosting the enrollment of women in the new degrees**. Proposal for the certification of labor capacities by the productive sector and of educational capacities by <u>MINEDUC</u>

In 2019, the **Proposal for Certification and accreditation of TVET** was developed presenting two different scenarios for certification:

- Regulation to print on the back of a degree (currently it can only be printed on the front) the table with the approved qualifications and training modules of a graduate, and
- Creation of a tripartite entity (Ministry of Education, Ministry of Economy, Ministry of Labor) of SINAFOL which would include social actors as the productive sector.

On September 8, 2021, Government Agreement No. 178-2021 was issued, temporarily creating the National Commission for Dignified Employment (CONED), integrated by MINTRAB, MINEDUC, MINECO and MIDES. Among the CONED attributions are: "Assist in the coordination and follow-up of the design, creation and operation of a national vocational training system articulating the productive demand with a reorganized training supply, guaranteeing greater coverage, relevance, flexibility, education and vocational training and quality



San Juan Sacatepéquez INED's Informatic Refurbishment and Web Systems technical student using the equipment financed by the THP.

qualifications" (article 4). CONED can be used to promote the creation of such a tripartite entity supporting the certification of capacities of the new expert degrees.



United State's Ambassador in Guatemala and MINEDUC, MINFIN, MINECO and PRONACOM authorities participating in the educational material and equipment delivery.

Support Materials and Equipment for the New TVET Degrees.

In addition to the design and implementation of the six new TVET degrees, through this program, support materials such as Teacher's Guide and textbooks for students were developed and acquired. Likewise, the Program procured goods and equipment for computing laboratory, food and beverage, hospitality and automotive mechanics; supporting the competency-based training of young students.

Six Teacher's Guides were designed, one per each degree, and twenty-two textbooks for students linked to training modules of the six degrees supporting the modular development of TVET.

Each of the six guides responds to the implementation of the new training model based on job specific competencies. It provides methodological foundation of the model, as well as the steps for interpretation and curricular application from the definition of qualification with the corresponding training modules and its connection with textbooks for students. It provides definitions, elements of planning tools, examples of implementation, and especially, a chapter dedicated to the assessment of competency-based training, with its instruments. The guides outline the planning and evaluation processes of TVET, providing instruments that contribute to the standard MINEDUC must issue to support the assessment with the new model.

Among the innovative aspects of textbooks designed are: i) attention to gender and intercultural issues when approaching the contextualized challenges of the country and the incorporation of some authorships outside the metropolitan area; ii) application and use of a learning cycle to organize the units of text integrated by: a contextualized challenge, an activation, new knowledge, especially procedural and cognitive, an integration and evaluation; and iii) special review by MINEDUC's DIGECUR of the pedagogical approach.

In total, more than 13,500 copies of 22 textbooks were delivered to students; 6 teacher's guides and 2 training modules. Additionally, more than 1,260 products and equipment worth more than 2 million Quetzales were provided. The goal was to equip computing laboratories, automotive mechanics workshops, hospitality workshops, and food and beverage workshops.

Design and Implementation of a Professional Development Program for TVET Teachers. Grant with INTECAP and English Program

The TVET Professor Updating Program started at the end of August, 2019. During the first stage of program, which

More than 13,500 education materials printed and more than 1,260 goods and equipments delivered to benefit TVET new degrees students, teachers and principals.



ended in November of the same year, 58 teachers (32 men and 26 women) were trained in 3 - 4 training modules of one of the six technical specialties. Teachers belonged to 13 implementing schools and other upper secondary schools designated by MINEDUC.



TVET new degrees teachers and principals training.

The professional development for in-service teachers included, in addition to modular training with INTECAP, an educational accompaniment for the use and application of class observation guides to both INTECAP instructors as well as MINEDUC teachers. Both the first stage of the program developed at INTECAP as the educational accompaniment and virtual training by GOPA emphasized the new training model and development of processes that set aside from the traditional teaching to give way to training in assessable and certifiable labor skills.

The same teachers received virtual training from sectoral specialists and a curriculum designer from GOPA, during eight sessions in June, 2020, when face-to-face activities had already been suspended. This virtual training included topics such as: the curricular structure of degree programs, planning of didactic units and assessment criteria, use of the methodological guides, instrument of progression of activities and case studies, student evaluation. The process reinforced the accompaniment they had received through guides and classroom visits.

Grant Agreement with INTECAP

The program funded a **Grant Agreement with INTECAP** in order to provide professional development to the TVET teachers implementing the 6 new degrees. Training on the methodology by work skills was included for occupational families on Hospitality and Tourism, Telecommunications and computing and transport and vehicle maintenance.



English coaches working sessions.

Through this grant, it was sought: i) to update 70 teachers from TVET areas to apply and develop the modules for the six degrees in the upper secondary school, including workshops for each specialty; ii) to offer an induction to teaching staff on labor market issues (per occupational family) and training based on work skills, as part of the conceptual and methodological framework of the National System of Labor Training -SINAFOL-; iii) link teacher training with cross-cutting themes related to sustainable development, inclusive education, -ethnic and gender equity, multi and interculturality, and assistance to special educational needs associated or not with a disability; and iv) strengthen teacher skills in the areas of TVET in the use of didactic methodologies and technological resources for self- learning and in the teaching, learning and evaluation process.

The grant with INTECAP aimed to implement 16 training sessions of 21 hours each. They were to be carried out on

weekends and one module of 136 hours (November 2019). However, since all face-to face activities were suspended during 2020 due to COVID-19 pandemic, it was only possible to implement 5 sessions for a total of 256 training hours (220 face-to-face and 36 virtual).

Through such sessions 6 instructors from INTECAP were trained on the methodology for labor skills, based on a qualification system; 58 MINEDUC teachers trained in 3-4 modules (according to specialty they teach).



INTECAP's technical manuals delivered to TVET degree on Hotels and Turism students.

English Program

In order to improve the teaching-learning process of English language in teachers and students, an English Program was implemented that provided support to 13 schools offering the new TVET degrees of MINEDUC. Its purpose was to improve the quality of English teaching according to the Common European Framework of References for Languages; and improve the capacities of future graduates.

The program components were: i) accompaniment at schools with an English specialist; ii) providing textbooks for teachers; iii) providing textbooks for students; and, iv) teacher training.

A baseline test was applied to students from the 13 schools of the first and second cohort to assess their English level,



TVET new degrees students showing their books delivered by the THP.

establishing A2 as the initial level, according to the Common European Framework. Student books were purchased based on the diagnosed level.

The English program supported with:

- **Hiring and accompaniment of 7 coaches** for English learning.
- Purchase and delivery of 2,586 copies of the English book "Insights" for the 13 schools benefited:
 - Books for English teachers were delivered, and they were trained and accompanied.
 - Textbooks for students of the first and second cohort were delivered.
 - English teaching practices were improved.
 - There were trainings on virtual educational platforms for English, McGraw Hill.
- **759 students and 17 teachers assisted by July 31, 2020**. This activity was cancelled early, due to the effects of COVID-19.

The main outcomes from the Labor Training component with MINEDUC is summarized as follows:

938 students enrolled in six TVET degrees designed by the program, with the technical support from the consulting firm GOPA, taught at 13 schools of MINEDUC, located in the departments of Alta Verapaz, Chiquimula, Jalapa, Sacatepéquez, Sololá and Guatemala:

- Hotel Administration and Management, Tourism Administration and Management, Food and Beverages, Development of Digital Content and Software, Computer Reconditioning and Web Systems and Automotive Mechanics and Management degrees were designed with information obtained from 74 working groups carried out at national and departmental level, with the participation of productive sectors and the GOG.
- In 2018, the Ministerial Agreement No. 3386-2018 was issued to create the National System of Labor Training in the school and out of the school or parallel education sub-systems of the Ministry of Education. This was the basis for the ministerial agreement No. 3778-2018 with which six TVET degrees were created.
- A **communication and broadcasting campaign** for the promotion of student registration in the new degrees at 13 schools, starting with the first cohort in 2019.
- Delivery of 22 textbooks for students, 6 teacher guides and 3 training modules (a total of 13,546 copies) at the 13 schools where degrees are taught. They were designed by the consulting firm, approved by MINEDUC and printed by the Threshold Program.
- Delivery of 9 technical manuals of INTECAP. (900 copies) at ten schools, from the catalog of manuals created by INTECAP, those applying for modules of 5 degrees were identified.

- **58 technical teachers updated.** A Professional Development program was designed for each of the 6 degrees. This was performed in 2019 at the INTECAP, but due to the pandemic, it was not completed.
- Delivery of technological equipment and furniture for 8 schools to support technical training of 6 new degrees, as well as equipment for the development of labor training modules.
- **Support of 7 coaches** for English language learning. 759 students and 17 teachers assisted as of July 31, 2020.
- 2,586 books "Insights" donated to 13 schools and training on virtual English educational platform of McGraw-Hill.
- **Issuance of** Government Agreement No. 178-2021 temporarily creating, , the National Commission for Dignified Employment -CONED- integrated by MINTRAB, MINEDUC, MINECO AND MIDES to coordinate, follow-up the design, creation and operation of SINAFOL.



ENCA, GOPA Consultants and THP/PRONACOM team.

National Central Agriculture School (ENCA):

Regarding the work carried out with ENCA, PRONACOM signed a letter of understanding establishing the commitments of each the parties involved. Likewise, through a competitive process, GOPA *Consultants*, in partnership with Virginia TECH and EARTH was contracted. This agreement established outcomes, scope and methodologies to be used, as well as the definition of actors participating in the consulting processes with the productive sector.

The main activities, achievements and outcomes of the joint work with ENCA are:



GOPA-ENCA initial curricula redesign workshop.

Design a Curricula for the Agroindustry Degree, focused on Labor Training and two Curricula Redesigns for Agricultural and Forestry Degrees, both with a focus on TVET

The design of this new degree of agroindustry oriented to labor training, as well as the update of the current study plans for agricultural and forestry degrees, were carried out according to a model including a consultation process with the corresponding productive sectors (agroindustry, agriculture and forestry). As a result, a definition of professional qualifications and development of training modules based on the learning results and labor skills were performed. This model pretended to articulate the market demand with ENCA's training supply and establish bridges between them through labor orientation mechanisms.

The process for curricula design or redesign included the following steps: i) document review; ii) development of consultation process with actors from the agroindustry sector; iii) design of study plans and labor qualifications favoring employability and entrepreneurship; and iv) socialization and validation of the proposal with actors from the corresponding productive sector.

Implementation of Round tables with Private Sector

The process to elaborate study plans included documentary review, development and application of a virtual survey, individual interviews and development of round tables, which allowed the elaboration of qualifications and training modules. Products constitute the results of a participative process of sector actors, academic representatives, employers from the different agriculture, forestry and agroindustry sectors, public and private institutes, among other.

Specific round tables were carried out for data information from each sector, and therefore 7 agricultural sector events were celebrated, 5 for forestry and 6 for agroindustry.



Work meetings with ENCA to review the curricula.



Agricultural and forestry degrees curricula updated and design of the new agroindustry degree.

Tables established within the framework of the updating process of study plans allowed the promotion of dialogue between the subsectors, which contributed to identify the skills demanded and academic training for the proposal to redesign the agricultural and forestry degrees, and the new agroindustry degree.

Accreditation of Agricultural and/or Forestry in Upper Secondary Schools

A proposal including the certification and accreditation protocol, based on an analysis of the current legal framework and the national and international context. This allowed the identification of elements to develop a framework oriented to acknowledge the training and skills acquired. This proposal also develops, in detail, the procedure for the certification of training, certification of skills, and an accreditation proposal for the schools and degrees.

Communication Campaign to Promote the Study Programs of the Degrees with a focus on TVET.

A communication campaign was developed to provide information on the process of developing the new curricula. ENCA participated dynamically and published notes on different activities through its social networks. Through the campus management, the broadcasting of information was coordinated with TVagro and the ENCA Social Communication unit.

Support materials for the new curricula

Three conceptual and methodological frameworks (1 for each course) and 24 didactic and operational frameworks (8 for each course) were developed. A process was carried out to define the model to be developed, with the support of *Virginia Tech and EARTH* universities, which was presented as a proposal to MCC/PRONACOM/ ENCA and subsequently submitted for consideration to some ENCA teachers and several agricultural and forestry secondary schools, which, as of 2021, began to use it.

Technical-Pedagogical Updating Program for Teachers (PAD)

The **Technical-Pedagogical Updating Program for Teachers** (PAD) implemented by the program is a dynamic updating process aimed at teachers of the National System of Agricultural and Forestry Education. **The PAD lasted 200 hours, divided into 120 classroom hours and 80 virtual hours.** This training was implemented during 4 workshops, and each was developed with a formative approach. It was structured in modules to address issues of didactics of job training, cross-cutting themes and learning resources.

<u>Classroom observations</u>. Two classroom observation exercises were developed which pretended to evaluate the application of elements addressed in the refresher workshops.

The PAD was planned to train up to 150 teachers from both ENCA and EEFAS (Agricultural and/or Forestry secondary School Establishments). At the end of the program, **174 people participated**, **92 of whom completed the 4th workshop**. All these people were given a certificate to support their partial



ENCA and EFFA's teachers during workshops.

or total participation in the PAD. It is important to highlight the participation of the 18 schools providing training in the agricultural and forestry areas of the country.



ENCA's and 18 school teachers PAD's graduation, March 2020.

The results obtained from the work carried out with ENCA are:

- Updating of the curriculum of the Agricultural and Forestry degrees and design of the Agroindustry degree. A process was carried out with the participation of the productive sector, unions and the GOG through 18 national and regional roundtables. At the end of the process, the proposal was submitted to ENCA.
- 24 guides for teachers and 3 methodological frameworks for the degrees of agronomist, forestry and agroindustry, prepared with technical support from the consulting firm GOPA and delivered to ENCA and EEMAF.
- Technical updating of 92 teachers belonging to ENCA and EEMAF. The training was designed together with the universities and 4 one-week sessions were carried out.

1.3 Strengthening MINEDUC Institutional and Planning Capacity

The purpose of this activity was to strengthen the institutional capacity of MINEDUC in order to optimize planning and budgeting for the equitable provision of a quality lower secondary education. To achieve this objective, it was necessary to have clear and applicable services standards of human resources processes (recruitment, selection and assignment of teachers); updated and georeferencing data of lower secondary schools; definition, expansion and execution of a budget progressively distributed to diminish equity gaps, based on student population trends and needs.



Virtual forum to promote the education quality improvement and a safe back to school 2021.

1.3.1 Main activities and Results

Lower Secondary Teachers' Recruitment and Selection Process

One of the main efforts of the Program in this activity was to work with MINEDUC to **design and implement a new**, **transparent teacher recruitment and selection process that ensures that the best candidates are contracted: select those candidates who know the subject they are going to teach and who have the competencies to be able to teach it**. For this, the following actions were taken:

- 1. A proposal was prepared to improve the recruitment and selection of lower secondary school teachers, in conjunction with MINEDUC, establishing that each candidate must pass a diagnostic test on knowledge of the subject to be taught and a test of teaching skills. The proposal was developed with the National Examination Jury and was based on international best practices and local capacity to implement them. The identification of best practices was shared with the Ministry's team and, based on this, the ideal elements that the process to be implemented in Guatemala should contain and that will guarantee that the selected persons have the necessary skills for teaching were identified. The elements that make up the proposal were approved by the Minister's Office of MINEDUC in 2017.
- 2. The next step was to prepare the Manual for the Recruitment and Selection process of lower secondary School Teachers, which detailed the steps necessary for the implementation of the proposal. The manual also details the technical and experience requirements that a lower secondary school teacher must have in order to teach classes in each curricular area. This manual, if implemented, represents an important tool for ensuring that in-service teachers meet the profiles.



THP consultant explaining the Secondary school teachers recruitment process improvement proposal.

3. The Catalogue of all teaching positions was prepared. Diagnosis of the catalogue, guidelines for the Human Resources Directorate (DIREH) in the alignment of positions and requirements for the development of a computer tool. In this document, the situation of the catalogue of teaching positions was analyzed, determining that the vast majority of the specialties found on the payroll are not part of the specialties defined for the Basic National Curriculum (CNB) for secondary school and that positions in budget line 011 were occupied with an incorrect specialty assigned.

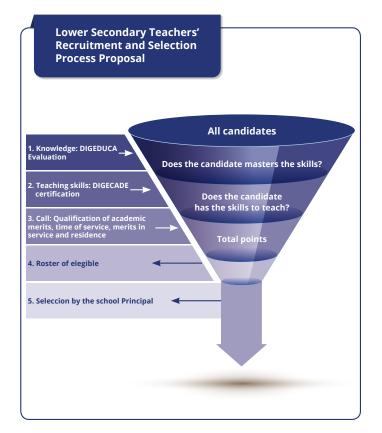
Afterwards, a proposal for a Catalogue of all Teaching Positions was prepared in conjunction with a commission appointed by the ministerial authorities. The proposal included the grouping of specialties into two global categories, which would guarantee that, even when there are changes in the curriculum, the catalogue would continue to be aligned. The quality guarantee would lie in the implementation of the manual of technical requirements and teaching experience. This proposal was presented to the Deputy Administrative Office in 2019 and agreed to be adopted. However, at the end of the program, the adjustment strategy is still under discussion.

4. In order to facilitate the competitive process for the selection of lower secondary school teachers, the **Information System for the Recruitment and Selection of Teachers** was developed in conjunction with the Information Technology Directorate.

The Secondary School Teachers Recruitment Process has to guarantee that the teachers hired have the skills and capacities for what they are going to teach and the capacity to teach.



- 5. In addition, a proposal for a Ministerial Agreement authorizing the proposed recruitment and selection of teachers was drafted in conjunction with the National Examination Jury. On January 20, 2021, MINEDUC issued and published the Ministerial Agreement Number 07-2021, which authorizes the new recruitment and selection process for teachers.
- 6. Finally, support was provided to the General Directorate of Educational Evaluation and Research (DIGEDUCA) with the hiring of item writers and validators and an international specialist to develop the knowledge test for teachers applying for positions in the areas of Mathematics, Communication and Language, Natural Sciences, Teaching Strategies and Social Sciences and Citizenship Training.





MINEDUC's authorities meeting to discuss about the service standards.

Service Standards/Learning Opportunities

There are different modalities of educational delivery in the lower secondary education which differ in methodologies, and specially, in resources assigned (modalities in the rural areas usually have lower resources than the ones in the urban area). This implies that the delivery and educational results are different in quality and amount, in the urban and rural areas. Service standards, also known as Lower Secondary Education Learning Opportunities (ODA/CB), are the minimum that schools must have in order to provide quality and equitable education. They are the key elements that, if not present in schools, it would be impossible to improve the lower secondary. The following activities were carried out in order to establish the service standards for MINEDUC:

 An Effectiveness and Efficiency Report of Lower Secondary School was presented based on research to determine the most effective elements in which MINEDUC should focus to provide quality education. In this research, service standards were identified, also known as the lower secondary school learning opportunities (ODA/CB). Based on those opportunities, several working events and meetings with MINEDUC and key actors were held so that actions to provide learning opportunities to all schools are reflected into the budget.

- 2. An intervention proposal was developed to improve the verification and guarantee of effective time in class at lower secondary level. The effective time in class throughout the year is one of the learning opportunities and a very important challenge for MINEDUC, since this time is very short (102 days a year, compared to the 180 that should be per year). This proposal was developed from a process analysis implemented by MINEDUC to measure the class time, the review of international best practices and national and international technical literature. The objective was to have a proposal that would allow measuring all the dimensions of class time.
- 3. The Multiannual plan for expansion of investment in lower secondary education was developed. It was drafted jointly with the MINEDUC, a logic framework for the National Strategy for lower secondary improvement, based the ODA/CB. Additionally, an application to facilitate planning was elaborated as well as multiannual budgets and a proposal for sources of resources that could be used to finance the provision of learning opportunities.
- 4. Three annual reports were developed, Lower Secondary School Success Report for 2018, 2019 and 2020. The first has a diagnosis of the implementation of learning opportunities for lower secondary education, the analysis of the state, access trends and main quality indicators



THP/PRONACOM, DIGEMOCA/MINEDUC and FHI360 representatives in institutional strengthen activities.

and a comparison with other countries. For the second, an evaluation of the provision of service standards was prepared. As for the third report, an automated report was created, this is a web version of the report that automatically estimates the indicators; which are displayed through dashboards published at: http:// estadistica.mineduc.gob.gt/iaee/

5. Training and awareness raising activities were carried out to improve planning and development of multi-year budgets based on learning opportunities for lower secondary.

Indicadores de Éxito Escolar en el Ciclo Básico				
Inferme anual do exito escolar	Informe anual de exito escolar en el Ciclo Básico			
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	Resumen de Indicadores			

Lower secondary school success annual reports available page.

Computer Applications for Educational Resource Management

As part of the program, multiple information systems were developed in order to support MINEDUC to manage and use the information more efficiently, which translates into the simplified and effective execution of processes. Systems developed for MINEDUC's institutional platform are configured and installed, mostly on MINEDUC's servers. A brief summary of the current state of each of the systems:

 Scorecard for Infrastructure Data. It was developed in the Business Objects system of MINEDUC in coordination with the Planning Directorate (DIPLAN). It is installed on the Ministry's server, and can be accessed at: http:// estadistica.mineduc.gob.gt/InfraestructuraMineduc/



Teachers with students transition from elementary to lower secondary school.

- 2. **Application to estimate the educational demand**. This application does not require installation on MINEDUC's servers because it can be used by the staff at the time it is required without restrictions. This was achieved by the technology used for collaborative work: spreadsheet in the cloud through Google Sheets. MINEDUC can decide who will be authorized to access this application. It was delivered and is now available for MINEDUC free of charge and without restrictions.
- 3. **Teacher Demand System**. This system is installed on MINEDUC's servers. In November 2020, DIPLAN requested to IT Management (DINFO) to start the production. It is expected to be used in short term.
- Educational Resources Bank. The management tool for educational resources is installed at MINEDUC's server. It can be accessed in the following website: https:// aprendoencasa.mineduc.gob.gt/index.php/docentes.
- 5. Computer module to manage the teacher-selection process in lower secondary school. This system is installed at MINEDUC's server. It is currently in the production environment since the new teacher recruitment and selection process is already approved.
- 6. **Payroll Audit System**. This system does not require to be installed at MINEDUC's servers since it is a desktop

program using Microsoft Excel. It can be used by any employee of MINEDUC, whenever required.

7. National database and follow-up systems of teacher's professional development. It is installed at MINEDUC's server with full access for modification. However, in order for them to be put into production environment, specific activities must be carried out to be completed by different actors within MINEDUC; among them that DIGECADE or DIREH request that they be put into production.



Educational resources virtual bank.

Design of an Automatic Enrollment Mechanism

An automatic enrollment mechanism was designed and implemented before the end of school year. **The objective** was facilitating the transition of sixth graders to first grade (7th grade) of lower secondary school. In 2018, a pilot program of the automatic enrollment process was carried out; this year 2,213 students of sixth grade were enrolled automatically. In 2019, 4,676 sixth grade students were allocated automatically.

For the automatic enrollment process of 2020, due to the COVID-19 Pandemic, 2,393 sixth graders were allocated automatic enrollment slots. This process has aimed to promote the continuity of students in lower secondary education.



Support MINEDUC to handle the COVID-19 Pandemic: Safe Return to School.

From September to December 2020, MINEDUC received support for a safe return to school in the frame of COVID-19 pandemic. This support consisted in providing technical assistance to MINEDUC to incorporate, international best practices within their back-to-school protocols, for this purpose, **an international epidemiologist**, **a national epidemiologist and a communicator** were financed, who supported the mediation of protocols in order to be understood by the target population (principals, teachers and parents).



Protocols created with the THP and other entities and international cooperation agencies support.

The main contributions for MINEDUC to handle the COVID-19 pandemic, is summarized as follows:

- Develop a document with international best practices for the return to school regarding COVID-19 pandemic. This document made it possible to translate the best practices and recommendations of the international epidemiologist into MINEDUC's protocols for a safe return to school.
- Supporting MINEDUC in the design of 13 protocols for reopening schools, among which are protocols for the principal or person in charge of the learning space, students, supervisors and school meals management, among other.
- Proposal of an epidemiological model based on the *BioComSc* 2020. This is an empirical model validated with the evolution of the number of cases of COVID confirmed in 23 countries who were able of controlling the first wave of the pandemic, including all the provinces of China. It was designed to offer a characterization, type of traffic light, to determine the epidemiological risk and allow the evaluation of control interventions carried out at every department, region or municipality; as well as predict the short-term trend considering that the effects of any intervention are observed approximately 5-7 days after the intervention is deployed.
- Develop of a scorecard for reopening schools in 2021. This includes information on the infrastructure of the schools, the proposed epidemiological model and the traffic light implemented by the Ministry of Public Health and Social Assistance (MSPAS).
- Review of MINEDUC's institutional protocol and accompaniment during the presentation and validation with different actors (union, media, Congress of the Republic, among other).

Support Implementation

Protocols are being used as the fundamental axis of the back-to-class strategy. Protocols can be found at: https://aprendoencasayenclase.mineduc.gob.gt/index.php/protocolos-para-el-regreso-a-clases/

MINEDUC has implemented a monitoring model in compliance with the established protocols. Besides, there was a training for its use and memorandums have been issued to promote compliance.



MINEDUC's authorities and technical teams meeting for protocols review.

13 Protocols Support MINEDUC with the design of 13 protocols for safe return to school

Resource Mobilization Project

2. Resource Mobilization Project

The objective of the Resource Mobilization Project has been assisting the GOG in its efforts to increase the availability of resources for education and other social services that help boost economic growth and reduce the causes of poverty by improving the efficiency of tax and customs administration and strengthening the government's capacity to finance infrastructure projects through PPPs to preserve limited public funding for social spending, such as education.

According to the above, the **Resource Mobilization Project** was structured in two activities:

Puerto Quetzal, Escuintia actial shot.

1. Improvement of the efficiency of tax and customs administration, through technical assistance for SAT.

2. Strengthening the capacity to finance infrastructure via PPPs by supporting ANADIE and other relevant institutions.

2.1. Tax and Customs Administration Improvement

The objective has been to assist SAT in its efforts to improve the efficiency of tax and customs processes in order to increase tax revenues and, therefore, support the capacity of the GOG to increase public funds, particularly in education.

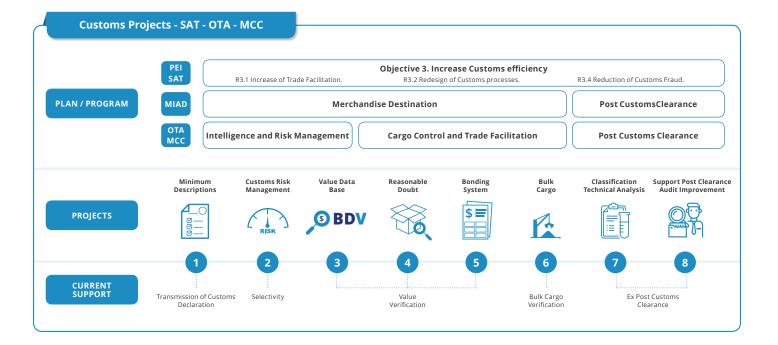
To address those issues, the Threshold Program included an amount of of US\$1.8 million that was administrated by MCC with the US Treasury Office of Technical Assistance (OTA) to assist through specialized coaches. These funds were reserved by MCC administration for OTA in 2016. Additional program fundings were later allocated to finance the hiring of local and international consultants to advise on oversight issues, develop computer applications, strengthen risk management analytical skills through an institutional *Data Warehouse*, data governance, and fraud investigation assistance.

2.1.1. Main Activities and Results

The following are the main activities, challenges and results to which the Threshold Program contributed regarding the activity of tax and customs improvement. All components were focused on the development of tools in order to improve the processes of valuation, classification and merchandise control. Additionally, support and technical assistance was provided for the improvement of some internal tax processes to improve the quality of selective audits, strengthen internal control functions, implement data governance and improve analytical capabilities through an institutional *Data Warehouse* and data governance, to set the basis for a risk management frameworkt establishment, and to modernize the process of refunds and compensation of VAT (value-added tax).

In customs, activities were organized by project and included, in addition to the technical assistance provided by OTA and MCC, the development of computer software tools through consultants financed by the Threshold Program. In this area, the projects developed were:

- a) Minimum Descriptions
- b) Value Database
- c) Reasonable Doubt
- d) Dry Bulk Cargo Dispatch
- e) Updating the Customs Risk Analysis System
- f) Merchandise Classification Technical Analysis
- g) Post-clearance Audit (PCA)



Regarding internal taxes, the program supported the Strengthening of the Risk Management Compliance Plan, which seeks to potentiate information analysis skills, implement a risk management framework and modernize the process of tax credit refunds and compensation.

Each of the projects carried out which included the development of applications, applied generally the following stages:

- 1. Upraising of the current process and improvement proposal
- 2. Development of business cases
- 3. Software development
- 4. Functional tests (regulations) and quality control tests (IT)
- 5. Test-derived adjustments
- 6. Creation or updating of procedures
- 7. Creation of technical documentation
- 8. Training and socialization
- 9. Publication in production

Some ideas and proposals related to several of the projects for customs were originated by the visit of a group of



OTA and SAT 2019 work plan signature.



Pedro de Alvarado's Custom's office visit. Guatemala's border with El Salvador. Courtesy picture by SAT.

officials and technicians from SAT's Customs to the National Superintendence from Perú's Tax Administration (SUNAT). This was facilitated by OTA/MCC in 2016, followed by several exchange activities between both countries through various cooperation mechanisms.

Following is the description of projects and their status by the end of program:

a) Minimum Descriptions

In order to have better elements to determine the correct valuation and classification of goods in customs, the program supported the development of a computer application that catalogs the minimum characteristics that must be completed in a declaration for certain types of goods that are considered sensitive or risky, and that validates that such characteristics or minimum descriptions have been incorporated during the process of transmission of customs and value declarations.

The computer development for the implementation of this project was completed by Threshold Program consultants, after tests and necessary preparation activities by SAT, it was **put in production in June 2021**. For this project, the team developed catalogs for three merchandise types: footwear, tires, and apparel, with potential for the system

to be expanded in the future to include other merchandise segments. The implementation started with these three segments at a anational level.

The implementation of such a solution will help SAT have better elements for the determination of the correct classification and valuation of goods, reduce spaces for discretion and corruption, and as a result, an increase in revenues is expected.

b) Value Database

To improve analysis tools on the price reasonability at which import goods are declared, the program provided assistance for the implementation of a new Value Database tool that allows to have updated information on the prices of goods and register value references that generate a doubt about the veracity of the declared value.

The new value database was officially implemented in June 2018 and has two main components: 1) new software for consultation of values declared with indicators that allow the identification of merchandise with a potential risk of undervaluation. This tool is used to perform the comparative analysis of declared value during the reasonable doubt process; 2) personnel specialized in sensitive merchandise segments

(called price analysts) who carry out an analysis on the behavior

of prices, to offer better indicators in the value database.

Fortalecimiento de la BDV BD Nuevo software de consulta de Personal especializado en valores declarados con Estos indicadores son una segmentos de mercancías, que herramienta util al revisor para indicadores que permiten realiza análisis constante del identificar las fluctuaciones de realizar un análisis comparativo comportamiento del precio del valor declarado de manera precios de manera más ágil v para ofrecer mejores apegados al comportamiento ágil, precisa y justa indicadores del comercio internacional Herramienta para el revisor Software Analistas de precios SAT 2018 allo del a la definista v controboro **OBDV**

SAT's BDV presentation. July 10, 2018. Courtesy picture by SAT.



The new reasonable doubt procedure will facilitate and streamline customs clearance and make it more transparent.

The VDB includes logs to keep track on the use of the application, as well as statistics and indicators on the activities carried out by the inspectors in the system and on the goods that that have risks. Since the implementation of the new Value Database, a positive behavior was observed in customs collection, which during 2018 showed a higher growth rate compared to the collection of internal taxes, reversing the trend of previous years.

c) Reasonable Doubt

In order to facilitate, streamline and make customs value verification processes more transparent, the Threshold Program collaborated in the **development of a new reasonable doubt procedure that includes a computer solution for its management, which introduces changes to simplify the process and clearly state the information required to initiate the procedure, the value hearing, the possibility of self-determination by reasonable doubt and the management of guarantees to request the release of goods**. Likewise, the new model includes the integration of a group of specialists who will evaluate the information received during the reasonable doubt procedure and who will be in charge of resolving the cases.

The new model includes changes to the clearance of goods in cases of discrepancies due to valuation, aspects, to make it more transparent and to expedite the clearance of goods, so that customs users can learn at an early stage the value references that support the reasonable doubt and make decisions on the continuity of the process. The software development includes two applications:

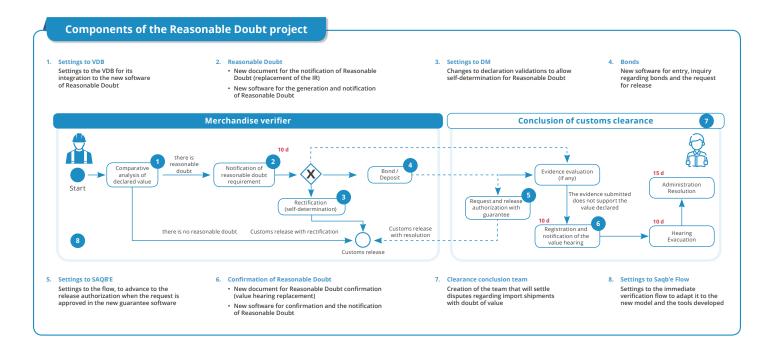
- I. <u>Valuation tool.</u> Allows control over the reasonable doubt process, where the reviewers can register the value references that originated their doubt, obtained from the Value Database previously mentioned. In addition, determine the appropriate value and the additional amount that would be payable.
- II. <u>Bond Control</u>. Allows users an online presentation of the bond information to request the clearance of the goods during the reasonable doubt process. The control of the entire collateral cycle will be managed through this application, from the beginning of the process, through the clearance authorization, until its execution or its restitution facilitated by the integration with the current collateral (bond) registration system managed by the collection intendancy.

In this project, the corresponding functional definitions were agreed upon, including the business cases and other documents required by SAT to support the new procedure. The development of the software was completed in a first version and tested. A pilot is being started in Express Aéreo at the international airport in Guatemala City.

d) Dry Bulk Cargo Clearance

To facilitate the clearance of dry bulk cargo shipments and to improve the collection an control mechanisms for such clearances, the Threshold Program provided technical assistance to improve the procedure and to develop an IT solution to automatize the weighing slip, request for installments and the current account for withdrawals. It also recommended a change of location for physical verifications of bulk goods and the strengthening of the current regulatory framework.

The application developed to automatize the Dry Bulk Cargo Clearance was **published in April 2021, to be used in a pilot project with a customs agent in Puerto Quetzal**. Due to difficulties, the implementation was suspended for a period of time. Adjustments and improvements required were made, especially so that the weighing information can be transmitted



from the scales to the SAT, with replication of the same to the Temporary Customs Warehouse. These adjustments were successfully applied before the end of the program, allowing the pilot to continue at Puerto Quetzal. The system was developed in such a way that other customs offices can be incorporated later, when they are ready to apply the new process.



Puerto Quetzal, Escuintla aerial shot.

e) Customs Risk Analysis System Update

SAT requested support for updating the risk analysis system that was developed and implemented with the support of the Korean Cooperation, during 2011. In 2019, the Threshold Program provided technical assistance and facilitated an IT consultant who provided support to update and adjust the system based on the findings identified by consultants from CUPIA (*Customs UNI-PASS International Agency*), the Korean entity that developed the system. Improvements recommended by OTA/MCC consultants and Customs Risk Analysis Unit staff were also carried out.

With the consultant's support, the data mining, legal compliance and random models were reviewed and adjustments were made to improve their performance. Several outdated rules were eliminated, which increased the efficiency of the risk model and reduced the review rates, improving the effectiveness of the selection of transactions subject to review. In addition, the consultant provided support to the IT Management so that it can assume the maintenance and other necessary adjustments to the risk system.

f) Merchandise Classification Technical Analysis

This project was outlined to automatize the issuance of test certificates, technical opinions and opinions on the classification of goods by the Fiscal Chemical Laboratory (LQF) and the Technical Unit for Customs Operations and Security (UTOSA), whose processes were carried out manually, using paper documents, Excel spreadsheets and other obsolete mechanisms. Not having a computer system generated inconveniences because it was not possible to take advantage of previous work on similar goods. In addition, it was not possible to consult the information for the use of merchandise reviewers, staff of the Risk Analysis Unit, Fiscalization or other control areas; there were no accurate statistics in real time of the requests received or the workload; it was not possible to relate the information with other systems such as the Value Database and the Risk System; and delays were common due to human error when writing or drafting information that already exists in other SAT systems, such as the merchandise declaration and the Unified Tax Registry (RTU).



Valle Nuevo Customs Office. Jalpatagua's border with El Salvador. Picture courtesy by SAT.

With the support of the Program, an evaluation of the LQF and UTOSA processes was carried out, the main weaknesses were identified and an improvement proposal for the automatization of their processes was created. As a result, specific recommendations were made for the development of a computer system, the standardization of applications and formats for opinions and judgements, as well as test certificates, and improvements to the regulatory framework to support the proposals.

The software developed was released in production in December 2020 and, after the staff adaptation period of the units involved, its use was made official in February 2021.

g) Customs Post-clearance Audit (PCA)

Through OTA experts some recommendations were made to improve the effectiveness of customs PCA through changes to achieve effective coordination and complementarity of the work areas involved, mainly Customs and Audit. Recommended actions included a verification program for customs agents and the implementation of a PCA Committee.

During 2020 and 2021, the program provided technical assistance in this area through an international expert in fraud investigation, who worked with a multidisciplinary team integrated by Customs, Auditing and Legal Affairs staff, and the Tax Investigation Department; It also had the



Custom's and PRONACOM's authorities, MCC, OTA, technical and customs informatic teams meeting screenshot.



SAT, MCC, OTA and THP/PRONACOM visit to Air Express Customs inspection area.

support of the Public Prosecutor's Office and the National Civil Police to review the PCA process, with emphasis on the investigation process and the preparation of cases in the customs area so that a well-substantiated case could be compiled for transfer to inspection and/or presentation of cases to the relevant jurisdictional bodies. This included taking advantage of available cooperation mechanisms with U.S. Government agencies.

The group received guidance and accompaniment to work on the investigation and substantiation of a first case related to the main fraud suspect within the analyzed segment and in the preparation of a Technical Guide on Fraud Investigations. It had the cooperation of Homeland Security Investigations (HSI) to obtain documents and statements from suppliers in the United States, respect to the case in question, whose file is in the preparation stage of the process to be presented to the Public Prosecutor's Office.

The presentation of this first case will set a precedent in terms of cooperation between Guatemala and the United States in the fight against customs fraud, sending a strong message on SAT's ability to better detect and punish these maneuvers and help discourage this type of behavior, to those who commit such crime, and also provide guidance to SAT on how these processes should be handled and how cases should be documented.



Delivery of fraud investigation documents to SAT Custom's authority. July 2021.

h) Strengthening Tax Compliance Risk Management

Since SAT's first assessment in 2017, according to the TADAT methodology (Tax Administration Diagnostic Assessment Tool) SAT has made efforts to implement a risk-based management framework that has led to the update of its Institutional Strategic Plan; the creation of the Institutional Committee for Tax Compliance Risk Management; and, the implementation of a first exercise of identification, evaluation and prioritization of non-compliance risks on the general VAT (Value Added Tax) regime.

The program provided technical assistance in four areas:

- i) Data governance
- ii) Risk model

iii) Unified detection and selection of cases based on risks

iv) Modernization of the tax credit refund and compensation process

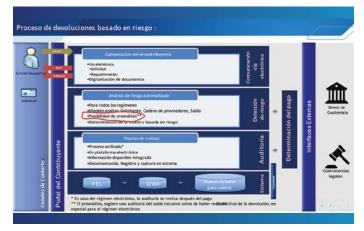
This project is led by the Collection Department (IRE) of SAT, within the analytical part (Data Governance and Institutional *Data Warehouse*), and by the Auditing Department and the Tax Investigation Department regarding risk management issues (including the unified detection and selection of cases; based on risk) and the modernization of the tax credit refund and compensation process, in response to a request for support made by SAT to the program at the end of 2019; due to the needs detected in the areas indicated, whose analysis and approach began with the cooperation of USAID in 2018.

i. Data Governance

In order to enhance tax compliance analysis capabilities, the Threshold Program provided technical assistance through a consultant with experience in the implementation of *Data Warehouse* systems for tax administrations.

This assistance included two components: a) Data Governance to implement the processes and instruments that will organize the information flows within the institution; to help manage knowledge and control over the use of information; b) Implementation of an Institutional Data Warehouse (DWI) to integrate dispersed information, enhance information analysis tools and generate solutions to support risk management, control and oversight initiatives.

Training on the use of Big Data Tools, including Big Data Developer and Machine Learning was provided to SAT personnel who performs data analysis tasks. A macro-process diagram and data governance procedures were developed, as well as proposals of formats or artifacts for the documentation of DWIrelated initiatives; configuration of the cloud site, information homologation, definition of information upload and update processes; configuration of tools for the administration of users and permissions, analysis on tax behavior indicators, data quality assessment, analysis on the use of information and feedback mechanisms on the interventions carried out by SAT. The consultant also assisted the teams of SAT's substantive areas that are developing information cross-checks and the IT Management staff for the automatization and optimization of processes within the DWI.



Risk model, unified detection and selection of cases and modernization of the refunds and compensation process presentation.

ii. <u>Risk model</u>, <u>unified detection and selection of cases</u> <u>and modernization of the refunds and compensation</u> process.

To help SAT implement a risk management framework and to modernize and systematize the refunds and compensation process, the program provided an international expert who developed **strategy proposals, a work plan, and a guide for risk management, as well as functional designs of tools** to be used within the process of auditing tax credit refunds and compensation, in order to increase the efficiency of the process.

Through this activity, a **Risk Model Strategy Proposal was** prepared, which identifies SAT's risk management priorities, a proposal of the risk models to be planned for implementation, and an evaluation of the risk management process at SAT, broken down by the different phases of the risk management process and each stage of the tax cycle, which includes recommendations to guide SAT in the implementation of a risk management framework in accordance with good practices.

In relation to **the refund and compensation process**, **a review and proposal for improvements was carried out**. In addition, proposals were made for the functional design of tools to support tax credit refund and compensation audits, including: risk model for refunds and compensations, worksheet and traceability modules; and the VAT risk model was automated, through which indicators are established on the behavior of taxpayers in the referred tax.



MCC, THP/PRONACOM team and SAT Custom's authority meeting to get to know the improvements by the technical assistance provided.



Institutional Data Warehouse and data analysis tools will improve SAT's control capacity and follow up with tax compliance.

Other Technical Assistance Actions

Through OTA experts, technical assistance was provided to implement a process of continuous improvement of selective auditing and improvement of the administrative process to collect tax debts, including staff training. A pilot experience was carried out in large and medium size special taxpayers.

Another action in which technical assistance was provided was strengthening the processes of detection and application of sanctions and punitive measures for the participation of SAT officials and employees in illegal and unethical situations and, thus, supporting the institutionalization of a better control system to prevent and punish those who incur in such situations, as well as to train staff in this area.

In customs, assistance and training was provided in the implementation of control measures to stabilize port operations (due to corruption scandals), through a Comprehensive Customs Cargo Control Plan (PICCA).



SAT, MCC, OTA, and PRONACOM's representatives THP implementation end meeting.

Continuous improvement of selective auditing and the administrative process for collecting tax debts. Focus groups were held with representatives of the operational and regulatory areas of auditing, as well as other areas that provide support, such as legal affairs and customs. Through these focus groups, the main obstacles to improving the quality of audits were identified.

Therefore, an **analysis of the audit counter review process was conducted and a review of the counter review template and policy was suggested**, looking forward to incorporating all aspects of the audit process and providing a perspective for continuous improvement of audit quality. With OTA's assistance, the next steps for improvement were developed:

- The counter-check template was redesigned to consider the entire audit process and to incorporate the report that is sent to the audit group. The resulting template was more professional, more effectively communicated and eliminated the time-consuming report that was part of the original process.
- The Counter-Reviews Unit developed a management report on the quality of audits in each operating management. The report also incorporated the top five audit quality issues that were identified, along with instructions on how to address those issues. The management report developed enabled the Counter Review Unit to identify audit quality trends in all operating managements and recommend corrective actions, which introduced a perspective of continuous improvement in audit quality.

With the consultant's support, the audit checklists were revised to introduce quality-oriented elements based on standards or good auditing practices. In addition, the Counter Reviews report sought to establish a balance between the quality and quantity of audits. **SAT adopted a policy of promoting multi-year audits, which was reflected in the audit plans from 2018**.



SAT's Internal Affairs Head Office was created with the THP support under a model that guarantees its autonomy and independency to promote transparency. In addition, OTA assisted in drafting a policy to encourage taxpayers to submit required information within an audit process at the lowest level, which helped reduce the backlog of "resistance cases" in Legal Affairs, allowing auditors to complete audits that could not have been completed due to the lack of financial information.

The number of steps in the preparation of audit reports was also reduced, allowing more audits to be conducted. In addition, assistance was provided to streamline the dispute resolution process, which significantly reduced the time allocated to cases. In addition, supervisors and middle managers were trained in the use of human resources management techniques and tools.

Strengthening controls to detect and sanction acts of corruption. The OTA provided technical assistance to the SAT to establish the basis for the creation and operation of the Internal Affairs Department. This department is responsible for conducting administrative investigations to detect, sanction and file complaints about the involvement of SAT staff in acts of corruption, as well as to make recommendations for the improvement of SAT's control systems.



SAT authorities, OTA, MCC and PRONACOM's representatives meeting to discuss about Project's sustainability and iniciatives supported by the THP.

To learn about the Colombian experience, in August 2016 there was a visit made to the Agency of the Inspector General of Taxes, Revenues and Parafiscal Contributions I.T.R.C. in Bogota, Colombia; with the participation of officials from SAT and the Ministry of Public Finance.

Under the guidance of the OTA consultant, the first **Operations Manual for Internal Affairs** was established, which helped lay the groundwork for the functioning of the Internal Affairs Department. Also, support was provided in the creation of the risk assessment department in Internal Affairs, in charge of reviewing operational and administrative transactional processes to identify internal control weaknesses and recommend improvements in those control processes. The OTA consultant also provided advice to a task force to develop the Risk Assessment Operations Manual and provided training to staff to enhance their risk assessment knowledge and skills.

In addition, an Annual Risk Assessment Plan was developed and support was provided for the first group of assessments carried out in the customs area.

Integrated Customs Cargo Control Plan (ICCCP). The program also provided assistance in the implementation of control measures in Puerto Quetzal and Santo Tomás de Castilla. This included technical advice to operational staff at the customs offices of Puerto Quetzal and Santo Tomás de Castilla for several months and training inspectors in valuation, classification and origin, as well as assistance in regularizing container inventories.

2.2. Strengthening the Capacity to form PPP

The objective of this activity has been to promote the capacities needed to develop and manage PPPs to improve the government's ability to access private capital markets and thereby address infrastructure financing needs while preserving public revenues for other social services.

The Threshold Program funds were oriented to support the efforts of the GOG:

- A. PPP capacity strengthening through:
 - Providing training on the fundamentals of PPPs through certified trainers; as well as promoting seminars, forums, conferences, workshops, etc., to achieve a proper understanding and capacity strengthening on the subject.
 - Providing *coaching* (through experts) to the staff of ANADIE, Ministry of Public Finance and other relevant institutions with the intention that the institutions can assume their role in the process of identification, prioritization, and mapping of projects, as well as the structuring and management.
- B. Fund studies that will serve as the basis for project structuring, including value-for-money analysis and transaction coaching services with a view to bringing one or two projects to the market.

2.2.1. Main Activities and Results

Through the Threshold Program, a PPP support strategy was designed and implemented, consisting of three pillars

- i) PPP training
- ii) PPP coaching for ANADIE and MINFIN
- iii) Financing of feasibility studies for PPP projects

The following are the achievements and results to which the program contributed in terms of capacity strengthening for public/private partnerships in Guatemala

PPP Training

With the support of the Threshold Program, ANADIE planned and implemented a **course on the foundational basis of PPP**,



ANADIE's display stand at APP Expo, 2019.

which was delivered by international experts between July 2017 and February 2018.

41 public officials from CONADIE member organizations, including ANADIE, MINFIN, MCIV, SEGEPLAN and PRONACOM, as well as from other institutions such as FEGUA, Municipality of Guatemala, INE, MEM, CACIF and COVIAL, participated in the level 1 course.

Training activities, in addition to the courses mentioned above, included forums, conferences, presentations and meetings with a variety of groups, **reaching a total of 788 people**.



Public officials and other participants during the APP training. February, 2018.

Among the activities supported by the Threshold Program, in October 2018 **a course on the UK experience in PPP projects** was delivered by UK *Infrastructure and Projects Authority* (IPA) at London, England; attended by a delegation of Guatemalan public officials an legislators.

ANADIE and MINFIN Coaching

The Threshold Program financed **two international coaches to provide technical training to ANADIE and MINFIN**, and help them lay the groundwork, including criteria, instruments and procedures for playing their role in the PPP assessment, approval and management process. Two of the PPP trainers also advised on the relationship with other stakeholders such as the media, legislators and other groups of interest.



Peruvian coach, René Cornejo, speech in the Second APP seminaire.

One advantage of these *coaches* was that they had experience in providing PPP consultancy services in Latin America. In addition, they had experience on participating in PPP projects, in some cases from a public function, in others from an investor perspective, or combined experience from both roles.

Financing Feasibility Studies for PPP Projects Structuring

This activity focused on financing feasibility studies and transaction coaching services to support the preparation and structuring of PPP projects. **Feasibility studies assess the**

viability of a project from economic, financial, technical and socio-environmental perspectives, among other dimensions. Transaction coaching services are used to prepare terms of reference for an international tender, promote a project to potential investors and assist the government in obtaining the best possible offer for the project.

The Threshold Program provided technical and/or financial assistance to three projects:

Escuintla-Puerto Quetzal Highway (AEPQ). One *coach* performed activities as a transaction coach, to help the project to be launched, as well as to prepare documents that were requested by the authorities involved in such process.

In addition, the program supported the *presentation of Initiative No. 5506 to the Congress* corresponding to the PPP contract for the development of an economic infrastructure for the project entitled "Rehabilitation, Administration, Operation, Maintenance and Complementary Works of the Escuintla-Puerto Quetzal Highway with Toll Collection". *Awarenessraising activities were carried out* to make viable the Congress approval of the project.

To date, the contract is pending of approval in third debate by the Congress of the Republic, after the Constitutionality Court ordered that such body should review it again after its rejection in October 2019, due to procedural errors.



"Rehabilitation, administration, operation, maintenance and complementary works for the Escuintla-Puerto Quetzal highway with toll charge" Project render. ANADIE's courtesy.

Modernization, Efficiency and Security of the La Aurora International Airport of Guatemala City (known by the acronym AILA). The Threshold Program contracted the consortium *Deloitte & Tetra Tech* to carry out the feasibility study with the following components during 2018 and 2019:

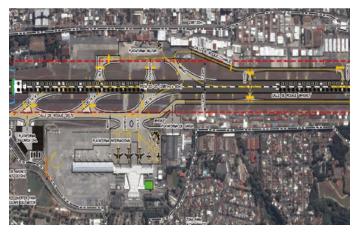
- Component 1: Diagnostic of the implementation of the 2007 AILA Master Plan and other actions. Contains an inventory identifying the state of progress of the uncompleted actions contained in the Master Plan for La Aurora Airport, as well as an analysis of other studies carried out on the airport.
- Component 2: Technical aspects of the structuring. It includes market studies, Technical Study, Socio-Environmental Study, Property Study, Operational Plan and Budget and Programming.
- **Component 3: Project risk assessment**. Contains the matrix of identified risks.
- **Component 4: Economic Evaluation**. Economic evaluation of the benefits and social costs of the project, as well as an economic analysis of the project. Preparation of a preliminary version of the Economic-Financial Model to develop and support the cost-benefit analysis.
- **Component 5: Financial Study**. Financial study composed of an economic-financial model that will allow the development of different scenarios and analysis of sensitivities, and the projections of income and operating costs obtained.
- **Component 6: Legal Study.** Legal *Due Diligence*, study of the strategy to be followed, drafts of documents necessary for the prequalification and bidding of the project, proposal of agreements, transaction and contracting strategy, documents included in the bidding file.

- Component 7: Evaluation of private participation models and public/private partnership structuring alternatives. Evaluation of private participation models and public/private partnerships structuring alternatives, including the complete Feasibility Study, Roadmap, presentation of results and conclusions obtained.
- Component 8: Final report and presentation of results. Compilation of the documents related to the consultancy in accordance with the components indicated, executive summary of the results of the studies carried out and presentation.
- Component 9: Development of technical, financial and legal files for the defined procurement model. Creation of the technical, financial and legal files for the contracting model defined as the optimal and most favorable for the State of Guatemala, resulting in these files in the base documents for a potential bidding process.



Render elaborated by Deloitte - Tetra Tech to identify AILA's improvement area.

In addition to the above, during the process of review, comments and acceptance of the consultancy deliverables, MCC staff and consultants provided feedback on the content of the documents.



Render elaborated by Deloitte - Tetra Tech to identify AILA's improvement area.

Following the acceptance of the final version of the studies in July 2019, the next phases of the process for the implementation of the project have not been pursued. Complementary studies have been carried out to determine further options for the investments required for airport improvement.

<u>Metroriel</u>: MCC allocated funds to hire the services of a transaction coach to conduct studies and analysis to support the feasibility of implementing a surface light rail to help improve mobility in Guatemala City on the current rail line between Centra Sur and Centra Norte, in the metropolitan area of Guatemala City, with an approximate length of 20.5 kilometers. The program provided advice to ANADIE on the drafting of the terms of reference for the contracting of the consulting services, as well as to support the members of the evaluation panel on the assessment of the offers that were received, through an expert who accompanied them during key stages of the review process and qualification of offers. The evaluation panel completed the qualification process and submitted its report with the corresponding recommendation, but the negotiation and signing of the contract could not be carried out because the conditions established by MCC, related to the support of the GOG and the Congress of the Republic (for the success of investments made by the program), were not met.



Feasibility Study final report for structoring the "Modernization, Efficiency and Security of the La Aurora International Airport of Guatemala City" Project presentation. March 27, 2019.



"Train transfer station from North to South of Guatemala" Project render. ANADIE's courtesy picture.



Projects under an APP model are an alternative for strategic infraestructure development allowing the Mobilization of resources from the private sector, incorporating cutting edge technology and more experience. The Monitoring and Evaluation (M&E) component is based on the Monitoring and Evaluation Plan, which was used to track advances toward the achievement of impact and outcomes. As all programs funded by MCC, the monitoring was carried out by the M&E unit and the evaluation of all projects and activities were conducted by contractors hired by MCC with support from the unit.

3.1 Monitoring

Throughout the Threshold Program implementation, information was collected to continuously monitor the indicators included in the *M&E Plan*. These were reports by which PRONACOM informs MCC of the progress made in the implementation and reviews the ongoing implementation of project work plans. This information is presented in the indicator tracking tables (ITT), provided by MCC for this purpose.

To support the data provided to MCC, implementing entities and beneficiaries were asked for information to update the indicators, which could be reported every quarter or according to data availability. After the first M&E Plan review was approved, by the end of 2019, in addition to the ITT, progress reports on the key indicators of the program were prepared.

In addition to the above, every two months, the physical progress of project has been estimated through the monitoring of contracts included in the Physical and Financial Progress Report that is delivered to the Secretariat of Programming and Planning of the Presidency (SEGEPLAN), Ministry of Finance (MINFIN), and Ministry of Foreign Affairs (MINEX).

Likewise, the program supported the General Directorate of Evaluation and Educational Research (DIGEDUCA) of

MINEDUC to carry out the process of **design**, **application and analysis of student knowledge tests to measure the impact of activity 1 of the Education Project**. To achieve this, the following actions were performed:

- Technical assistance for the development of vertical tests based on the Basic National Curricula (CNB), which includes from fourth grade of primary education to ninth grade of lower secondary education. For this, a curriculum designer and a team of writers and validators were financed to develop items (questions). It also supported three field pilots to validate the items.
- Support data collection for two consecutive years (2018 and 2019) in the 5 departments where the program was implemented .
- Hiring an international expert to support the design of test and who guided the data analysis .



DIGEDUCA's team training, M&E, 2018.

In order to comply with the above, the Threshold Program contributed with:

- Development of the first test for lower secondary students, based on the CNB, characterized by applying a vertical scale for the areas of Mathematics, Communication and Language, and Natural Sciences.
- Data collection for two consecutive years (2018 and 2019) for the program impact evaluation. This was made jointly with resources of the program and the GOG.
- Through four 3-day- face-to-face sessions and 17 virtual meetings, it was possible to train 14 technicians, one director, and 2 deputy directors of DIGEDUCA, as well as 7 consultants financed by the Threshold Program who supported DIGEDUCA. The training was related to design and application of vertical tests, their analysis, associated factors and items construction.



Lower Secondary school students taking the Program's intermediate evaluation. Jalapa's Telesecondary.

3.2 Evaluation

Evaluations support two main objectives of MCC: accountability and learning. Accountability refers to MCC and PRONACOM's duty of reporting their activities and attributable results, accepting their responsibility and disclosing results in

a public and transparent way. Learning, on the other hand, refers to improving the understanding of the causal relationships between interventions and changes in poverty and income. MCC advances toward achieving accountability and learning goals by using a variety of independent evaluation approaches. MCC currently distinguishes between two types of evaluations: impact and performance. *At least, each project should have an independent performance evaluation, for accountability reasons.*

Following is a summary of each of the evaluations being conducted:

Education Project

Improvement of Education Quality Evaluation

This activity is assessed through an impact evaluation of mixed methods, using an experimental design with the participation of MINEDUC and other stakeholders. A random selection based on educational districts of the Education Project allows for rigorous evaluation of changes in teaching and learning behaviors. The results are expected to be attributable to the intervention package including: in-service teacher training program, pedagogical and management coaches, as well as the creation/strengthening of learning communities, parent organizations and school networks.

For this study, the Threshold Program supported DIGEDUCA/ MINEDUC to carry out the process of instrument design, piloting, application of tests at two different times to schools selected by the consulting firm. All this was supported by national and international consulting firms financed by the program.



Physical and Financial advancement report (IAFF) was elaborated and submited to SEGEPLAN, MINFIN and MINEX each bimester. The evaluation has **a baseline report**, which was presented on September 24th and 25th, 2019 to the MCC staff, MINEDUC authorities and workers, PRONACOM; first cohort universities and the consulting firm FHI360; with the participation of professionals from headquarters and departmental districts. In 2022, a new round of data collection will begin to gather information for the final report to be presented in August 2023.

Improving TVET Evaluation

Given those multiple reforms contemplated in this activity shall be carried out at a national level, it was not possible to establish a control group to compare the impact of reforms. Therefore, the type of methodology used was a performance evaluation with mixed methods focusing in the implementation fidelity and a results analysis that will monitor progress in adopting the reforms needed to establish the integrated governance system of TVET. This qualitative methodology will be based on interviews with the main actors involved in the implementation of the activity.

The collection of qualitative data, was carried out during the first semester of 2021. The final report is expected to be delivered in October 2022.



Mathematica evaluation firm, baseline report presentation 2019.

Strengthen Institutional and Planning Capacity Evaluation

A mixed-methods performance assessment is being conducted. It is a political economy analysis using a Drivers of Change framework to analyze institutional changes. It has two main components: The first is a trend analysis, for which secondary data is used to examine changes over the time frame in key project-related outcomes (e.g. changes in budget allocations to lower secondary). The second component is qualitative and includes rounds of interviews with key informants and focus groups with program participants.

This evaluation has a baseline report and it is expected to collect final information between 2021 and 2022. The final report is expected for August 2023 (because it is presented together with the Improvement of education quality evaluation).

Resource Mobilization Project

Customs Activity Evaluation

The development, implementation and potential results from this activity shall be reviewed with a performance evaluation. Also, every lesson drawn shall be gathered and documented to improve the design and implementation of future activities of this nature.

The evaluation design report is currently being finalized. The data collection will be finished by the end of 2021 and a final report is expected in March 2022.

PPP Activity Evaluation

The PPP's performance evaluation is being carried out simultaneously in Guatemala and El Salvador. This evaluation features a mixed-method-based implementation analysis that uses a political economy approach to answer a number of questions about the quality of implementation of the PPPs. If possible, the evaluator shall compare the implementation experiences and results in El Salvador and Guatemala.

The evaluators presented the first interim report in mid-2020. The second interim report is expected to be completed by April 2022. The Final report will be presented in April 2024.

Project	Activity	Evaluators	Type of evaluation
Education	School success	Consulting firm Mathematica	Impact
	Job training		Performance
	Institutional strengthening		Performance
Resource Mobilization	Improve tax and customs management	Individual consultant Bonni Blarcom	Performance
	APP strengthening	Consulting firm Mathematica (jointly with El Salvador)	Performance



All the programs financed by MCC are subject to an external evaluation that reports to the beneficiary country and the donation entity about the achieve results.

Post Threshold Program Monitoring and Evaluation

Monitoring and evaluation of programs financed by MCC does not end when the program ends. This activity will continue because it is important **to MCC to know the sustainability without interventions and support the evaluations** as they do not end at the end of the program . These activities are carried out following the Post Threshold Monitoring and Evaluation Plan which contains indicators for the program sustainability report, PRONACOM is in charge of reporting. This post Threshold M&E Plan has the following objectives:

- a) Specify how the project goals and activities are going to be monitored after the Threshold Program is completed; and
- b) Provide a general overview of those activities that will be carried out for the projects and activities evaluations.

4.1. Threshold Program Management

The Threshold Program was under **PRONACOM management**, **as the Accountable Entity**, and PRONACOM'S Executive Committee, who took an important role for relevant decisions according to MCC guidelines and its faculties established in the Grant Agreement.

The program management was in charge of coordinating, managing, implementing and overseeing the activities, including without limitation, allocating resources, procurement management and execution of; contracts, cooperative agreements and other according to MCC guidelines as the donor entity; guaranteeing the implementation in a consistent way with the signed Grant Agreement, including the implementation and scope of objectives for different components. In addition, the Program Management was in charge of the administrative component until the end and orderly program closure. Likewise, it oversaw the planning that allows the monitoring of the program impact, ensuring its sustainability by the GOG.

Particularly, the Program's Management planned, implemented and supervised the Threshold Program in all areas such as Education, Resource Mobilization, Monitoring and Evaluation, and administrative team.

Through the Program's Directorate the strategic vision was established for an eficient and effective implementation of all the activities, looking for the goals compliance and obtaining results.



The Program Management established the strategic vision for an efficient and effective implementation of all activities, seeking the compliance of goals and outcome achievement. It was also in charge of the staff, interinstitutional relationships and coordination of work at technical and strategic levels; this was with different beneficiaries, consulting firms, companies and individual consultants.

Specifically, during the last months of implementation and during the closure period, management was in charge of: leading and implementing the Program Closure Plan; establishing and implementing the closure communication; guaranteeing that program reports be published and easily accessible at PRONACOM website; establishing risk management mechanisms; supervising the implementation of necessary activities for program completion; negotiate and create the necessary connections guaranteeing the commitments from GOG for the sustainability of programs and compliance of duties post program's completion; and, for such effect, by developing a sustainability plan.

4.2 Legal

The Threshold Program legal coach was created for the implementation of professional services **to ensure compliance with MCC's guidelines and policies as a donor entity during the implementation of the program**. This includes, but is not limited to, the following:

- a. Implementation documents under the Grant Agreement.
- b. Compliance with applicable regulations.
- c. Compliance with Fraud and Corruption Policies.
- d. Development, review and update of the Anti-Fraud and Corruption Plan.

- e. Elaboration, compliance and review of agreements with beneficiary entities.
- f. Advising on the review and update of the Fiscal Accountability Plan (FAP).

The signing of agreements with the beneficiary entities was another of the main tasks for the legal coach. The objective was to comply with the obligations preceding the disbursement of the grant and the implementation of specific activities.

As part of the legal steps necessary to achieve the objectives under the Program Grant Agreement, four Implementation Letters were signed extending the timeframe for program implementation in 2017, 2018, 2020 and 2021, with the completion date finally extended to October 31, 2021.

Likewise, the legal coach was in charge of the elaboration and amendments of all contracts that were necessary for the implementation of the two program projects, as well as for the contracts under the Administrative and Monitoring and Evaluation components. Throughout the implementation, it fulfilled a transversal function of support and advice to the administrative and technical areas.

To ensure the Threshold Program orderly closure, the legal coach ensured compliance with all commitments made by



MCC, THP/PRONACOM and UPANA's representatives during the PEM's first cohort Grant Agreement signature, 2018.

PRONACOM and its transition to program closure, ensuring that PRONACOM was not part of legal claims or disputes by preparing the necessary documents at contract closure. In this matter, appropriate advice and timely conciliation was provided related to any current or terminated contract. Thus, as noted above, it was ensured that PRONACOM, through the Threshold Program, did not acquire any legal commitments beyond the program's end date, with the exception of commitments for closing purposes.



THP/PRONACOM team during the tablets delivery in UVG school, Sololá, 2020.

4.3 Procurement

The implementation framework for the **Threshold Program Grant Agreement establishes that contracting and procurement will be governed by MCC's Program Procurement** Guidelines and the procurement component was in charge of preparing, updating and following up on the activities projected in the Procurement Plan, approved by MCC prior to its execution.

The Procurement Plan has been the key tool to disclose the procurement processes of goods and services executed to achieve the planned objectives. In this matter, Procurement updated the procurement plan when necessary to ensure efficient and satisfactory execution of the various procurement processes during the implementation of the program. Procurement was also in charge of the processes for selecting and awarding contractors (consulting firms) and suppliers, as well as following up on the administration of the respective contracts.

It should be noted that all acquisitions of goods, works and non-consulting services carried out in implementing the Threshold Program Grant Agreement and which were financed in whole or in part, directly or indirectly, with MCC funding, were subject to **MCC's Procurement and Contracting Guidelines**.

Within the legal framework for the execution of the Threshold Program's procurement of goods, works, consulting and nonconsulting services, the principles, rules, and procedures set forth in the **Program Procurement Guidelines (PPG)** have been followed, except for those processes to which MCC has specifically accepted the application of alternative (previously unrefuted) procedures.

It is important to mention that Procurement, through contracting individual consultants and consulting firms that implemented the various programs in the institutions and the acquisition of goods, contributed to each of the program's components to achieve the projected execution. In addition, Procurement recorded the work done by filing supporting documentation.



THP/PRONACOM team in the TVET informatic equipment reception, 2021.



MCC and THP/PRONACOM representatives visit to Universidad InterNaciones school in Mataquescuintla, Jalapa, 2019.

4.4 Finance

The Finance team (Finance) of the program has been responsible of the **financial management activities and the compliance with the Fiscal Accountability Plan -FAP-** considered as the MCC standard document for administration and management of the program resources.

Likewise, Finance was **also in charge of the budget activities throughout the development of the Threshold Program**, allocating resources for the different projects and activities, verifying availability of funds prior to signing any kind of contracts, and ensuring that payment obligations were properly met. It is important to mention that one of the greatest achievements of the program, related to finance, is that there were no delays on payments during the implementation, demonstrating a good financial planning.

In addition, there was a thorough monitoring of the procedural and documental compliance so that each payment was made with the due Written Approval, and the corresponding certifications; in order to guarantee to MCC that all expenses were adequate according to the Grant terms and conditions and within the approved budget for each activity and project.

External Audit:

Financial Audit of MCC resources managed by PRONACOM was carried out by an external firm. The general objective was to perform the **financial audit to review the execution of MCC fund resources**, which has been carried out under the audit guidelines provided by the Government Accountability Office -GAO-, US Government Auditing Standards, as well as the MCC Financial Audit Guidelines.

This Audit has included procedures to obtain evidence about program internal controls, amounts and disclosures in financial statements, review and obtain an understanding, and perform tests to determine whether all material aspects have been fulfilled in accordance with the Grant Agreement.

Throughout the revised period options, the external auditor confirmed that the results carried out **did not reveal noncompliance instances** that could require reporting under the US Government Auditing Standars, **demonstrating reasonableness, transparency, and good program management**.

Team Work:

The finance function was always identified by creating linkages with other areas of the program; among legal, procurement, and The THP Progam Director. Therefore,



THP/PRONACOM team during team work training, 2019.

jointly, the adequate management in regulatory, contract and management matters were achieved.

Execution:

One of the most important challenges was to meet the budget estimates approved every quarter, as well as the commitments and goals inherent to the program. For that matter, the finance team constantly followed-up the timely execution of payments and compliance with budget commitments. By the end of the program implementation, the financial execution **Reached 98%**, reflecting the efficient use of available funds.

98%

The Threshold Program reached a 98% financial execution, a percentage that proves an Efficient use of available funds.

4.5 TEAM IN CHARGE OF THE PROGRAM ADMINISTRATION



MCC and THP/PRONACOM team.

In front from left to right: Karen Morales, Legal Advisor; Irina Reyes, M&E Coordinator; Liseth Juárez, Education Project Director; Francisca Cárdenas, Threshold Program Director; Emily Schultz, MCC Threshold Program Policy Officer; Rosa María Aguilar, Procurement Specialist; Karla López, Education Project Specialist; Susely Chamalé, Procurement Analyst.

Back from left to right: Josué Ricart, Finance Specialist; Jorge Arévalo, Finance Analyst; John Wingle, MCC Guatemala Country Director; Manfredo Chocano, Resource Mobilization Project Director.

5. FINANCIAL EXECUTION

The Threshold Program financial execution was measured according to contracts signed under the figure of "Commitment" and cash payments made under "Accrued".

During the program development there were some transfers modifying the total amount of the grant administered by the Accountable Entity, which was originally US\$ 28 million, which, at the beginning of the financial execution, already was at USD 26.2 million because of USD 1.8 million were transferred to OTA to execute part of the activity of improving tax and customs administration.

By the end of the program **USD 25,363,138 have been** executed (accrued), representing a 98% of the budget.

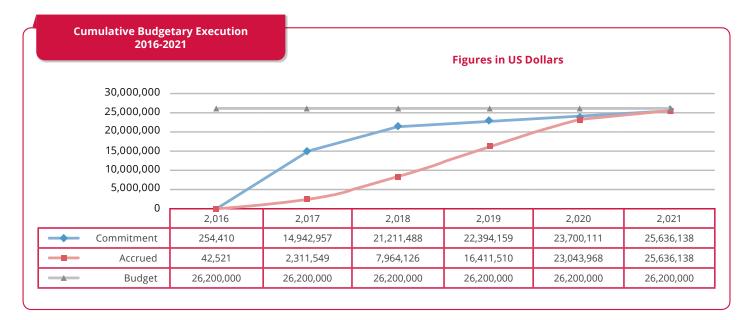
The following chart shows a multi-year analysis of the cumulative execution from 2016-2021, based on the budget managed by PRONACOM.

As for the fiscal year, the financial execution was:

Financial Execution of Threshold Program

YEAR	COMMITMENT (USD)	ACCRUED (USD)	% COM	% ACCRUED
2016	254,410	42,521	1%	0%
2017	14,942,957	2,311,549	57%	9%
2018	21,211,488	7,964,126	81%	30%
2019	22,394,159	16,411,510	85%	63%
2020	23,700,111	23,043,968	90%	88%
2021	25,636,138	25,636,138	98%	98%

*USD 26.2 million initial budget.



At closeout, most of the Threshold Program activities have successfully progressed, though more slowly than planned. Political and institutional reforms have required large initial investments on time and energy, digging into the issues, building relationships and a good planning of implementation. Only after this point is that sustainable changes take place. COVID-19 has also had a relevant impact, especially for the Education Project due to the closure of the schools from March 2020 until the end of the program.

As any other ending program, the main challenge for the future is to guarantee the sustainability of the initiatives and projects implemented, as well as the continuity and execution of the improvements and/or promoted reforms. This implies a commitment with a long-term vision from the beneficiary institutions, as well as the transmission of information and knowledge toward the different actors and public servants guaranteeing that the historical memory of achievements, the lessons learned and good practices generated, last over time and serve as a contribution for future interventions.

In order to guarantee the maximum impact of MCC investment and efforts from the Government of Guatemala, a **Program Sustainability Plan** has been developed identifying, among other things, the results obtained, the risks for the outcome sustainability; as well as, the measures that Guatemala Government intends to take to achieve the unmet results, measures that will mitigate the risks for the sustainability of those results and, the measures oriented to maintain or extend the scope or scale of such results.

It is considered that the implementation of such Sustainability Plan becomes the key to guarantee the continuity of progress achieved by the program and make the most of the results and achievements met. Also, actions and post-program follow-up reports will be helpful to encourage sustainability and promote actions guaranteeing the institutionalization of processes. Particularly the main challenges identified for each of the projects promoted by the Program are:

Education Project

Considering that the objective of the Education Project was the support the different efforts undertaken by the GOG aimed to offer quality lower secondary education to prepare Guatemalan youth to succeed in the labor market, it is necessary that MINEDUC continues supporting secondary education. One of the main challenges consists of **increasing the budgetary allocation for middle school to allow both the expansion of coverage as well as improvement in quality**.

It is also important to **coordinate efforts from the international cooperation** through programs, projects and initiatives promoting the improvement of lower secondary education benefiting the population needing this support, that is young people from 12-18 years, who later will become the economically active population.



MINEDUC and EFPEM/USAC Letter of Understanding signature to cofinance PEM's second cohort specialized in Mathematics, 2021.

As for the **teacher training**, it is recommended to continue the implementation of teacher training in specialized areas addressed to lower secondary school teachers, at a national level, ensuring that teachers have the subject matter knowledge in order to achieve better results in the performance of middle school students. It is recommended that these teacher trainings always perform a diagnostic assessment for decision making and improving learning, during the training and, at the end of training, to verify both improvements and results.

The implementation of **Educational Coaching in Lower Secondary** is also considered as an important challenge since it requires a greater investment on financial and human resources. Nonetheless, it is a worthwhile effort since it allows the improvement of the teaching practice and also promotes the development of the educational community.

Another relevant challenge is the strengthening of the Parent Councils role in lower secondary through the General Directorate for the strengthening of the Educational Community (DIGEFOSE) of MINEDUC so that, through team work with teachers and principals, they can manage the improvement of conditions at schools and promote actions in the educational community favoring the improvement of quality of education in each territory. Empowering parents contributes to improved registration, learning retention and school success of students.



Second cohort Math PEM Virtual teaching screenshot, 2021.

Educational quality also improves when teachers are prepared and have a good grasp of the subjects they teach. Hence, it is important that MINEDUC implements the new recruitment and selection process for lower secondary school teachers and that, in future calls for applications, it ensures the hiring of teachers for secondary education who are capable and have the necessary knowledge to guarantee the quality of teaching.



Santo Domingo Xenacoj, Sacatepéquez "Instituto Mixto de Educación Básica por Cooperativa" lower secondary school students.

For the **training of upper secondary school students** there are challenges and opportunities related to the implementation of the TVET. The modular training contributes to greater opportunities for training young people as well as their insertion into the labor market, however, it is important that the implementation of these new degrees at schools meet the necessary conditions for an effective implementation, as well as achieving the local participation from the different productive sectors. MINEDUC also must consider a strategy that guarantees **the permanent hiring of specialists in the different areas of TVET**.

Resource Mobilization Project

Within the framework of the initiatives promoted for the improvement of Tax and Customs Administration, an important challenge for SAT will be achieving **an effective implementation of processes and tools developed with** the support of the program, particularly the applications for the new reasonable doubt procedure, whose implementation could not be carried out before the end of the program. This will require an accelerated process of knowledge transfer and absorption, leadership and commitment of the parties involved for its finalization and implementation.

Another relevant challenge will be **the appropriation of IT tools** developed with the support from the program and provide them with an adequate **maintenance** to continue building the necessary improvements.

SAT's control and facilitation activities should be carried out within an adequate risk management framework, to increase its efficiency in medium and long term.

Regarding data tools, it is a challenge **to institutionalize the rules of information governance, the development of tools** for data governance and empowering substantive areas in the use of the institutional data warehouse. Likewise, to apply methodologies and processes clearly defined, for an adequate monitoring of actions and projects and this way follow-up on their results.

As for PPPs, although Guatemala has a PPP Law for infrastructure development since 2010, no project has been developed yet under this modality in the country. Therefore, it is important to review the legal framework **and promote the necessary reforms allowing the streamlining and simplification of project approval processes**, distinguishing between those who require an approval from the Congress of the Republic, and those that could be approved through other authorities.

The first PPP, technically supported, reached Congress in 2018; however, it is still waiting to be approved by such body, which diminishes certainty for investors about the operation of this model, therefore, it is essential that its discussion and approval be a priority for both the Executive and the Legislative bodies.

Another challenge in terms of projects is to advance in the development of the AILA project, for which feasibility studies

were completed and it is waiting for the decision from the institutions involved to be out in the market.

It is important to continue with the **strengthening of capacities of the institutions involved**, not only on basic aspects, but also preparing them to deal with more advanced issues regarding the implementation and development of PPP projects. The objective should be to develop the necessary skills that allow the resolution of more complex situations that will emerge as the projects advance toward the following stages.



SAT and ANADIE first sustainability meeting called by MINFIN, 2021.

7. ACRONYMS

AILA: Aeropuerto Internacional La Aurora <La Aurora International Airport>.

ANADIE: Agencia Nacional de Alianzas para el Desarrollo de Infraestructura Económica <National Agency for Partnerships for the Development of Economic Infrastructure>.

APP: Alianzas Público-Privadas < Public-Private Partnership>.

BDV: Base de Datos de Valor<Value Database>.

BO: Business Objects.

CACIF: Comité Coordinador de Asociaciones Agrícolas, Comerciales, Industriales y Financieras <Coordinating Committee of Agricultural, Commercial, Industrial and Financial Associations>.

CB: Ciclo Básico < Lower Secondary Education>.

CNB: Currículo Nacional Base <National Basic Curriculum>.

CONADIE: Consejo Nacional de Alianzas para el Desarrollo de Infraestructura Económica <National Council for Partnerships for the Development of Economic Infrastructure>.

CONED: Comisión Nacional de Empleo Digno <Dignified Employment National Commission>.

COVIAL: Unidad Ejecutora de Conservación Vial <Road Maintenance Executing Unit>.

CUPIA: Customs UNI-PASS International Agency.

DIDEDUC: Dirección Departamental de Educación <Departmental Education Directorate>.

DIGEACE: Dirección General de Acreditación y Certificación < General Directorate for Accreditation and Certification>.

DIGECADE: Dirección General de Gestión de Calidad Educativa <General Directorate for Education Quality Management>.

DIGECUR: Dirección General de Currículo <Curriculum General Directorate>.

DIGEDUCA: Dirección General de Evaluación e Investigación Educativa <General Directorate for Education Evaluation and Research>.

DIGEMOCA: Dirección General de Monitoreo y Verificación de la Calidad <General Directorate for Monitoring and Verification of Education Quality>.

DIGEFOSE: Dirección General de Fortalecimiento de la Comunidad Educativa <General Directorate for the Strengthening of Educational Community>.

DINFO: Dirección de Informática <Information Technology Directorate>.

DIPLAN: Dirección de Planificación Educativa <Directorate of Educational Planning>.

DIREH: Dirección de Recursos Humanos <Human Resources Directorate>.

DWI: Institutional Data Warehouse.

EEMAF: Establecimientos Educación Media Agropecuaria y Forestal < Agricultural, Livestock and Forestry Secondary Education Establishments>.

EFPEM: Escuela de Formación de Profesores de Enseñanza Media <Lower Secondary Teacher Training School>.

ENCA: Escuela Nacional Central de Agricultura <Central National School of Agriculture>.

EPQ: Empresa Portuaria Quetzal.

FAP: Fiscal Accountability Plan.

FEGUA: Ferrocarriles de Guatemala < Guatemala Railroad>.

FHI: Family Heatlh International.

HSI: Homeland Security Investigations.

INE: Instituto Nacional de Estadística <National Statistics Institute>.

INEB: Instituto Nacional de Educación Básica <National Institute for Secondary Education>.

INGUAT: Instituto Guatemalteco de Turismo <Guatemalan Institute of Tourism>.

INTECAP: Instituto Nacional Técnico de Capacitación y Productividad <Technical Institute for Training and Productivity>.

IPA: Infrastructure and Projects Authority.

IT: Information technology.

I.T.R.C: Agencia del Inspector General de Tributos, Rentas y Contribuciones Parafiscales de Bogotá <Agency of the Inspector General of Taxes, Revenues and Parafiscal Contributions of Bogota>.

ITT: Indicator Tracking Table.

LQF: Laboratorio Químico Fiscal <Fiscal Chemical Laboratory>.

MCC: Millennium Challenge Corporation.

MCIV: Ministerio de Comunicaciones, Infraestructura y Vivienda < Ministry of Communications, Infrastructure and Housing>.

MEM: Ministerio de Energía y Minas <Ministry of Energy and Mining>.

MIDES: Ministerio de Desarrollo < Ministry of Development>.

MINECO: Ministerio de Economía < MInistry of Economy>.

MINEDUC: Ministerio de Educación < Ministry of Education>.

MINTRAB: Ministerio de Trabajo < MInistry of Labor>.

MOU: Memorandum of Understanding.

M&E: Monitoreo y Evaluación < Monitoring and Evaluation>.

MINFIN: Ministerio de Finanzas Públicas <MInistry of Finance>.

NUFED: Núcleos Familiares Educativos para el Desarrollo <Educational Family Groups for Development>.

ODA: Oportunidades de Aprendizaje <Learning Opportunities>.

ODK: Open Data Kit.

OPF: Organizaciones de Padres de Familia <Parents Council>.

OTA: Oficina de Asistencia Técnica del Tesoro de los Estados Unidos de América <Office of Technical Assistance, U.S Department of Treasury>.

PAD: Programa de Actualización Técnico-Pedagógica de Docentes <Technical-Pedagogical Updating Program for Teachers>.

PADEP: Programa Académico de Desarrollo Profesional <Program for Professional Development of Lower Secondary teachers>.

PCA: Post Clearance Audit.

PEM: Profesorado en Enseñanza Media < Teacher Training>.

PEMEM: Institutos Experimentales de Educación Básica <Experimental institutes of lower Secondary Education>.

PPG: Program Procurement Guidelines.

PRONACOM: Programa Nacional de Competitividad < National Competitiveness Program>.

PTNM: Plan para la Transformación de la Educación Secundaria <Proposal for the Transformation of Secondary Education>.

RTU: Registro Tributario Unificado <Unified Tax Registry>.

SAT: Superintendencia de Administración Tributaria <Superintendence of Tax Administration>.

SEGEPLAN: Secretaría de Planificación y Programación de la Presidencia < Secretariat of Planning and Programming of the Presidency>.

SINAFOL: Sistema Nacional de Formación Laboral <National System of Technical and Vocational Education and Training -TVET->.

STEG: Sindicato de Trabajadores de la Educación en Guatemala <Education Workers' Union in Guatemala>.

TADAT: Tax Administration Diagnostic Assessment Tool.

TVET: Technical and Vocational Education and Training.

UNI: Universidad InterNaciones.

UPANA: Universidad Panamericana.

USAC: Universidad de San Carlos de Guatemala.

UTOSA: Unidad Técnica de Operaciones y Seguridad Aduanera < Technical Unit for Customs Operations and Security>.

UVG: Universidad del Valle de Guatemala.

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The sole purpose is to communicate the activities and goals achieved by the Threshold Program, therefore, it is suggested that the use of the information herein be cited as follows:

Source: Memoria de Labores del Programa Umbral, PRONACOM, 2021. Ciudad de Guatemala.



Beneficiary entities of the Threshold Program





