**BUREAU OF INTERNATIONAL LABOR AFFAIRS**
UNITED STATES DEPARTMENT OF LABOR

# FINAL EVALUATION REPORT

## LEVERAGING DATA TO BUILD AN EFFICIENT LABOR MARKET IN EL SALVADOR, GUATEMALA, AND HONDURAS (LMI PROJECT)

July 2022

**Grantee:** American Institutes for Research (AIR)
**Project Duration:** October 2017 – September 2022
**Fiscal Year and Funding Level:** Initial funding FY17, $4,000,000.00; additional funding FY20, $345,000.00

**Evaluation Fieldwork Dates:** January 17, 2022 – February 4, 2022

## ACKNOWLEDGEMENT

This report describes the final performance evaluation of "Leveraging Data to Build an Efficient Labor Market in the El Salvador, Guatemala, and Honduras (LMI Project)". Fieldwork for this evaluation was conducted in January and February 2022. NORC at the University of Chicago conducted this independent evaluation in collaboration with the project team and stakeholders. NORC prepared the evaluation report according to the terms specified in its contract with the United States Department of Labor. The evaluation team would like to express sincere thanks to the OTLA team for their technical support and guidance, as well as to the project team at be American Institutes for Research (AIR)[1] for their invaluable logistical support including assistance with scheduling interviews and making introductions to the interviewees. All respondents provided valuable contributions.

This report was prepared for the U.S. Department of Labor (DOL) by NORC at the University of Chicago under Contract Number 47QRAA20D0045. The views expressed are those of the authors and should not be attributed to DOL, nor does mention of trade names, commercial products, or organizations imply endorsement of same by the U.S. Government.

[1] This grant was awarded to IMPAQ International; however, AIR acquired IMPAQ and as of 1/1/2022, has absorbed all of IMPAQ's projects.

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## LIST OF ACRONYMS

| | |
|---|---|
| AECID | Spanish Agency for International Development Cooperation |
| AIR | The American Institutes for Research |
| ANDI | Asociación Nacional de Industriales (National Association of Industries) |
| ASI | Asociación Salvadoreña de Industriales (Association of Salvadoran Industrialists) |
| CAMARASAL | Cámara de Comercio e Industria de El Salvador (Salvadoran Chamber of Commerce and Industry) |
| CANATURH | Cámara Nacional de Turismo de Honduras (Honduras National Chamber of Tourism) |
| CASATUR | Cámara Salvadoreña de Turismo (Salvadoran Chamber of Tourism) |
| CEPAL | La Comisión Económica para América Latina y el Caribe (Economic Commission for Latin America and the Caribbean) |
| CGAB | Camara Guatemalteca de Alimentos y Bebida (Guatemalan Chamber of Beverages and Food) |
| CIG | Camara Industrial de Guatemala (Guatemala Chamber of Industry) |
| CIIU4 HN | Clasificador Industrial Uniforme de Actividades Económicas (National Economic Activities Classifier) |
| CLAEES | Clasificación de Actividades Económicas de El Salvador (Classifier of Economic Activities of El Salvador) |
| CNOES | Clasificación Nacional de Ocupaciones de El Salvador (National Classification of Occupations of El Salvador) |
| COHEP | Consejo Hondureño de la Empresa Privada (Honduran Council of Private Enterprise) |
| CNOH 18 | Clasificador Nacional de Ocupaciones de Honduras (National Occupational Classifier of Honduras) |
| COTICNOH | Comité Técnico Interinstitucional de Clasificaciones de Honduras (Interinstitutional Technical Committee of Classifiers of Honduras) |
| COVID-19 | Corona Virus Disease 2019 |
| CSO 09 | Sistema de Ocupaciones 2009 (2009 National Occupational System) |
| DIGESTYC | Dirección General de Estadística y Censos (General Directorate of Statistics and Census) |
| EHPM | Encuesta de Hogares de Propósitos Múltiples (Multiple Purpose Household Survey) |
| ENEI | Encuesta Nacional de Empleo e Ingresos (National Employment & Income Survey) |
| EPHPM | Encuesta Permanente de Hogares de Propósitos Múltiples (Permanent Multiple Purpose Household Survey) |
| EURO+LABOR | Institutional Strengthening of Decent Employment and Employment Opportunities for Youth in Honduras |
| FLACSO | Facultad Latinoamericana de Ciencias Sociales (Latin American Social Sciences Institute) |

| | |
|---|---|
| FOA | Funding Opportunity Announcement |
| ICLS | International Conference of Labor Statisticians |
| IDB | Inter-American Development Bank |
| IGSS | Instituto Guatemalteco de Seguridad Social (Guatemala Institute of Social Security) |
| IHSS | Instituto Hondureño de Seguridad Social (Honduras Social Security Institute) |
| ILAB | Bureau of International Labor Affairs |
| ILO | International Labor Organization |
| INE | Instituto Nacional de Estadística (National Institute of Statistics) |
| INEC | Instituto Nacional de Estadística y Censos de Costa Rica |
| INFOP | Instituto Nacional de Formación Profesional (National Professional Training Institute) |
| INGUAT | Instituto Guatemalteco de Turismo (Guatemalan Institute of Tourism) |
| INSAFORP | Instituto Salvadoreño de Formación Profesional (Salvadoran Institute of Professional Formation) |
| INTECAP | Instituto Técnico de Capacitación y Productividad (Technical Institute of Training and Productivity) |
| IOM | International Organization for Migration |
| ISCO | International Standard Classification of Occupations |
| ISIC | International Standard Industrial Classification |
| ISSS | Instituto Salvadoreño del Seguro Social (Salvadoran Institute of Social Security) |
| ITCA | Instituto Tecnológico Centroamericano (Central American Technology Institute) |
| KII | Key Informant Interviews |
| LMI | Leveraging Data to Build an Efficient Labor Market in El Salvador, Guatemala, and Honduras Project |
| MINTRAB | Ministerio de Trabajo y Previsión Social (Ministry of Labor and Social Security) |
| MOU | Memorandum of Understanding |
| MPRC | Maryland Population Research Center |
| MSRC | Michigan Survey Research Center |
| MTPS | Ministerio de Trabajo y Previsión Social (Ministry of Labor and Social Security) |
| NAEG | Nomenclatura de Actividades Económicas para Guatemala (Nomenclature of Economic Activities for Guatemala |
| OCSE | Oficina de Coordinación del Sistema Estadístico (National Employment Statistics Coordination Office) |
| OTLA | Office of Trade and Labor Affairs |
| PMP | Performance Monitoring Plan |
| SAR | Servicio de Administración de Rentas (Revenue Administration Service) |

| | |
|---|---|
| SICA | Sistema de Integración de América Central (Central American Integration System) |
| SIMEL | Sistema de Información del Mercado Laboral (Labor Market Information System) |
| STSS | Secretaría de Trabajo y Seguridad Social (Secretariat of Labor and Social Security) |
| TOR | Terms of Reference |
| UCA | Universidad Centroamericana José Simeón Cañas (Central American University José Simeón Cañas) |
| UNAH | Universidad Nacional Autónoma de Honduras (National Autonomous University of Honduras) |
| UNFPA | United Nations Population Fund |
| URL | Universidad Rafael Landivar (University Rafael Landivar) |
| USAID | United States Agency for International Development |
| USD | United States Dollar |
| USDOL | United States Department of Labor |
| UVG | Universidad del Valle Guatemala (University of the Valley Guatemala) |

# EXECUTIVE SUMMARY

## BACKGROUND AND CONTEXT

On October 1st, 2017, the United States Department of Labor's (USDOL) Bureau of International Labor Affairs' (ILAB) Office of Trade and Labor Affairs (OTLA) awarded AIR a cooperative agreement for USD 4 million to implement Leveraging Data to Build an Efficient Labor Market in El Salvador, Guatemala, and Honduras (LMI Project). The project was modified in June 2020 to add USD 345,000 and again in February 2021 to extend the period of performance by 12 months, through September 30, 2022. However, project activities ended on April 30, 2022, because it did not require the entire extension period to complete its deliverables.[2] The objective of the LMI project is to improve the labor market efficiency and performance in Guatemala, Honduras, and El Salvador. To achieve this objective, the project has two key outcomes: Governments publish reliable, comprehensive, and current labor market information (LMI) in user-friendly formats for the general public, and professional audiences; and increased skill and knowledge of educational and workforce development programs, employers, service providers, practitioners, and policy makers on how to use LMI.

## KEY EVALUATION FINDINGS AND CONCLUSIONS

While each country is at a different point in developing LMI systems, the project's aim to strengthen the generation of LMI is consistent with government workforce development policies and efforts in each country. The revision of the household survey instruments, advanced sampling methodologies, and updates to the occupational and industrial classification systems were consistent with international standards. Furthermore, the project efforts to revise the household survey instruments and update the classification systems complemented similar efforts of the International Labor Organization (ILO), World Bank, and other key international organizations.

The project was designed to support the *2014 U.S. Strategy for Engagement in Central America.* While the *2021 U.S. Strategy to Address the Root Causes of Migration in Central America* builds on the 2014 *U.S. Strategy for Engagement in Central America,* the 2021 strategy, which reflects the Biden administration's priorities and national contexts, places a heavier emphasis on factors that contribute to irregular migration such as gang violence, gender-based violence, corruption, and violations of human rights. The LMI project interventions have remained consistent with U.S. policy to improve labor market efficiency

The involvement of key stakeholders was crucial to achieving results. The statistical institutions collaborated closely with the project to revise the household survey instruments. The statistical agencies, labor ministries, central banks, and some private sector actors participated in updating the occupational and industrial classification systems. The university partners in all three countries agreed to store the establishment survey data and receive the methodology and tools so the LMI project establishment surveys might be continued in the future. Key business associations supported both establishment surveys. However, some key generators and users of LMI, such as the social security and revenue agencies, did not actively participate in the updates to the occupational and industrial classification systems.[3] Also,

[2] Note that the project's cooperative agreement will not officially end until the final evaluation is complete.

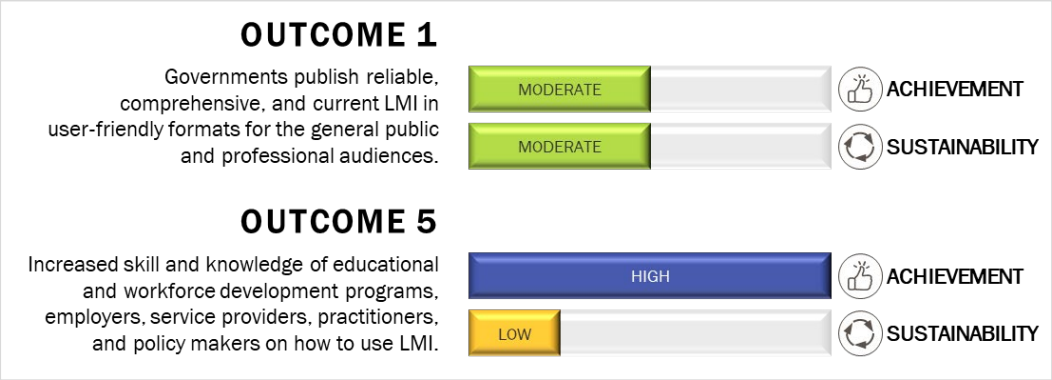
[3] According to members of the steering committees, these key institutions were approached to participate but some declined because they manage different LMI databases and operate independently. One exception is the social security institution (IHSS) that participated in the project.

Guatemala's National Statistical Institute (INE) declined the project's help to improve its sampling methodologies and electronic data collection systems.

Overall, the project was implemented in a cost-effective manner. The COVID-19 pandemic caused both inefficiencies and efficiencies. Once the pandemic started, the project paused activities to determine how to respond, which caused delays and created inefficiencies. On the other hand, the project created efficiencies by implementing remote activities such as including virtual meetings and trainings to protect project staff and stakeholders. Other factors that caused inefficiencies included technology glitches experienced by participants during the training events and turnover of both project and key stakeholder staff.

Figure 1 summarizes the achievement of project outcomes and their sustainability[4] . The table also provides a rating for both achievement and sustainability: low, moderate, above moderate, and high.

*Figure 1. Performance Summary*




According to the findings, the project either met or exceeded most of its performance indicator targets for Outcome 1. While the changes to align the household surveys with the International Conference of Labor Statisticians resolutions and directives should improve the quality of the survey data, it is too early to determine whether the revised surveys actually produced more reliable and comprehensive information. Further, threats to data quality remain in all three countries that include sample frames and sizes based on outdated census information, issues with the administration of the surveys by enumerators, and timeliness in processing and publishing the full survey datasets in El Salvador and Honduras. Note that these on contextual factors that are outside the control of the project.

The results that are published are not always in a user-friendly format for the general public. In terms of sustainability, the revisions to the household surveys and the updates made to the occupational and industrial classification systems in all countries will likely be sustained once the project ends. The advanced sampling and data collection procedures in El Salvador and Honduras will also likely be sustained. On the other hand, the establishment surveys and electronic data collection systems in El Salvador and Honduras will be difficult to sustain. While willingness to sustain these outputs is high, the ability is low because the institutions do not have sufficient financial resources

As for Outcome 5, the project exceeded the performance indicator on the number of trainees but fell short on the number of persons that completed at least 50 percent of the technical workshops. At the time of the evaluation, the project had not administered a survey to

[4] Although the original project design listed 5 outcomes, the Funding Opportunity Announcement asked applicants to only address Outcomes 1 and 5.

measure the number individuals with increased success executing their job responsibilities. Nevertheless, the achievement of the technical workshops and certificate courses is high.

In assessing the achievement of Outcome 5, it is important to understand that the project shifted from a labor market exchange approach with emphasis on both improving and using LMI to one heavily focused on improving the quality of LMI. The LMI training was largely designed to improve skills and knowledge around generating high quality LMI and less on using LMI to drive employment and workforce development policy and programs. So, while the LMI training was highly effective, its effectiveness focused primarily on the generation of LMI and less on the use of LMI.

The improvement of LMI knowledge and skills appears to be sustainable in the short term but the technical workshops and certificate courses do not appear to be sustainable. The academic institutions responsible for providing the training are willing to continue but have not identified the necessary resources. Without continuous training to update the new skills and knowledge, the newly acquired LMI skills and knowledge can become obsolete.

## LESSONS LEARNED

1. **It is critical to match training content to the experience and skill level of participants**. To maximize learning and its application, it is important to assess participant experience and skill level before training to ensure that training content meets participant needs.
2. **Training schedules should be adjusted to accommodate work responsibilities and ensure maximum attendance and participation**. Based on a midterm evaluation recommendation, the project started to record training sessions and make them available online to participants who could not attend in person which was the correct decision.
3. **Establishment surveys require trusted actors such as business associations to coordinate the survey and follow up with establishments to ensure acceptable questionnaire response rates**. Due to mistrust, the private sector in all three countries is reluctant to share LMI with the government, making it difficult for public agencies to conduct reliable establishment surveys. The project engaged the main business associations of each sector to explain the purpose of the survey to its members and encouraged them to fill out the questionnaire, which significantly increased the survey response rate.
4. **Institutional limitations, especially the lack of financial resources reduced the chances of sustaining key outputs and outcomes**. In all three countries, partner institutions do not have the resources in their budgets to sustain the production of LMI data of high quality and building competitive skills and knowledge in educational and workforce programs.
5. **The project's performance indicators did not entirely capture the achievement of the outcomes**. The project developed a set of performance indicators to measure the achievement of the outcomes. However, the indicators did not measure all of the dimensions of the outcome statements.
6. **While each country has a labor market exchange system, they are not considered effective because the labor market information that feed the systems is weak**. An effective LMI exchange system requires high quality and complete LMI.
7. **Countries with small labor markets with limited availability of professional labor may require a flexible team approach rather than one highly qualified project director as often required by ILAB as key personnel**. AIR experienced difficulties in recruiting a qualified project director. It decided to use a combination of a highly qualified and respected international consultant, a regionally based manager with strong government contacts,

and an AIR manager with ample ILAB project experience. This team approach provided effective project management.

## PROMISING PRACTICES

1. **Establishing country-level project steering committees helped to create interinstitutional communication and collaboration**. Prior to the project, these LMI institutions rarely met and shared information. At the time of the evaluation, the steering committees were meeting as planned and their members reported improved communication, coordination, and collaboration. While there is interest among the steering committee members, it is too early to determine where they will continue to meet and coordinate once the project ends.
2. **Building project interventions on existing institutional structures, processes, and priorities.** Since the statistical institutions have the mandate and resources to conduct periodic household surveys, improvements to the survey instruments are highly sustainable.
3. **Involving credible universities to provide accredited certificate courses**. The receipt of a university accredited certificate upon completion of the course was highly appealing to participants and, thus, served as an important motivational factor.
4. **Fostering local capacity building through expert technical assistance.** The consultants that the project contracted were well-respected by project partner institutions. The respect and credibility the project gained by partnering with these experts should continue being used as a tool for further in-country capacity building.

## RECOMMENDATIONS

ILAB, other U.S. Government donors, and grantees might consider the following recommendations:

1. **Learning and Improvement**. Consider incremental project approaches where components, interventions, or expansions and their funding are phased in over periods of time based on progress, achievements, and learning. Milestones, performance indicators, or deliverables might be used as criteria for moving from one stage to another. In special situations, such as presidential elections where substantial personnel and policy changes might occur, ILAB might consider an incremental extension to account for the delays cause by the personnel and policy changes.

2. **Project Modifications**. Ensure that when significant changes are made to the project, the changes are reflected in project modifications and project documents**.** The significant changes might include modifications to the project design (project objective and outcomes), to the monitoring and evaluation system (key performance indicators), interventions, geographic areas, personnel changes, and budgets. They might also include new U.S. government policy priorities such as a focus on vulnerable and underserved communities.

3. **Training Needs Assessments**. Conduct training needs assessments to ensure training is designed to build the capacity of participants to perform their job responsibilities and match the participant's experience and skill level. The supervisors of the participants should be consulted to determine the institution's expectations regarding improved job performance for the participants.

4. **Virtual Training**. Provide virtual training and other learning programs, when appropriate, where sessions are recorded and offered online with the corresponding materials and assessments so participants can successfully complete training courses at their pace.

5. **Application of Knowledge and Skills**. Conduct assessments of how individuals and institutions that received technical assistance and training are applying new knowledge and skills to achieve objectives in their places of work. The assessment of knowledge and skills should involve a combination of a post-training follow-up survey, observation, and interviews with supervisors and co-workers so data from these sources can be triangulated and used to assess how knowledge and skills are being applied.

6. **Team Management Approach**. In countries with small labor markets with limited availability of qualified professionals, consider a team approach to meet the requirements of key project personnel such the project director position. A team approach that combines a core group with complimentary skills could be an effective alternative where there are labor market limitations.

7. **Impact and Outcome Indicators**. Require impact level indicators to measure the achievement of the project objective and ensure outcome indicators measure all of the dimensions of the outcome statement. Impact indicators could be linked to broader U.S. Department of State objectives. The outcome indicators should capture the intention of the outcome statement.

8. **Sustained Linkages**. Where collaboration and coordination between key government institutions are critical to the success of the project, the project should have a strategy to create and sustain effective linkages. While ILAB or the grantee cannot mandate collaboration and coordination mechanisms such as signing interinstitutional agreements, the grantee can act as an honest broker to facilitate the interinstitutional collaboration and coordination and even provide incentives such as technical assistance and training to help institutions improve performance as related to the project's objectives.

**ILAB, USAID, and other international cooperative agencies might consider the following recommendation:**

9. **Labor Market Information Projects**. Consider developing and funding labor market information and exchange projects that make labor market information available to policy makers, workforce development programs, and to the public in user-friendly formats. While international cooperative agencies such as USAID are investing in youth and broader workforce development programs, there appears to be a few organizations investing in labor market information and exchange projects.

# 1. PROJECT CONTEXT AND DESCRIPTION

## 1.1. PROJECT CONTEXT

The economies of El Salvador, Guatemala, and Honduras are facing multiple challenges including persistent poverty, high unemployment or underemployment, economic stagnation, labor market inefficiency, and gang violence.[5] The countries have large informal employment sectors and receive significant levels of remittances from the U.S. that, together, tend to hamper the development of formal employment.[6] Additionally, gang violence inhibits worker mobility because workers, for security reasons, cannot travel to or through areas controlled by gangs. These challenges are forcing prime-age workers to seek opportunities elsewhere, including Mexico and the United States.[7]

A consistent theme in these countries is the need to identify job opportunities and train the workforce for these jobs to support economic growth, which requires strong labor market information (LMI) systems that currently do not exist in these countries.[8] Currently in El Salvador, Guatemala, and Honduras labor market data are collected and analyzed by a variety of institutions and organizations, resulting in a patchwork of information that is difficult to access, inconsistently analyzed, and incomplete, which negatively affects the work of key partners, such as policymakers.[9]

Employers lack information required to make informed decisions regarding recruiting, business expansion, and employee skills development. Potential employees make career development decisions without understanding market demands. Education and training institutions undertake the planning, implementation, and evaluation of programs, curricula, and career guidance with insufficient information to meet the needs of employees and employers.

Although all three countries conduct periodic LMI collection, their systems can be substantially improved to increase labor market effectiveness and efficiency. Each country's statistical institution conducts large-scale household surveys, following methodologies and using instruments that need reviewing and updating to adhere to current best practices and rigorous standards. The household surveys do not use advanced sampling mechanisms nor digitization systems.[10]

Furthermore, these countries do not have updated and consistent occupational and industry classification systems. They also lack a nationally representative establishment survey that

[5] Economic Opportunity in the Northern Triangle: U.S. Government Support for Private Sector-Led Development, September 20, 2021, https://www.csis.org/analysis/economic-opportunity-northern-triangle

[6] "Sousa, Liliana D.; Garcia-Suaza, Andres. 2018. Remittances and Labor Supply in the Northern Triangle. Policy Research Working Paper; No. 8597. World Bank, Washington, DC. https://openknowledge.worldbank.org/handle/10986/30446

[7] Economic Opportunity in the Northern Triangle: U.S. Government Support for Private Sector-Led Development, September 20, 2021, https://www.csis.org/analysis/economic-opportunity-northern-triangle

[8] Efficient LMI systems refer to accurate and timely information on the labor market supply and demand that are available to decisionmakers and other users. LMI systems help governments monitor employment, develop labor policies, and provide strategies for economic growth.

[9] US Department of Labor (ILAB-OTLA), Market Supply and Demand in the Northern Triangle: Leveraging Data to Build an Efficient Labor Market, IMPAQ International, July 2019.

[10] Ibid.

provides critical information about availability and demand of jobs by sector, experience and skill requirements for these jobs, employee profiles, and payment information.[11]

## 1.2. PROJECT DESCRIPTION

On October 1, 2017, the United States Department of Labor's (USDOL) Bureau of International Labor Affairs' (ILAB) Office of Trade and Labor Affairs (OTLA) awarded the American Institutes for Research (AIR) a cooperative agreement for USD 4 million to implement the *Leveraging Data to Build an Efficient Labor Market in* in El Salvador, Guatemala, and Honduras Project (LMI). The project is implemented in El Salvador, Guatemala, and Honduras. The original period of performance was October 1, 2017, through September 30, 2021.

### 1.2.1. PROJECT MODIFICATIONS

Over the life of LMI, OTLA provided three project modifications. In June 2018, AIR requested and received a modification that changed the project director, modified home office staff assigned to the project, and realigned the budget line items to reflect the most recent cost projections. The modification also added the Maryland Population Research Center (MPRC) and the Michigan Survey Research Center (MSRC) as subcontractors to access their global experts in LMI systems. The second modification occurred in June 2020. This modification added USD 345,000 for three additional establishment survey pilots and 3 statistical analysis certificate programs. It also replaced MPRC and MSRC with independent LMI expert consultants and replaced Latin American Social Sciences Institute (FLACSO) Guatemala with the Universidad del Valle de Guatemala (UVG).[12] Finally, like the previous modification, this one also changed the project director, realigned project budget line items, and modified AIR home office staff. In February 2021, ILAB provided the third project modification that extended end-date of the project by 12 months; from to September 30, 2021, to September 30, 2022.

### 1.2.2. OBJECTIVE, OUTCOMES, AND OUTPUTS

The goal of the LMI project is to improve labor market efficiency and performance across the three countries by assisting them to develop LMI systems that publish reliable, comprehensive, and current LMI in user friendly formats. In turn, improved LMI systems will facilitate the match between human capital and the current and future needs of employers.

To support the goal, the project design includes the project objective and outcomes as shown in Table 1.

**Table 1: LMI Project Objective and Outcomes**

| **Project Objective: Improve the labor market efficiency and performance in the Project countries.** |
|---|
| **Outcome 1: Governments publish reliable, comprehensive, and current LMI in user-friendly formats for the general public and professional audiences.** |
| Outcome 1.1: Statistics Bureaus conduct well-designed household surveys on a regular basis. |
| Outcome 1.2: Statistics Bureaus conduct well-designed establishment surveys on a regular basis. |
| Outcome 1.3: Labor Market Observatories generate valid labor market estimates on a regular basis. |
| Outcome 1.4: Increased skill and knowledge of personnel of government statistical agencies. |

[11] Ibid.

[12] The intention was to replace FLACSO with UVG but during a competitive process to select the subcontractor, the University of Rafael Landívar (URL) submitted a higher quality proposal and was thus selected.

| Project Objective: Improve the labor market efficiency and performance in the Project countries. |
| --- |
| Outcome 5: Increased skill and knowledge of educational and workforce development programs, employers, service providers, practitioners, and policy makers on how to use LMI.[13] |

In addition to the outcomes, the project reports on the following seven outputs:[14]

1. A revised national household survey for each country.
2. Facilitate the creation of an establishment survey in each country.
3. Updated occupational and industry classification systems.
4. Advanced sampling mechanisms and data collection methods and manuals for each survey.
5. Formal agreements with public or private organizations.
6. Electronic data collection systems.
7. Labor market information training, workshops, and conferences.

The complete list of outcomes and outputs and their causal relationships are shown in the project's results framework in Annex G.

#### 1.2.3. BENEFICIARIES AND INSTITUTIONAL STAKEHOLDERS

The primary beneficiaries of LMI include jobseekers, employees, employers, local experts, and institutional stakeholders. The institutional stakeholders include labor ministries, statistical bureaus, universities, technical training institutions, international. business associations, and other research institutes. The project works with 22 local institutional stakeholders from the public, private, education, and international development sectors. A map of the project countries listing the stakeholders by country appears in Annex D.

#### 1.2.4. PROJECT MANAGEMENT AND IMPLEMENTATION

The project personnel are organized by staff based in the U.S. and project countries as well as consultants based primarily in South America. In the U.S., AIR staff consist of the project manager and technical lead who are supported by project coordinators and analysts. In the region, staffing consists of a project director and a project specialist based in El Salvador. A regional LMI expert consultant based in Uruguay supported all three countries while a team of Chile-based consultants provided training and survey support. In addition, each country has a designated country lead provided by FLACSO in El Salvador and Honduras and URL in Guatemala. FLACSO and URL are project subcontractors responsible for implementing training programs and facilitating communications with local institutional partners. The LMI project's organizational chart is listed in Annex E.

# 2. EVALUATION PURPOSE AND METHODOLOGY

## 2.1. PURPOSE

The purpose of the final evaluation includes an assessment of the following:

- Achievement of the project objective, outcomes, and outputs as well as identification of the challenges encountered.

[13] The original project designed included 5 outcomes. However, the Funding Opportunity Announcement asked applicants to only address Outcomes 1 and 5. This is explained in more detail in Section 3.1.1.

[14] These 7 outputs were taken from the LMI project document.

- Intended and unintended effects of the project.
- Lessons learned and emerging good practices that can be applied in future LMI projects.
- Sustainability of the overall objective, outcomes, and outputs.,
- Quality of data collected under ILAB-funded establishment surveys in each of the three target countries[15].

Additionally, OTLA commissioned NORC at the University of Chicago to conduct a data quality assessment (DQA) of the establishment surveys in the Project's scope of work, and a data analytics of collected labor market–establishment and household survey–data[16]. The purpose of the DQA, included separately in Annex J, is to conduct the following assessments:

- Validity, reliability, timeliness, precision, and integrity of the establishment survey data conducted separately in Honduras, El Salvador, and Guatemala, through a combination of quantitative and qualitative analysis.
- The extent to which changes in data collection procedures in the establishment surveys affected the quality of collected data.
- Validity, reliability, timeliness, precision, and usability of the national labor market data conducted separately in Honduras, El Salvador, and Guatemala, through qualitative analysis.

The evaluation will provide ILAB, AIR, and other project stakeholders with an assessment of the project's performance, its effects on project participants, and an understanding of the factors driving the project results. The evaluation results, conclusions, and recommendations will serve to inform stakeholders in the design and implementation of subsequent phases or future projects as appropriate. A more detailed description of the evaluation and purpose and objectives is described in the Terms of Reference (TOR) in Annex A.

### 2.2. METHODOLOGY

The evaluation team used a mixed-methods evaluation design consisting of document reviews, key informant interviews and an online perception survey. The full results of the perception survey appear in

To protect the evaluation team, project staff, and other key stakeholders from the COVID-19 infection, fieldwork consisted of conducting all interviews remotely using video conference platforms such as Zoom and Microsoft Teams.

A detailed description of the evaluation methodology including the evaluation questions, the evaluation team, evaluation approach and schedule, data collection and analysis methods, and limitations are included in the ILAB's project summary page[17].

A rigorous checklist indicated in the Terms of Reference and the Methodological Report of this contract drove the DQA[18]; the DQA data quality analysis results appear in Annex J.

[15] The results of the Performance Evaluation's data quality assessment are separate from the DQA results.

[16] The DQA and the Data Analytics are not part of the Performance Evaluation. We present their results in Annexes I and J, respectively.

[17] Please, find the Terms of Reference and the Methodological Report at: https://www.dol.gov/agencies/ilab/leveraging-data-build-efficient-labor-market-central-america.

[18] Same as previous one.

# 3. EVALUATION RESULTS

## 3.1. RELEVANCE

The relevance section answers the following two evaluation questions:

| Relevance Questions |
|---|
| To what extent did the project design respond to the labor market information needs, policies, and priorities of key stakeholders in El Salvador, Guatemala, and Honduras? |
| Were the sectors selected relevant to the demands of the labor market and to the needs of educational workforce development programs? |

### 3.1.1. RELEVANCE OF LMI PROJECT DESIGN

To understand the current LMI project design, it is important to understand its origin and how it evolved. In July 2017, USDOL and USAID) signed a Memorandum of Agreement that transferred USD 4 million from the Economic Support Fund account of the US Department of State's Bureau of Western Hemisphere Affairs (State/WHA) to USDOL to implement the LMI project in support of the U.S. Strategy for Engagement in Central America.

The project was designed to support the U.S. Strategy for Engagement in Central America, which promoted security, governance, and prosperity in Central America, especially in El Salvador, Guatemala, and Honduras, and complemented the work undertaken by national governments and multilateral development banks to support the priority objectives identified by these countries in their Alliance for Prosperity Plan.[19]

To support the project design, ILAB conducted a scoping mission to El Salvador, Guatemala, and Honduras in March 2017, where the ILAB team met with representatives of ministries (labor, education, and economy), central banks, statistical institutions, vocational training institutions, private sector think tanks, and chambers of commerce.[20] The scoping mission identified a range of issues with the quality of LMI as well as how LMI is used to develop employment and workforce development programs. According to the team members, the scoping mission was invaluable in helping design a complete labor market exchange project.

In July 2017, ILAB/OTLA issued a Funding Opportunity Announcement (FOA) stating its intention to provide USD 4 million through a cooperative agreement grant and requesting applications from eligible organizations. The project design in the FOA included the project objective, five outcomes, eight sub-outcomes, and four outputs. The results framework published in the FOA showing the objective, outcomes, and outputs and their causal relationships appears in Annex F.

The FOA states that "While the Department considers achieving all of these outcomes necessary and sufficient to achieve the project objective, the project implementer will be directed to focus resources on achieving Outcomes 1 and 5 and producing the identified outputs under each outcome." While ILAB representatives who were interviewed did not remember exactly why outcomes 2, 3, and 4 were omitted in the FOA, they pointed out it was most likely due to OTLA realizing that USD 4 million would not be sufficient to achieve all 5 outcomes.

[19] Memorandum of Understanding between USAID and USDOL, July 2017.

[20] U.S. Department of Labor, Bureau of International Labor Affairs, Labor Market Technical Assistance Project for El Salvador, Guatemala, and Honduras. Report by Roberto Morales and Halima Woodhead, March 20 -24, 2017.

The original project design and results framework included in the FOA represents a relatively well-balanced labor market exchange approach. Outcome 1 and its four sub-outcomes aim to strengthen the quality of information, while Outcomes 2-5 and their sub-outcomes aim to improve the use and application of the information to eventually improve employment and workforce development programs. The decision to remove Outcome 2-4 weakened the LMI use side of the equation but strengthened the supply of LMI.

To strengthen the LMI use side of the equation, AIR proposed providing training and technical assistance to countries to develop virtual labor exchanges (VLEs). Once the project started, AIR decided not to pursue the VLEs because countries lacked funding to develop and maintain VLEs, and the information required to populate the VLEs either did not exist or were of poor quality. The modified results framework presented in the project document appears in Annex G.

In consultation with OTLA, AIR decided to focus project resources on improving the quality of information under Outcome 1. Subsequently, it changed the indicator from the number of electronic LMI data repository systems developed (VLEs), to the number of governments receiving technical assistance to implement new electronic data collection methodologies. While the indicator was changed, the results framework and reference to VLEs in the project document were not changed.

In hindsight, it would have been prudent for ILAB to revise the results framework with only outcomes 1 and 5 showing the causal relationships between the outcomes, sub-outcomes, and outputs. In this process, the project objective should have been changed to reflect what outcomes 1 and 5 could realistically achieve, without Outcomes 2, 3, and 4. This would have helped applicants develop more precise proposals.

> *The project was well aligned with our LMI needs. The help with the household survey, classification systems, and establishment surveys were all important. But we have lots of weaknesses so much remains to be done.*
>
> ***Guatemala Ministry of Economy Representative***

According to nearly all of the key stakeholders who were interviewed, the project design responded well to the LMI needs of the project countries. Key informants, as well as expert LMI consultants, noted that Guatemala, Honduras, and El Salvador have a myriad of LMI weaknesses and that while this project did not address all these needs, it made an important contribution to improving the quality of LMI.

### 3.1.2. RELEVANCE OF PILOT ESTABLISHMENT SURVEY SECTORS

The project conducted two pilot establishment surveys in each country. The first survey focused on the tourism sector while the second survey focused on the food and beverage manufacturing sector in all three countries. The aim of the pilot establishment surveys was to develop survey methodologies and tools that could be transferred to local institutions so more establishment surveys could be conducted in the future.

During scoping missions conducted in the first months of the project, project staff met with key LMI stakeholders in each country to discuss potential sectors to conduct the pilot establishment surveys. To help select the sectors, the project developed a set of criteria that included: strategic importance to the countries, enough establishments to draw a meaningful sample, and sufficiently organized (lack of informality), including the presence of a business association that could help identify, notify, and follow-up to ensure reasonable response rates.

Using these criteria, the project selected the tourism sector in Guatemala and Honduras and the plastics sector in El Salvador. However, the plastic sector business association, ASIPLASTIC, decided not to participate because it was busy deciding how to respond to a proposed law banning single use plastics. Since the project selected the tourism sector in Honduras and Guatemala, it decided, after consulting OTLA, to choose the tourism sector in El Salvador so it could compare survey results across the three countries.

The second pilot establishment survey sector, food, and beverage manufacturing. was recommended by USAID El Salvador during one of the first scoping missions. Since the sector satisfied the selection criteria mentioned above, the project proposed this sector to project stakeholders in all three countries. The stakeholders agreed that it would be an ideal sector because of the availability of establishment lists, the volume of establishments in each country, and a high level of interest in how COVID-19 may have affected food production.

In general, key project stakeholders who were interviewed in all three countries commented that the tourism and food and beverage manufacturing sectors were appropriate choices. They noted that both sectors are of strategic importance to governments in the three economies and are important employers. They also acknowledged that both sectors are relatively well organized and have business associations that helped facilitate the implementation of the survey.

> *The tourism and food and beverage sectors in Honduras are important. But there are other important sectors that include agriculture, construction, ports, textile, and call centers. All would benefit from establishment surveys.*
>
> ***INFOP-Honduras Representative***

However, when asked whether there are other sectors more relevant to labor markets, stakeholders in all three countries commented that the informal sector, which employs between 70 and 80 percent of workers in each country, is the most important sector but because it is highly disorganized, conducting an establishment survey would have been extremely challenging. They also noted that agriculture, construction, textile, and call centers are important sectors. In El Salvador, the pharmaceutical sector is important while the ports sector is important in Honduras. Stakeholders noted that all these sectors are strong candidates for establishment surveys.

### 3.2. COHERENCE

This section addresses the following two evaluation questions.

| Coherence Questions |
|---|
| How consistent and mutually supportive were the project's interventions with: (1) Broader government labor market information and workforce development policies and interventions; (2) International norms and standards; and (3) Interventions of other key actors working in this area? |
| To what extent were the project's interventions to improve labor market efficiency and employability in alignment with the 2021 *U. S. Strategy to Address the Root Causes of Migration in Central America*? Moreover, to what extent did the project's interventions in each country remain coherent with current USG policy objectives, particularly with respect to employability and labor market efficiency in underserved communities where many migrants to the US originate (particularly for women, indigenous and rural populations, afro-indigenous communities). |

#### 3.2.1. COMPATABLITY WITH GOVERNMENT POLICIES AND PROGRAMS

GOVERNMENT LMI AND WORKFORCE DEVELOPMENT POLICIES AND INTERVENTIONS. Promoting employment is a priority for these countries and LMI systems are key to generating

employment [21] According to the International Labor Organization (ILO) and International Organization for Migration (IOM), the countries have weak LMI systems that lack accurate, timely, and transparent LMI, which makes it difficult to identify job opportunities and properly train the workforce to fill those job opportunities.[22]

The ILO, IOM, United Nations Population Fund (UNFPA), and the World Bank, among other international organizations, have been promoting LMI systems in these countries. The ILO has provided technical assistance to these countries since 2006 as a key strategy to promote and achieve decent work.[23] While Guatemala and Honduras are working on developing LMI systems, El Salvador recently developed its LMI system, referred to as SIMEL, with technical assistance from the ILO. However, according to ILO consultants, the challenge for these countries is the availability of accurate and timely LMI as input to the LMI systems.

The LMI project built on ILO's support to these countries by investing in interventions aimed at improving the quality of LMI. The interventions included technical assistance and training to revise the household surveys to bring them in line with International Conference of Labor Statisticians (ICLS) resolutions and directives, update and harmonize occupational and industrial classification systems to bring them in line with United Nation's International Standard Industrial Classification (ISIC) and the International Standard Classification of Occupations (ISCO), improve household survey sampling and data collection methodologies, and use electronic data collection and analysis methods and tools. In addition, since none of the countries implement national establishment surveys on a consistent basis, the project piloted establishment survey methodologies and tools in two key sectors.

> *The project decided to contract me because I had worked with all 3 countries when I worked for the ILO. I helped revise household surveys and sampling methodologies. I am very aware of the issues in each country. I also know the technical staff in the statistical institutions that helped the project gain credibility.*
>
> ***Project LMI Consultant***

According to stakeholders in all three countries, the project was consistent with and supported LMI policies and interventions because it built on what countries were already working on to improve the household surveys, update the occupational and industrial classification systems, and improve sampling methodologies. Furthermore, the project contracted the same LMI expert that the ILO had used in previous years, which helped ensure consistency and continuity.

The results from the online perception survey support the interviews in that 68 percent[24] of respondents believed the project's interventions are consistent with or very consistent with government labor market and workforce development policies and programs.[25] Another 11 percent said the project interventions are somewhat consistent. Only 1.6 percent of respondents opined that the interventions are not consistent.

INTERNATIONAL NORMS AND STANDARDS. The project ensured that its interventions are consistent with and support international LMI norms and standards in several ways. First, as the project was beginning to implement activities, it took advantage of the ILO's 20th International Conference of Labor Statisticians (ICLS) to send two representatives from each country to

[21] Economic Opportunity in the Northern Triangle: U.S. Government Support for Private Sector-Led Development, September 20, 2021, https://www.csis.org/analysis/economic-opportunity-northern-triangle

[22] https://programamesoamerica.iom.int/sites/default/files/informe_regional_final.pdf

[23] Ibid.

[24] The online survey had 125 respondents across all three countries.

[25] The total number of online survey respondents were 125.

attend the conference held at the ILO office in Geneva. The ICLS provided the participants an opportunity to receive training and information necessary to implement the ICLS's international guidelines and resolutions during the revision of the household surveys and updates to the classification systems.

A second way the project ensured consistency with international LMI norms and standards was to contract the same consultant who had previously served as the ILO's regional LMI consultant. The consultant provided technical assistance and training to the technical staff of the statistical institutions in all three countries. In particular, he analyzed the household survey questionnaire, and occupational and industrial classification systems. He also made recommendations to the statistical institutions in El Salvador and Honduras to improve sampling methodologies to bring them in line with international standards.

> *The LMI consultant was very good. We worked with him before when the ILO sent him to help us with the household surveys, sampling methods, and occupational and industrial classifiers. He knew the issues in El Salvador and was able to build on previous ILO work including the work that CEPAL did on LMI systems.*
>
> ***DIGESTYC Representative***

The project also invited representatives from the Costa Rica National Statistics Institute (INEC) to present, discuss, and share methodologies it developed to implement an establishment survey. The INEC establishment survey is considered to meet international standards and good practices for conducting an establishment survey.

INTERVENTIONS OF OTHER KEY LMI ACTORS. The project's efforts to improve the quality and availability of LMI is highly consistent with the assistance of key international organizations focusing on labor markets. A joint study conducted by the ILO and IOM in 2019 recommended strengthening labor market information in these countries.[26] In addition, the ILO has provided technical assistance to Guatemala, Honduras, and El Salvador since 2006 to improve LMI and recently provided technical assistance to El Salvador to develop its LMI system (SIMEL).

The project's focus on improving LMI was also consistent with employment and workforce development interventions funded by international cooperation agencies. In Honduras, the Euro+Labor project (2015-2020), funded by the European Union through the Spanish Agency for International Development Cooperation (AECID), aimed to strengthen Honduran institutions responsible for promoting employment. [27] According to Honduran labor ministry representatives who served as the government's points of contact for the project, LMI's focus on improving LMI was consistent with the Euro+Labor project because employment institutions in Honduras require timely LMI. However, these representatives acknowledged that Euro+Labor ended before it could take advantage of any improved LMI supported by the LMI project.

In El Salvador, the USAID funded *Puentes para el Empleo* project, that provided youth with technical and life skills to acquire employment, participated in LMI capacity-building activities and provided feedback and recommendations to the project on LMI.[28] However, since the *Puentes para el Empleo* project ended in September 2020, the evaluator was unable to interview project staff to discuss collaboration.

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[26] https://programamesoamerica.iom.int/sites/default/files/informe_regional_final.pdf

[27] http://www.aecid.hn/sitio/documentos_publicos/fichas/DL/Programa_EurolaborVf.pdf

[28] Multi-Country Interim Performance Evaluation of the Leveraging Data to Build an Efficient Labor Market in the Northern Triangle (LMI) Project, April 7, 2020.

In addition to employment and workforce development projects funded by international cooperation organizations, the LMI project was consistent with the objectives and interventions of educational institutions responsible for preparing youth and other jobseekers for employment. The evaluator interviewed representatives from universities in all three countries that included Central American University José Simeón Cañas (UCA) in El Salvador, University of the Valley Guatemala (UVG) and University Rafael Landívar (URL) in Guatemala, and the National Autonomous University of Honduras (UNAH). He also interviewed representatives of technical and vocational training institutions including Salvadoran Institute of Professional Formation (INSAFORP), Central American Technology Institute (ITCA), Technical Institute of Training and Productivity (INTECAP) in Guatemala, and National Professional Training Institute (INFOP) in Honduras.

> *I don't think the project got to the point that the data were used to develop or adjust employment programs. The certificate programs covered some areas to help participants understand how to use information, but did they actually use it? I don't think so.*
>
> ***COHEP Representative***

In general, these institutions applauded the project's aim to improve the quality and availability of LMI. They also said that the training the project provided on LMI systems was useful and supported their efforts to use LMI to inform their educational and vocational training efforts. However, these institutions noted that the project's interventions largely focused on improving the quality of data generated by the household surveys and piloting methodologies for establishment surveys and did not get to the point of improving how LMI is used by governments, educational institutions, and employers. They suggested that using LMI to inform government policies and workforce development programs would be an appropriate focus if there were to be a future LMI strengthening project.

### 3.2.2. ALIGNMENT WITH 2014 U.S. STRATEGY FOR ENGAGEMENT IN CENTRAL AMERICA

The LMI project was not originally designed to support the *U.S. Strategy to Address the Root Causes of Migration in Central America*, which was developed in 2021. Rather, as explained in Section 3.1.1, the LMI project was designed in support of the *2014 U.S. Strategy for Engagement in Central America,* which aimed *to* promote prosperity and regional integration, strengthen governance, and improve security.[29,30] The original LMI project supported the U.S. engagement strategy in several ways as shown below in Figure 2.

COHERENCE WITH U.S. POLICY OBJECTIVES ON EMPLOYABILITY AND LABOR MARKET EFFICIENCY IN UNDERSERVED COMMUNITIES. The *2021 U.S. Strategy to Address the Root Causes of Migration in Central America* builds on the 2014 *U.S. Strategy for Engagement in Central America*. The 2021 strategy, which reflects the Biden administration's priorities and national contexts, places a heavier emphasis on factors that contribute to irregular migration such as gang violence, gender-based violence, corruption, and violations of human rights. The 2021 strategy also places an emphasis on vulnerable and underserved communities.

The LMI project remains focused on improving the quality of LMI, primarily from the household surveys that is the main source of LMI in each country. While the project's interventions have remained consistent with U.S. policy to improve labor market efficiency, ILAB did not request

[29] US Strategy for Engagement in Central America, September 2014, https://obamawhitehouse.archives.gov/sites/default/files/docs/central_america_strategy.pdf

[30] The US Strategy for Engagement in Central America was updated in 2016 but the goal and objectives remained the same. Refer to U.S. Strategy for Engagement in Central America: Policy Issues for Congress, June 2019.

the project to adjust its interventions to focus on labor market efficiency in underserved communities.

*Figure 2: How the Original LMI Project Design Intended to Support the US Central America Engagement Strategy*

| Original LMI Project Design | | US Central America Engagement Strategy |
|---|---|---|
| Project Objective: Improved labor market efficiency and performance | → | Strategic Objective 1.3: Reduced poverty |
| Outcome 1: Governments publish reliable, comprehensive, and current LMI in user-friendly formats for the general public and professional audiences | → | Strategic Objective 2.1: Professionalize civil service |
| Outcome 2.1: Educational and training initiatives are market-driven | → | Strategic Objective 1.4: Improved quality of education |

### 3.3. EFFECTIVENESS

The effectiveness section addresses the following 6 evaluation questions:

| Effectiveness Questions |
|---|
| To what extent did the project achieve its objectives, outcomes, and outputs (intended effects)? To what extent were underserved communities and populations reflected in the achievement of outcomes and outputs? Were results evenly distributed on the basis of gender, rural/urban or other socio-economic characteristics? Were there any unintended effects realized from implementing the project? |
| How effective were the project's outputs (i.e., establishment surveys, improved household surveys, updated occupational classification system, improved data collection methods, training, electronic data collection systems) in achieving the objectives and outcomes? What factors did the project face that either facilitated or hindered the implementation of the outputs? How did these differ by country? |
| Is the labor market data collected by institutional partners with project support considered to be high quality? |
| How effectively did the key stakeholders engage in, use, institutionalize or benefit from the project outputs? What factors either facilitated or hindered their engagement or uptake (paying particular attention to underserved communities or groups)? |
| To what extent did the project implement the midterm evaluation recommendations? What effect did this have on the project's achievements? |
| Did the revised surveys appropriately and successfully capture labor market information of vulnerable or underserved groups? To what extent did the project include DEI&A principles into the design of the surveys? How are data from the surveys being used, shared, accessed, or disseminated - particularly with respect to jobseekers, youth and underserved communities and groups? |

#### 3.3.1. ACHIEVEMENT OF PROJECT OBJECTIVE, OUTCOMES, AND OUTPUTS

Since the project's monitoring plan did not include indicators to measure the project objective, the evaluator was not able to assess the achievement of the project objective against indicators. It should be noted that ILAB did not request AIR to include project objective level indicators. Table 2 shows the achievement of the project's outcome performance indicators (target vs. achieved) along with the evaluator's comments. The achievement of outputs is discussed under the effectiveness of outputs in Section 3.3.2.

*Table 2: Achievement of Outcome Performance Indicators and Discussion*

| Outcome and Performance Indicator | Target | Achieved | Comments |
|---|---|---|---|
| **Outcome 1: Governments publish reliable, comprehensive, and current LMI in user-friendly formats for the general public and professional audiences** | | | |
| 1.1. Number of nationwide household surveys revised | 3 | 3 | As planned, the project revised national household surveys in all three countries to bring them in-line with ICLS resolutions and directives. |

| Outcome and Performance Indicator | Target | Achieved | Comments |
|---|---|---|---|
| 1.2. Number of local institutions adopting establishment survey methodology | 3 | 3 | The project planned that at least three local institutions would adopt the establishment survey methodology. The project reported signing non-disclosure agreements with three institutions so they might use the survey methodology and tools. These include UCA, UVG, and UNAH.[31] However, none of the institutions had identified resources that would allow them to conduct the establishment surveys |
| 1.3. Conduct pilot establishment survey | 3 | 6 | In total, the project conducted six pilot establishment surveys; one in the tourism sector and one in the food and beverage sector in each country. The project originally planned to conduct one pilot establishment survey in each country or a total of three. Based on project modification #2 that allocated an additional USD 345,000, the project conducted a second pilot establishment survey in each country to bring the total to six. |
| 1.4. Number of businesses participating in pilot establishment survey | 300 | 1,765 | The original target of 300 was based on one establishment survey per country with a target of 100 establishments, which the project determined to be minimum acceptable number to be able to draw meaningful conclusions. Once the second establishment survey was added, the target should have been updated to 600. During actual data collection, the business associations in each sector provided sustained follow-up to convince establishments to complete the survey questionnaires that led to a much higher response rate than originally anticipated, especially in Guatemala and Honduras. The actual number of establishments that participated in the six surveys was 1,765 including 366 in El Salvador, 851 in Guatemala, and 548 in Honduras. |
| 1.5. Number of governments receiving technical assistance to implement new electronic data collection methodologies | 3 | 3 | The project provided training and technical assistance to the statistical institutions in El Salvador and Honduras to implement electronic data collection methodologies, specifically the use of Survey Solutions. INE Guatemala declined assistance from the project because it plans to digitalize household data collection by 2025. Instead, the project provided assistance to MINTRAB to implement electronic data collection methodologies and support its efforts to improve data management techniques. |
| 1.6. Number of training sessions administered to statistical agencies on rigorous statistical methods | 30 | 30 | As planned, the project provided 10 technical workshops in each country, aligned closely to the project outputs (household surveys, establishment surveys, occupational and industrial classification systems, sampling methods, and use of electronic data systems). |
| 1.7. Number of procedures, manuals, and guidelines for conducting surveys and documenting the proper usage transferred to stakeholder institutions | 6 | 6 | The project planned to develop and transfer six procedural survey documents for the household surveys and classification systems in each country. As planned, it provided six sets of recommendations and documented the updates or changes made to the survey instruments and classification systems. |
| **Outcome 5: Increased skill and knowledge of education and workforce development programs, employers, and policy makers on how to use LMI.** | | | |
| 5.1. Number of individuals with new or better employment following completion of USG-assisted workforce | 159 | 0 | Per agreement with ILAB, the project did not report on employment but rather redefined the indicator and reported on the number individuals with increased success executing their job responsibilities. At the time of the evaluation, the project |

[31] Note that the evaluator was unable to confirm that the NDAs were signed since AIR considers the NDA to be confidential information.

| Outcome and Performance Indicator | Target | Achieved | Comments |
|---|---|---|---|
| development programs (F indicator # EG.6-1) | | | had not reported the achievement of this indicator. See a more detail explanation following this table.[32] |
| 5.2. Number of individuals with improved skills following completion of USG-assisted workforce development programs (F indicator # EG.6-2) | 315 | 747 | Per agreement with ILAB, the project did not report on improved skills but rather redefined the indicator and reported on the number of individuals that completed survey related training modules. While the project set a target of 315, 747 individuals completed the project training events at the time of the evaluation.[33] See a more detail explanation following this table. |
| 5.3. Number of individuals who complete USG-assisted workforce development programs (F indicator # EG.6-3) | 45 | 27 | Per agreement with ILAB, the project did not report on USG-assisted workforce development programs but rather redefined the indicator and reported on the number of individuals (disaggregated by type of stakeholder, gender, and geographic location) who completed at least 5 (50%) of the technical 10 workshop. The project set a target of 45 and reported that 27 completed at least five workshops.[34] |

In summary, the project either met or exceeded nearly all its performance indicator targets. The one exception is the number of individuals completing at least five of the ten workshops. Only 27 persons completed five or more workshops. According to the project, high staff turnover among partner institutions explains the low completion rate.[35]

While the project achieved or exceeded nearly all its indicator targets, it is not clear to the evaluator whether the outcomes were actually achieved. For example, Outcome 1 states that governments will publish reliable, comprehensive, and current LMI in user-friendly formats for the general public and professional audiences. While it is too early to determine whether the revised household surveys produced more reliable and comprehensive information, the changes to align them with ICLS resolutions and directives should improve the quality of the survey data. Nevertheless, threats to data quality remain in all three countries. These include sample frames and sizes based on outdated census information, administration of the household surveys by the enumerators, and timeliness in processing and publishing the full survey datasets in El Salvador and Honduras. Further, the results that are published are not always in a user-friendly format for the general public. These points are discussed in more detail below in Section 3.3.2.

According to the online perception survey, 38 percent of the respondents believe that the project improved governments' ability to publish reliable, comprehensive, and current LMI in user-friendly formats, while 29 percent thought the project improved the governments' ability to produce LMI to a lesser degree. Only 2.4 percent responded that the project did not improve the governments' ability to produce LMI.

Outcome 5. increasing skill and knowledge of education and workforce development programs, employers, and policy makers on how to use LMI, aims to improve how LMI is used and was not the focus of the project. Over time, the project shifted from a labor market exchange approach with emphasis on both improving and using LMI to one heavily focused on improving the quality of LMI. This is because the project learned during scoping missions that the most pressing need in all three countries was improving the quality of LMI. Based on

[32] Changes to the indicator definitions were made in coordination with OTLA.

[33] The 747 does not include the last certificate course that was in progress at the time of the final evaluation. The 747 persons trained are unique and not double counted.

[34] The 27 persons trained are unique and not double counted.

[35] The evaluator did not have access to staff turnover rates to confirm this explanation.

interviews with stakeholders, the project's shift to focusing on improving the quality of LMI was justified given the weaknesses all three countries have producing high quality LMI.

In the shift to improving LMI quality, the project provides technical workshops and certificate courses designed to improve skills and knowledge around generating high quality LMI and less on using LMI to drive employment and workforce development policy and programs. Thus, while some training that focused on LMI use, such as visual presentation of labor market data to influence public policy, contributed to Outcome 5, it is unlikely that the project made a significant impact on using LMI for policy or to improve workforce development programs since the project's efforts were focused on LMI quality.

In the opinion of the evaluator, the project's outcome indicators do not measure all of the dimensions of the outcome statements. For example, Outcome 1 indicators are largely focused on outputs (revised household surveys, establishment surveys, assistance to use electronic data collection systems, training, user manuals) instead of measuring if LMI quality (reliable, comprehensive, and current LMI) and access (user-friendly formats for the general public and professional audience) increased. Likewise, Outcome 2 indicators focus on the U.S. State Department workforce development indicators but do not measure whether education and workforce development programs, employers, and policy makers are using LMI.

The online perception survey supports the notion that the statistical institutions benefited most from project interventions. Fifty-four percent of the survey respondents believed that statistical institutions benefitted in to a moderate or moderately high degree from project interventions, compared to 45 percent for labor ministries, 30 percent for vocational training institutions, and 20 percent for the private sector.

The other issue that deserves mention is the indicators for Outcome 5. According to the project, it was required to list Department of State indicators for workforce development even though LMI was not a workforce development project. These are EG 6.1, 6.2, and 6.3.[36] To address the project's concerns about its ability to measure these indicators, the project staff worked with OTLA to create custom indicator definitions as described under Outcome 5 in Table 3 above. Nevertheless, it should be clear that the indicator achievements for outcome indicators 5.1, 5.2, and 5.3 do not relate to workforce development, but rather to training focused largely on the generation of LMI.

VULNERABLE AND UNDERSERVED POPULATIONS. As discussed in Section 3.2.2, the project was not designed to specifically address vulnerable and underserved populations and, thus, these populations were not directly reflected in the achievements. Instead, the project focused primarily on improving the quality of LMI collected by the household surveys and piloting the establishment surveys. The capacity building activities supported the household surveys and establishment surveys.

DEMOGRAPHIC, GEOGRAPHIC, AND SOCIO-ECONOMIC CONSIDERATIONS. The project was not designed to ensure even distribution of results on the basis of demographic, geographic, and socio-economic characteristics. As noted above, the project aimed to improve the quality of LMI, especially from the household surveys. Since the household surveys are based on scientific random samples, households represented in the sample should be evenly distributed across demographic, geographic, and socio-economic characteristics. The project's effort to improve

[36] https://2009-2017.state.gov/f/indicators/index.htm

sampling methodologies were intended to strengthen the sample frames in El Salvador and Honduras, where many of the project's recommendations were accepted.

> *I was really surprised and impressed with the level of communication and collaboration between institutions in Honduras. This is the first time government agencies, universities, and the private sector met to discuss LMI, especially the classifiers. I hope we can sustain this when the project ends.*
>
> ***STSS Representative***

The project did, however, address gender in its LMI trainings. The project encouraged partner institutions to send the appropriate mix of female and male participants. The project also disaggregated training participants by sex in its reports to OTLA. Of the 747 persons that the project reported to have participated in LMI training events at the time of the evaluation, 55 percent were female, and 45 percent were male. [37] More specifically, 63 percent, 47 percent, and 59 percent of the participants were female in El Salvador, Guatemala, and Honduras, respectively. The larger number of female training participants can be explained by staffing structures in the institutions that sent participants where there is a larger number of female staff.

UNINTENDED EFFECTS. The most important unintended effect of the project according to both project staff and key stakeholders was improved interinstitutional collaboration and communication that did not exist before the project. Especially the steering committee meetings provided opportunities for representatives from LMI institutions to meet, share information, and collaborate on initiatives such as the occupational and industrial classification systems. The regional conferences provided participants from the three countries to meet, network, and share information. While it could be argued that the steering committee meetings and regional conferences were designed to increase interinstitutional collaboration, since it was mentioned as an important unintended effect by both project staff and many stakeholders, the evaluator decided to keep it as a positive unintended effect.

### 3.3.2. EFFECTIVENESS OF PROJECT OUTPUTS

The following section describes the outputs, their level of achievement, and effectiveness in achieving the outcomes. The outputs are presented and discussed in the same order that they are listed in the TPRs.

REVISED NATIONAL HOUSEHOLD SURVEYS. The statistical institutions in each country conduct a multi-purpose household survey that gathers demographic and socioeconomic information. However, the employment and income sections of each survey instrument is by far the most extensive. In El Salvador, DIGESTYC conducts the annual Multiple Purpose Household Survey (EHPM) while the National Statistics Institutes (INE) in Guatemala and Honduras conduct the bi-annual National Employment and Income Survey (ENEI) and the annual Multiple Purpose Household Survey (EHPM), respectively.[38] These household surveys are the primary source of LMI in each country.

Since 2006, El Salvador, Guatemala, and Honduras have received their main technical assistance for making improvements to the household surveys from the ILO. The LMI project built on this effort by providing technical assistance and training to continue to improve the survey instruments and bring them into compliance with international standards.

[37] The number of LMI training participants represents the number reported by the project as of February 28, 2022.

[38] INE Guatemala did not conduct the ENEI in 2020 and only conducted one ENEI in 2021 due to COVID-19 limitations. It plans to return to the bi-annual mode in 2022.

Specifically, the project contracted an LMI expert who conducted assessments of the current survey instruments and made recommendations to improve them and bring them into compliance with the resolutions and directives made at 15th to 20th International Conference of Labor Statisticians (ICLS).[39] The recommended changes included eliminating irrelevant or outdated questions, rewording questions to increase accuracy, and modifying questions to capture changes on occupation-related definitions made at the 19th and 20th ICLS.

> *The recommendations that the LMI expert made were very useful. We have made about 85 percent of the changes he recommended. The other ones will take more time and budget resources, but we also plan to implement them too in the future.*
>
> ***DIGESTYC Representative***

Representatives of the statistical institutions in each country told the evaluator that they found the recommendations to improve the employment and income section of the survey instruments to be extremely helpful. According to representatives from El Salvador and Honduras, approximately 80-85% of the recommendations were accepted, the corresponding changes were made, and the revised survey instruments were used in the last household survey in both countries.

Guatemala, on the other hand, is different. When the project presented INE Guatemala with the recommendations to revise the survey instrument, it learned that the World Bank had also made recommendations to revise the instrument and suggested that INE not implement the project's recommendations because it could affect the ability to compare future survey results to past results. To resolve the confusion, the project met with INE Guatemala and World Bank technical staff and, together, arrived at the conclusion that both sets of recommendations were consistent and should be made by INE Guatemala. However, INE Guatemala management told both the World Bank and LMI project that it did not plan to implement the recommendations in the 2021 household surveys but will implement the recommendations in the 2022 surveys.

Overall, the online perception survey results support the notion that the revisions to the household surveys were effective. Forty-five percent of respondents rated the revisions as effective while 17 percent rated them as very effective. Another 18 percent rated the revisions as less effective. Only 1.6 percent rated them as not effective.

ESTABLISHMENT SURVEY CREATED IN EACH COUNTRY. The FOA and project document both note that the three countries do not conduct national establishment surveys. To fill the gap, the project aimed to conduct pilot establishment surveys where methodologies and tools would be developed and transferred to the statistical institutions in each country,

Based on information in the FOA, AIR aimed to work with statistical institutions to conduct establishment surveys on a regular basis. However, during the first wave of scoping missions, AIR learned that the private sector was reluctant to share information with the government. AIR also learned that the statistical institutions do not have resources to conduct regular establishment surveys. To address this challenge, the project requested and received agreement to change the performance indicator from the *number of governments adopting the establishment surveys* to the *number of local institutions adopting the surveys*. The corresponding outcome in the project document was not changed.

[39] The International Conference of Labour Statisticians (ICLS) is the world's recognized standard-setting body in the area of labor statistics. It is convened roughly every five years by the International Labour Organization (ILO).

The project worked closely with business associations to conduct pilot establishment surveys in the tourism and food and beverage manufacturing sectors in each country. Note that UCA, the project's university partner in El Salvador, served as the survey partner for the food and beverage sector establishment survey because the relevant business association, Salvadorian Association of Industrialists (ASI), declined to participate in the survey.[40]

The business associations facilitated contact with the establishments and provided follow-up to ensure acceptable survey response rates. This was especially helpful in Honduras where response rates dropped below acceptable levels as the project made the transition from face-to-face interviews to telephone interviews to prevent COVID-19 infections.

Table 3 shows the business associations and number of participating establishments by sector and country.

*Table 3: Business Associations and Number of Establishments by Country and Sector*

| Country | Sectors | Business Association | No. Establishments |
|---|---|---|---|
| El Salvador | Tourism | Salvadoran Chamber of Tourism (CASATUR) | 233 |
| | Food and Beverage | Universidad Centroamericana (UCA)[41] | 133 |
| Guatemala | Tourism | Guatemalan Institute of Tourism (INGUAT) | 745 |
| | Food and Beverage | Guatemalan Chamber of Food and Beverage (CGAB), Guatemala Chamber of Industry (CIG) | 106 |
| Honduras | Tourism | Honduran Council of Private Enterprise (COHEP), Honduras National Chamber of Tourism (CANATURH) | 448 |
| | Food and Beverage | COHEP, National Association of Industries (ANDI) | 339 |

The business association partners in all three countries told the evaluator that the pilot establishment surveys were very useful and helped fill gaps in information. They disseminated the survey results to the establishments that participated in the tourism sector survey and intend to disseminate the results to the establishments that participated in the food and beverage sector survey when they are available.[42] These comments are consistent with the online perception survey results where 58 percent of respondents believe the establishment surveys were effective. Only 3.2 percent of respondents believe the surveys are not effective.

However, when asked how the business associations or the establishments intend to use the information, representatives of these organizations were less certain. Likewise, when the evaluator asked representatives from vocational training institutions how they intended to use the information, they commented that it should be useful to help better plan and develop

> *The tourism survey has important information, but we have to see how we can use it, maybe combine it with other studies that were conducted. I have not seen the results from the food and beverage sector survey yet.*
>
> ***INSAFORP Representative***

[40] The evaluator was unable to interview anyone from ASI. However, according to the TPRs, ASI declined to participate due to political turmoil in the country and a shift in private sector priorities.

[41] UCA as the partner for the food and beverage sector establishment survey because the relevant business association, Salvadorian Association of Industrialists (ASI), declined to participate in the survey.

[42] The project disseminated the reports to project partners in the relevant sector as well as institutional project partners such as ministries of labor/economy, universities, and so forth.

training courses for the tourism and food and beverage sectors but noted that they needed to review the results in more detail to determine more precisely how to use it.

> *We have agreed to warehouse the data from the surveys and receive the methodology and tools to be able to conduct future surveys if we can find resources. However, we should have been involved in conducting the 2 surveys so we could have gained experience and a deeper understanding.*
>
> ***UVG Representative***

The primary challenge in all three countries, however, is securing resources to conduct future establishment surveys. While the project developed robust establishment survey methodologies and transferred these to university and business association partners, at the time of the evaluation, the only partner that had identified resources and planned to conduct other surveys was INGUAT in the tourism sector in Guatemala. The challenge to continue conducting establishment surveys is discussed in more detail under sustainability (Section 3.5.1).

UPDATED OCCUPATIONAL AND INDUSTRIAL CLASSIFICATION SYSTEMS. The project aimed to work with the statistical institutions in each country to update their occupational and industrial classification systems to bring them in line with ISIC and ISCO standards. Since the classification systems are applied to the household surveys, it is important to use updated systems that meet international standards to ensure consistency and accuracy.

In the early stages of the project, the AIR team realized that it would be important to work with a range of key actors who generate and use LMI to ensure that classification systems are harmonized. In El Salvador, the project worked with the Ministry of Information and DIGESTYC to update the National Classification of Occupations of El Salvador (CNOES) and the Classifier of Economic Activities of El Salvador (CLAESS). In Guatemala, the project worked with the Employment Statistics Coordination Office (*OCSE Empleo*) to update 2009 National Occupational System (CSO 09). In Honduras, the project helped reactivate and work with the Interinstitutional Technical Committee of Classifiers of Honduras (COTICNOH) to update National Occupational Classifier (CNOH 08) the National Economic Activities Classifier (CIIU4 HN).

The project contracted the same LMI expert who provided technical assistance for the revised household surveys to conduct assessments of the current occupational and industrial classification systems and made recommendations for improvement and bringing them into compliance with the ISIC and ISCO standards.

To date, the statistical institutions reported that they have made progress in updating their classification systems and intend to apply them to the household surveys. In El Salvador, DIGESTYC updated CNOES and is finalizing the updating of CLAESS. In Guatemala, OCSE *Empleo* updated CSO 09 but it has not yet been approved by all OCSE members. It should be noted that BANGUAT recently updated the industrial classification system, so OCSE *Empleo* did not require assistance from the project. In Honduras, CNOH 08 and CIOU4 HN were updated and published.

Sixty-two percent of the online perception survey respondents believed that the project's efforts to update the classification systems and bring them in line with ISIC and ISCO standards were effective or highly effective. Only 4 percent thought that the effort to update the classification systems was not effective.

The major challenge facing all three countries is harmonizing the various classification systems in use and ensuring that the relevant institutions use the same classifiers. The consultant providing technical assistance to the countries explained that there are two main obstacles to harmonizing and using the same classifiers. First, it is not mandatory for institutions to use the same classification systems. The second is the high cost of updating databases using the new classifiers. In the case of ONSEC, a key informant explained that the law does not permit the institution to modify its classification system because changes to the classification would change pay grades and actual salaries, which, in turn, would affect the ONSEC budget.

> *We have a classification system we have to follow by law. So, the law has to change for us to change our classification system. We do not plan to change until the law changes.*
>
> ***ONSEC Representative***

ADVANCED SAMPLING MECHANISMS AND DATA COLLECTION METHODS. The project intended to work with the statistical institutions to improve sampling and data collection procedures to bring them in line with international standards, including the ICLS resolutions and directives. The improvements included preparing guides and manuals.

> *When the project started, we already had received assistance and recommendations from CEPAL to improve our sampling. The Impaq consultant made similar recommendations. So, it was useful to know we were on the right path.*
>
> ***DIGESTYC Representative***

The project contracted the same LMI expert who provided support to the statistical institutions on the revised household surveys and classification systems to provide technical assistance and recommendations for improving sampling methodologies. The consultant reviewed the sampling and data collection procedures used by DIGESTYC and INE Honduras and made recommendations based on the United Nations Department of Statistics publication on sampling directives for household surveys.

INE Guatemala, however, declined the project's offer of technical assistance to improve its sampling and data collection procedures because it had already received technical support from the Economic Commission for Latin America and Caribbean's (ECLAC) sampling expert. During an interview with INE Guatemala, a representative told the evaluator that the institution uses adequate sampling methods and is not interested in making further changes.

DIGESTYC and INE Honduras representatives who were interviewed explained that they found the recommendations for improving sampling useful and have decided to implement most of them. However, these representatives noted that they will not implement some recommendations because they imply additional personnel costs or could result in affecting how data are collected and reported, making it difficult to make comparisons with previous household surveys using different sampling procedures.

Despite the problems that the statistical institutions face trying to implement the recommendations to improve their sampling methodologies, nearly 56 percent of the online perception survey respondents thought the project's effort at improving sampling was effective, while 25 percent thought it was less effective (20 percent) nor not effective at all (5 percent). There was very modest variation between countries (3-4 percent).

FORMAL AGREEMENTS SECURED WITH PUBLIC AND PRIVATE INSTITUTIONS. The formal agreements are really an administrative task that facilitates collaboration with agencies but does not directly lead to outcome achievement. Nevertheless, the project managed to sign agreements with 17 key public and private institutions, which are presented in Annex H.

COMPLETED ELECTRONIC DATA COLLECTION SYSTEMS. Originally, the project intended to develop electronic LMI data repository systems that automated the process of extracting and analyzing

data. During implementation, the project found that countries lack both data and resources to develop electronic data collection systems.

In early 2020, the project proposed and ILAB agreed to change the indicator from the *number of electronic LMI data repository systems developed* to the *number of governments receiving technical assistance to implement new electronic data collection methodologies.* According to the indicator definition, the criterion for success is that each government transitions from paper-based household surveys to electronic data collection methodologies, including computer-assisted interviewing using telephones and web-based applications.

In August 2020, INE Guatemala and INE Honduras requested support from the project to conduct the household survey by telephone due to the COVID-19 pandemic. In Guatemala, INE discussed the logistics of conducting the household survey using telephones and developed a revised survey instrument. In the end, however, INE Guatemala abandoned its attempt to conduct the telephone survey and decided to wait until 2021 to conduct a traditional paper and pencil survey.

In Honduras, the project provided technical assistance to pilot-test the survey, develop the methodological protocol, and create an enumerator manual. While INE Honduras conducted the household survey by telephone, it experienced a range of difficulties, including low response rates.[43] A high-ranking INE Honduras official explained that the institution did not have the capacity to effectively conduct the telephone survey and questioned the quality of the data collected by telephone due to the low response rate and other difficulties. INE Honduras has decided to conduct future face-to-face household surveys.

> *We had problems when we made the change to using telephones to conduct the household surveys due to COVID. The response rate was very low. We just did not have the capacity to conduct the survey using telephones, which affected data quality. We will return to face-to-face interviews.*
>
> ***INE Honduras Representative***

To help the project countries implement new electronic data collection methodologies, the project contracted an expert consultant. The consultant provided technical assistance and training to DIGESTYC and INE Honduras to troubleshoot issues both institutions were experiencing with CSPro software and to teach them basic functionalities of Survey Solutions, an open-source electronic data collection software from the World Bank. INE Guatemala declined the project's offer of technical assistance because, according to project staff, the institution has a plan to digitalize the household survey by 2025 and did not require assistance.

The project spent two days remotely connected to the INE Honduras server installing Survey Solutions and configuring the software and training their technical staff to maintain it. On the other hand, DIGESTYC did not find the introduction to Survey Solutions very helpful given institutional capacity and resources needed to make the transition to Survey Solutions.

[43] Of the 16,000 in the survey sample, only 4,000 answered the telephone call.

During interviews with representatives of the statistical institutions in each country, they noted that while the project's efforts to promote electronic data collection systems was important, the institutions lack resources to purchase the required hardware and software to transition to electronic data collection systems. In El Salvador, DIGESTYC noted that it has digitalized nearly all of the data collected by the household survey, which was made possible by UNFPA that donated smart phones and computers. In Honduras, INE representatives said they need to digitalize the household survey data but do not have the resources to purchase the necessary technologies.

> *I know the importance of using electronic data collection systems. They increase effectiveness and efficiency. I am a big believer in that. But we do not have funds to buy the data collection devices and software. We barely have enough money to conduct a survey.*
>
> ***INE Guatemala Representative***

Despite the challenges that the statistical institutions face trying to transition to electronic data collection systems, 51 percent of the online perception survey respondents thought the project's effort to improve the use of electronic data collection systems was effective, while 23 percent thought it was less effective or not effective at all. It should be noted that only 39 percent of respondents in Guatemala thought the project's effort to improve electronic data collection systems was effective. The lower rating for Guatemala likely reflects the fact that INE declined help with electronic data collection.

COMPLETED LMI TRAINING, WORKSHOPS, AND CONFERENCES. The project concentrated its LMI capacity building efforts under this output. It includes three discrete clusters of activities: 10 technical workshops, five certificate courses plus two advanced statistical courses, and four regional conferences.

The **technical workshops** were organized and implemented by a combination of the LMI project the FLACSO partners in each country. The project organized and implemented five technical workshops in each country plus two additional workshops in Guatemala. FLACSO El Salvador and FLACSO Honduras organized and implemented five workshops in their respective countries. FLACSO Guatemala organized and implemented three workshops in Guatemala. The workshops implemented by the FLACSO partners were done so in close coordination with the project.

Table 4 shows the workshop number, general workshop themes, and total number of participants for all three countries, along with their average pretest and posttest scores.

*Table 4: Technical Workshops, Themes, Number of Participants and Pre and Posttest Scores*

| Workshop | Main Theme Covered | Number of Participants | Pretest Score Percent | Posttest Score Percent |
|---|---|---|---|---|
| 1 | Survey Design | 91 | 38% | 54% |
| 2 | Household Surveys | 89 | 50% | 71% |
| 3 | Establishment Surveys | 100 | 63% | 70% |
| 4 | Classification Systems | 97 | NA | NA |
| 5 | Sampling Methodologies | 100 | 56% | 69% |
| 6 | Labor Market Indicators | 99 | NA | NA |
| 7 | Data Visualization | 97 | 65% | 75% |

| Workshop | Main Theme Covered | Number of Participants | Pretest Score Percent | Posttest Score Percent |
|---|---|---|---|---|
| 8 | Survey Data Collection | 97 | 62% | 80% |
| 9 | "R" Statistical Computing | 96 | 72% | 73% |
| 10 | LMI Systems | 42 | 60% | 65% |

The 10 technical workshops were theoretical in nature and corresponded closely to the 6 project outputs (i.e., household surveys, establishment surveys, classification systems, sampling methodologies, and electronic data collections). Each workshop generally consisted of 16 hours. On average, 96 persons distributed over the three countries participated in each workshop. The exception was the LMI workshop, which had only 42 participants, or approximately 14 per country. The majority of the workshop participants were female in El Salvador (61 percent) and Honduras (59 percent) while the majority in Guatemala were males (56 percent).

*When the workshops started to be offered online, the schedules conflicted with other job responsibilities. I would be in the middle of a class when someone would need me to sign an urgent document or attend a meeting. That was very frustrating.*

***CGAB Guatemala Representative***

To assess effectiveness, the project administered pre- and post-workshop tests. The differences in test scores are interesting. First, it should be noted that pre-test and post-test scores were not available for workshops four and six because they were not administered correctly. The average pre-test score for the other 8 workshops was 58 percent while the average post-test score was 70 percent for an average increase of 12 percent. The median pre-test score was 55 while the median post-test score was 65 (10 percent increase). The pre-test scores ranged from 37 to 84 and the post-test scores ranged from 47 to 85. There was a minimal difference noted between countries.

While one would anticipate low pre-test scores, since it was the first time many participants had been exposed to the workshop themes, the post-test scores and increases are relatively modest. This might be explained by issues that participants experienced with the schedules conflicting with job responsibilities and technology glitches stemming from the virtual nature of the workshops. It might also be explained by the range of knowledge and experience of the participants.

While the project used pre- and post-tests to assess training effectiveness, the project did not conduct post-training assessments in participants' workplaces to determine how they were using newly acquired skills and knowledge to improve LMI processes. These kinds of post-training workplace assessments would have been useful to determine whether individuals were able to apply new learnings, and if not, the reasons. This information could have helped the project adjust training content and processes.

Overall, the participants found the technical workshops to be of high quality and applicable to their work. They noted that the workshops were well designed, the content was appropriate, and the facilitators were knowledgeable in their technical area of expertise. The major complaints were that the workshops were scheduled during days and times that conflicted with many of the participants' work responsibilities and the training content was too advanced for some participants and not sufficiently advanced for others. Based on a midterm evaluation recommendation, the project started to record workshop sessions and make them available online to participants who could not attend, beginning with the seventh workshop.

The **certificate courses** were organized and implemented by FLACSO in El Salvador and Honduras and by FLACSO and URL in Guatemala. Table 5 shows the certificate course number, general course themes, total number of participants, and the number of participants who satisfactorily completed the course and received a certificate.[44]

*Table 5: Certificate Courses, Themes Covered, Numbers of Participants and Graduation Rates*

| Certificate Course | Main Course Themes Covered | Number of Participants | Number of Graduates | Graduation Rate |
|---|---|---|---|---|
| 1 | Establishment surveys, occupational and industrial classification systems, sampling and data collection, and data analysis. | 94 | 76 | 80% |
| 2 | Descriptive statistics, sampling, and data analysis. | 98 | 79 | 81% |
| 3 | Labor market policies, labor market instruments, indicators and sources, and analysis and presentation of LMI. | 94 | 73 | 78% |
| 4 | Labor market Indicators, administrative records, sampling frames, LMI visualization, and electronic data collection. | 85 | 73 | 86% |
| 5 | Labor markets, labor informality and future of work, employment, and human capital. | 94 | NA | NA |
| R 1 | R Software Course 1 | 43 | 29 | 67% |
| R 2 | R Software Course 2 | 36 | 35 | 97% |

*I participated in an R software certificate course. It was too theoretical, and we could not apply it to our situation. The course should have used local data. Another problem was that the profile of the participants was unclear. We ended up with participants with a mix of experience and skills, so the challenge was to satisfy all levels.*

***Guatemala Ministry of Economy Representative***

The certificate courses were more practical in nature and corresponded more generally to the six project outputs. The hours required to complete the course depends on the university requirements for accreditation. UCA in El Salvador requires 80 hours while UVG in Guatemala and UNAH in Honduras requires 65 hours and 90 hours, respectively.

On average, 93 persons distributed over the three countries participated in each certificate course. The exceptions were the two R software courses that had an average of 40 participants.

The average graduation rate was 81 percent for the five certificate courses. However, nearly 100% of the participants in El Salvador graduated while between 70 percent and 75 percent from Guatemala and Honduras graduated. Only 67 percent graduated from the first R software course while 97 percent graduated from the second course. Fifty-eight percent of the certificate course participants were female while 42 percent were male.

[44] At the time of the evaluation, the project was in the process of offering the fifth certificate course and thus, graduation rates were not available.

*The course on survey design was especially useful. My institution conducts placement surveys to gather information on our students who were placed with businesses. I learned how to design a survey, structure the questions, and present the results. This was very helpful in my work.*

***ITCA Representative***

The majority of course participants believe that the courses were well designed and implemented. The course content was appropriate and applicable to their work and the facilitators who taught the courses were highly knowledgeable. Seventy-one percent of the online perceptions survey respondents rated the project's capacity building training as effective or highly effective. Another 12 percent rated it as somewhat effective. None of the respondents rated the training as not effective.

Overall, according to course participants, the scheduling made it difficult to sustain participation over the entire course period, especially given the high demand placed on participants to carry out their daily job responsibilities.[45] Another concern mentioned in interviews is that course content was either too advanced or not advanced enough for participants.[46] This was likely the case with the first R software course where only 67 percent of participants graduated.

*I had to miss a couple of classes due to a conflict with my job responsibilities. When I tried to get the course materials to make up the missed classes, the course facilitator would not give me the materials because it was against policy. So, I had to drop out of the course. The project needs to find a way to allow participants to make up classes.*

***DIGESTYC Representative***

As discussed under the workshops, to help ensure the training content was meeting participants' needs, the project started to consult former participants to solicit input to help design future courses. According to one of the project's partners responsible for delivering the certificate courses, the input from participants resulted in a course with a very general and diverse set of modules that were difficult to teach. In hindsight, the representative pointed out that it would have been more useful to consult the institutions (i.e., conduct an adequate training diagnostic) to help determine learning objectives that help the course participants perform their jobs more effectively.

In addition to the technical workshops and certificate courses, the project organized three **regional conferences** for its key stakeholders. The first conference was held October 10-19, 2019, during the 20th ICLS conference in Geneva. The project organized meetings between ICLS sessions to discuss how to implement the ICLS recommendations. The second conference, hosted by FLACSO in El Salvador from January 29 to 31, 2020, focused on LMI. The third conference was hosted virtually by AIR and FLASCO Honduras and focused on the challenges of collecting and reporting on LMI in the COVID-19 context. At the time of the evaluation, a fourth conference had not taken place. It was planned for March 21-23, 2022, to be hosted by URL Guatemala and intended to cover the effect of COVID-19 on regional labor markets as well as changes countries made to surveys to adjust to the pandemic.

The first conference provided the participants with the opportunity to meet key personnel from the ILO, the United Nations Economic Commission for Latin America and the Caribbean (ECLAC), and INEC and discuss how to implement ICLS recommendations. The second conference allowed participants to meet and network with a range of government, academic

[45] Because these were university courses, they had to comply with the requirements of the implementing institution. Unfortunately, the project could not unilaterally change these requirements.

[46] To address this concern, the project started to offer beginning and advanced level statistics (R) courses.

and private sector actors from all three countries. According to the participants, the opportunity to network with colleagues from other countries was especially enriching. However, once the conference moved to a virtual format, due to the COVID-19 pandemic, the face-to-face networking was lost. The participants noted that while still relevant, the virtual conferences were less effective and interesting than the face-to-face conferences.

### 3.3.3. QUALITY OF LABOR MARKET INFORMATION

The primary source of LMI in all three countries is the household survey. In general, the stakeholders that were interviewed opined that while the quality of data collected by the household surveys is not high, it is of acceptable quality. Representatives from the statistical institutions said that with technical assistance from the LMI project and other international organizations like the ILO, improvements have been made in the survey instruments, sampling methodologies and data collection, and occupational and industrial classification systems. These improvements have helped improve the quality of information.

Sixty-three percent of the online perception survey respondents thought the project's effort to improve the quality of labor market data in all three countries was effective, while 22 percent thought the effort was somewhat effective. Only 1.6 percent responded that the effort was not effective.

However, the same stakeholders, as well as project staff, noted that other factors that were beyond the scope of the project affect data quality. These include the sample frames and sizes, administration of the household surveys by the enumerators, and timeliness in processing and publishing the results of the surveys.[47] Labor ministry and statistical institution staff explained that the size of the samples should be increased, but the institutions did not have the funds.

In Honduras, the Secretariat of Labor and Social Security (STSS) and INE representatives said that the current sample size of 7,200 should be increased to 30,000 and that household survey is only covering 16 of 18 departments, but due to a lack of funding and capacity, increasing the sample is not possible. In El Salvador, the sample frame is based on the outdated 2007 Census.

Due to a concern that sampled households fail to represent the full socio-economic spectrum of the population, ECLAC recommended restructuring the sampling frame based on a new population census. The ECLAC recommendations cannot be implemented until a new census is conducted. And in Guatemala, INE uses a sample frame based on the outdated 2002 census. While a new census was conducted in 2018, the results have not been accepted by the government and cannot be used to restructure the sample frame.

Another issue mentioned by stakeholders and project staff is how the survey instruments are administered. Stakeholders in all three countries explained that the statistical institutions do not have the resources to properly train and supervise enumerators and conduct data quality checks. In the Project countries, the lack of security in neighborhoods affected by gang violence and crime might deter enumerators from entering to administer the survey. An issue identified by a labor market assessment conducted by the project is that the lack of security in some neighborhoods in El Salvador endangers enumerators who carry tablets or other digital data collection tools.[48]

[47] To address the administration of the survey, the project trained enumerators in El Salvador,

[48] Labor Market Assessment and Action Plan, July 2019.

Timeliness of the household survey results, including the publication of the full datasets, is problematic in El Salvador and Honduras. In El Salvador, while DIGESTYC publishes a comprehensive survey report and key descriptive statistics one year after the survey, there can be wide variation in data publication dates. Additionally, while a subset of the household survey data is publicly posted on the institution's website, the complete household survey dataset is not released to the public. In Honduras, INE publishes key results and basic descriptive statistics from the household survey results three months after the survey. INE Honduras also publishes datasets of thematic indicators on education, labor market, poverty, and income one year after the survey but not on other key indicators. Restricting the publication of the full household survey data set was a policy implemented by the previous administration. Guatemala is the only project country where the full household survey datasets are publicly available. INE Guatemala publishes both the household survey report and the datasets in Excel and SPSS format on the INE website approximately five months after the survey.

According to project staff, it attempted to influence the various statistical institutions in each country to share data more openly but, ultimately, sharing the results of the surveys is a highly political issue and beyond the control of the project.[49]

### 3.3.4. STAKEHOLDER ENGAGEMENT

The project's main stakeholders are those public, academic, and private sector organizations that participated in and directly benefited from project interventions. These stakeholders, roles, and benefits are summarized below in Table 6.

*Table 6: Stakeholders and Roles and Benefits*

| Stakeholders | Role and Benefits |
|---|---|
| **Statistical Institutions** | The statistical institutions included DIGESTYC, INE Guatemala, and INE Honduras. These institutions received technical assistance from the project to revise the household surveys to align them with international standards. The project also worked with the statistical institutions to update the occupational and industrial classifications systems and align them with international standards. DIGESTYC and INE Honduras received technical assistance to improve sampling methodologies and implementation of electronic data collection systems. INE Guatemala declined assistance from the project to improve its sampling methodologies and electronic data collection systems. |
| **Ministries of Labor** | The labor ministries, especially the labor market observatories, are important users of LMI, especially the household surveys.[50] Labor ministry representatives participated in the updates to the classification systems and steering committee meetings. While the labor market observatories in Guatemala and Honduras reported that they benefitted from the project's efforts to improve LMI, the MTPS in El Salvador commented that the project did not do enough to help it develop its new LMI system (SIMEL) such as providing computers and software.[51] In addition, when INE Guatemala declined support to improve electronic data collection methodologies, the project provided a one-day workshop to MINTRAB on the use of technologies to collect and manage data. |

[49] Publishing survey data, such as employment rates, can be considered politically damaging to administrations who promised to improve employment.

[50] In El Salvador, the name was changed from the Labor Market Observatory to the Labor Market Intelligence Unit (UIMEL) at the end of 2019.

[51] It should be noted that ILAB did not permit AIR to purchase computers and software.

| Stakeholders | Role and Benefits |
|---|---|
| **Local Partner Institutions** | The project's local partner institutions included FLACSO in El Salvador and Honduras and URL in Guatemala. The local partner institutions took primary responsibility for working with AIR to design, organize and deliver training courses. They also hosted regional conferences and provided the project team with contacts, meeting space, and occasional technical assistance. These academic institutions have the methodologies, materials, and experience to continue providing training if they can find resources. |
| **Universities** | The universities included UCA in El Salvador, UNAH in Honduras, and UVG and URL in Guatemala. The universities agreed to warehouse the data collected by the establishment surveys and receive the establishment survey methodologies and tools so they might be able to conduct future establishment surveys if resources are available. In addition, UCA participated in the food and beverage establishment survey because the relevant business association, ASI, declined to participate. |
| **Vocational Training Institutions** | The technical and vocational training institutions included ITCA and INSAFORP in El Salvador, INTECAP in Guatemala, and INFOP in Honduras. These institutions participated in the steering committee meetings and the workshops and certificate courses. They benefitted from newly acquired LMI skills and knowledge. Institution representatives acknowledged the focus of the project was improving the quality of LMI and, thus, did not focus on the use of LMI to inform educational and vocational offerings. |
| **Business Associations** | The business associations included CASATUR, INGUAT, CIG, and CGAB and COHEP, CANATURH, and ANDI. The business associations played an important role by working with their respective sector establishments to explain the purpose of the survey and to follow up with them to ensure adequate response rates. While the business associations disseminated the results of the surveys to the establishments that participated, it was not clear to the evaluator how the results will be used. INGUAT intends to repeat the survey for at least more two years, but the other business associations do not have the resources to continue. |

Nearly 64 percent of the online survey respondents believe that the statistical institutions participated at a moderate or moderate high level, compared to 55 percent who believe the same of universities' participation, and 47 percent for ministries. Only 30 percent of respondents believe that the private sector participated at a moderate or moderate high level.

In addition to the primary stakeholders listed in Table 6, there are other key institutions that are important generators and users of LMI that did not participate or participated infrequently. According to the project's primary stakeholders, it would have been useful to have their participation, especially during the discussion on updating and harmonizing occupational and industrial classifiers. These include Salvadoran Institute of Social Security (ISSS), the Guatemala Institute of Social Security (IGSS), and Honduras Revenue Administration Service (SAR).

### 3.3.5. IMPLEMENTATION OF MIDTERM EVALUATION RECOMMENDATIONS

In general, the project found the midterm evaluation recommendations useful and agreed to implement them. Table 7 provides an assessment of the midterm evaluation recommendations that includes how the project addressed the recommendations and the effect that the recommendations had on project achievements.

*Table 7: An Assessment of the Effect of Midterm Evaluation Recommendation on Project Achievements*

| Recommendation | Recommendation Effect on Achievements |
|---|---|
| All LMI stakeholder institutions within countries should focus on creating a collaborative environment and creating formal agreements *among* themselves including key department and municipal level LMI stakeholders. | The midterm evaluation recommended that stakeholder institutions sign formal agreements among one another and extend institutional relationships and agreements to regional (department and municipal levels) LMI stakeholders. The project decided it did not have the scope nor resources to expand interinstitutional relationships to the departments and municipal levels. Formal agreements between key LMI institutions were never signed because the project determined it did not have the authority to force LMI institutions to sign agreements among themselves. Rather, it opted to encourage interinstitutional collaboration through the steering committees and other activities. This was a highly effective approach. |
| Implementers should continue building the capacity of staff across key organizations to design, understand, and use LMI systems, and eventually transition these activities to stakeholder institutions. | The midterm evaluation specifically recommended three steps to improve training effectiveness: focus on applied technical training and additional statistical software training (i.e., R software); improve the match between participant needs and course materials; and record training sessions so they are available to some participants unable to attend all sessions.<br>To address the recommendations, the project adjusted the certificate courses to include applied technical training approaches and more advanced topics such as R software, surveyed past training participants to learn how to adjust training content to respond to participant needs, and developed a free and open-source repository which hosts project training materials.<br>The applied technical training in the certificate courses including the R software were mentioned by participants in interviews as important and helpful changes. The repository that hosts training materials was also noted as a good idea but few participants that the evaluator interviewed took advantage of the repository. Finally, the mismatch between participant skill and knowledge level and the training content remains a problem according to some interviewees. |
| Implementers should maintain the involvement of agency heads in the project through high-level meetings. | Based on this recommendation, the project reported that it promoted high-level meetings involving agency heads, mainly around the classification systems output. During the final evaluation, the directors of the statistical institutions confirmed that they often participate in project meetings. However, the participation of the other institutions such as labor ministries, central banks, and social security agencies included section or department directors but not the actual heads of these agencies. One project weakness noted by statistical institution representatives is that the project lacked a main ministry that had convening power that could bring agency heads together for key meetings. The statistical institutions do not have strong convening power. |
| When there is an administration change, implementers need to conduct introductory meetings with new political appointees to help them understand project goals and the importance of LMI systems. | The project reported that it held introductory meetings with new political appointees following every administration change since the midterm evaluation including the president of the Central Bank in El Salvador, Head of El Salvador's LMI system (SIMEL), Vice-Minister of Social Security and Employment at the Ministry of Labor and Social Welfare (MINTRAB Guatemala). This is an important and necessary practice to ensure new key personnel (political appointees) are aware of the project and are willing to support project activities and interventions. |

| Recommendation | Recommendation Effect on Achievements |
|---|---|
| Implementers should continue to anchor project activities in statistical bureaus, ministries of labor, industry representatives, and universities. | The midterm evaluation notes that most project activities are anchored in institutions such as the statistical institutions, university partners, and business associations. It also notes that funding for the establishment surveys is not yet identified and should be a priority for the project. While the project has transferred the establishment survey methodology and tools to partner universities in all three countries and these universities have agreed to store the survey data, none of the universities have identified resources to continue to implement establishment surveys once the project ends. |
| Implementers should use the media to promote project outputs and highlight accomplishments. | The midterm evaluation notes that using media to promote the project to the public and the business community can create trust in the data collection efforts and elevate LMI systems as a national priority. It also notes that AIR and FLACSO should work with LMI users and project beneficiaries, including government institutions, technical training institutes, students, employers, and employees to disseminate the accomplishments of the project to build awareness and enthusiasm, creating demand for high-quality LMI data.<br>To address this recommendation, the project used media, including social media, to disseminate the results of the establishment surveys in Guatemala and Honduras. However, while important steps, it is unlikely that these modest efforts created trust in data collection and elevated LMI as a national priority in Guatemala and Honduras. Furthermore, the project did not reach the point where it worked with project beneficiaries/stakeholders to disseminate accomplishments that created demand for high-quality LMI. |
| Donors should support data-driven cultures in stakeholder institutions to impact related policy. | While the project reported that it responded to this recommendation by its activities that were designed to support data-driven cultures and statistical rigor in stakeholder institutions, in the opinion of the evaluator, this recommendation is intended for donors or international cooperation agencies that support LMI initiatives (i.e., ILO, IOM, World Bank, USAID, AECID). While ILAB has not traditionally addressed LMI, it could be an interesting future focus. The spirit of the recommendation is the international cooperation organizations should promote robust LMI systems, which are essential for policymakers, employers, and workers. |

### 3.3.6. REVISED HOUSEHOLD SURVEYS AND VULNERABLE AND UNDERSERVED COMMUNITIES

The revision of the household surveys did not specifically intend to capture labor market information on vulnerable or underserved groups. The revisions were intended to align the employment and income sections of the survey instruments with the resolutions and directives of the ICLS, especially the 19th and 20th conferences. The revised household survey instruments should capture more accurate LMI from all socio-economic groups in the sample frame.

A well-conceived and designed sample frame should include vulnerable and underserved communities to ensure they are accurately represented in the survey results. As discussed in Section 3.3.5, The project made recommendations to bring sampling methodology in line with ICLS standards and countries accepted the majority of the recommendations. In El Salvador, the sample frame is based on an obsolete 2007 population census that is likely causing some groups to be over or underrepresented. In Guatemala, the sample frame is based on the obsolete 2002 census. While Guatemala conducted a census in 2018, the results have not been officially accepted and published. Furthermore, Guatemala refused technical assistance from the project to improve its sample frame.

DIVERSITY, EQUITY, INCLUSION, AND ACCESSABILITY PRINCIPLES. Diversity, Equity, Inclusion, and Accessibility (DEI&A) is a term used by organizations and training programs that attempt to

ensure all people, regardless of race, gender, or other demographic attribute, can succeed in an organization.[52,53]

The LMI project interventions were specifically designed to respond to the outcomes and outputs in the FOA, which are mainly focused on improving the quality of LMI and its use. Since the FOA did not request the project to specifically address DEI&A principles in the revisions to the household surveys, it did not. As explained under the discussion of vulnerable and underserved populations, the project worked with the statistical institutions to revise the employment and income sections of household survey instruments to align them with ICLS resolutions and directives with the aim of collecting more accurate LMI.

USE OF HOUSEHOLD SURVEY DATA. While the project focused two workshops on constructing labor market indicators and creating visualizations to disseminate LMI to general audiences, most of the training was focused on improving the quality of LMI. As discussed previously, over time the project shifted from a relatively well-balanced LMI exchange approach to one heavily focused on improving the quality of LMI to meet the needs of the countries. This was done with OTLA's approval.

As already stated, each country disseminates the household survey results differently. In El Salvador, DIGESTYC publishes a comprehensive survey report and key descriptive statistics one year after the survey, but only releases a subset of the complete household survey datasets to the public. In Honduras, INE publishes key results and basic descriptive statistics from the household survey results three months after the survey as well as datasets of some thematic indicators but not on others. Like El Salvador, Honduras does not make complete household survey datasets available to the public. Guatemala is the only project country that publishes the full household survey datasets publicly, though not always in a timely manner.

Although the statistical institutions in each country publish the results of the household surveys in one form or another, it is not entirely clear if or how the results are used by key LMI actors. Both academic and private sector representatives who were interviewed complained that government decisionmakers do not use scientific LMI to inform employment or workforce development policies. Most stakeholders who were interviewed acknowledged that jobseekers, youth, and underserved communities do not use the household survey results because they are not available to the public in user-friendly formats.

The labor ministries in each country have some form of virtual labor market exchange system. MTPS in El Salvador has the recently developed LMI system referred to as SIMEL, while the STSS in Honduras uses "Get Employed". In Guatemala, MINTRAB has the National Employment System. None of these labor exchange systems are considered highly effective, primarily because the input of LMI is weak. For example, MTPS claims its SIMEL is one of the best labor market exchange systems in the world and can compete with any from Europe.[54] An ILO consultant who was involved in its development explained that the SIMEL software is very powerful and of world class caliber but is only as effective as the information input, which is lacking. This would seem to support the project's decision to focus on improving the quality of LMI.

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[52] https://en.wikipedia.org/wiki/Diversity,_equity,_and_inclusion

[53] *Government-Wide Diversity and Inclusion Strategic Plan 2011: https://www.opm.gov/policy-data-oversight/diversity-and-inclusion/reports/governmentwidedistrategicplan.pdf*

[54] Interview with the Ministry of Labor on El Salvador morning news program, Channel 12.

## 3.4. EFFICIENCY

This section answers the following two evaluation questions:

| Efficiency Questions |
|---|
| Was the four-year timeline and budget adequate to achieve the objectives, outcomes, and outputs? What can ILAB and AIR learn about the level of change that can realistically be achieved within a given project timeframe, budget, and country context like the LMI project? |
| Was the project implemented in the most cost-effective manner possible or could it have been implemented more efficiently? What factors, if any, facilitated or hindered efficiency? |

### 3.4.1. ADEQUACY OF PROJECT TIMELINE AND BUDGET

The LMI project was initially designed as a four-year, USD 4 million dollar. Project modification #2 added an addition USD 345,000 while project modification #3 added an additional year of implementation. Project staff and implementing partners noted that while the initial four-year timeline, USD 4 million budget was not adequate, the modifications that increased the budget to USD 4.345 million over five years were adequate to achieve the outputs. However, some project staff and OTLA managers noted that more resources would have allowed the project to conduct more establishment surveys in other important sectors.

Based on comments made by several key stakeholders as well as the evaluator's experience evaluating ILAB projects, one thing that can be learned regarding the level of change that can be realistically achieved within a given project timeframe, budget, and country context is that there is a strong correlation between the pace of implementing activities and achieving outputs and the capacity and pace of project counterparts. This is especially true for policy and capacity building projects that typically do not involve large capital outlays for materials and equipment.

> *I have worked with quite a few donor projects. What USDOL should do is plan on national elections that fall within a project's implementation period and assume there will delays and disruptions of activities when administrations change. This should be planned in the project's timeline.*
>
> ***Guatemala Ministry of Labor Representative***

Inevitably, during most project life cycles, there will be turnover of key staff driven by elections and changes of administration or personnel changes that government ministries decide to make. Furthermore, counterpart staff generally have heavy demand on their time, making it difficult to participate in capacity building activities, coordination meetings, and other key activities. ILAB and its implementers might anticipate movements and availability of personnel during project design (target setting) and the development of workplans. Furthermore, when ILAB anticipates personnel changes, high staff turnover, and competing demands on staff to participate in trainings and meetings, it might consider extending the project timeline.

Another thing that can be learned is that while most ILAB projects are able to meet output targets such number of training events, numbers of people trained, materials produced and so forth, the typical four-to-five-year timeline is often too short to measure the effects or the extent to which project beneficiaries apply new knowledge, skills, or materials to their work and the differences those effects make in achieving objectives.

### 3.4.2. FACTORS THAT AFFECTED PROJECT EFFICIENCY

Overall, the project operated in an efficient manner. It produced outputs and achieved outcome indicator targets with the planned amount of human and financial resources. According to the online perception survey, 48 percent of respondents believe the project

operated in a cost-effective or highly cost-effective manner while 13 percent thought it operated in a somewhat cost-effective manner. However, 38 percent reported that they did not know.

There were events that have created both efficiencies and inefficiencies as summarized below.

TRAVEL TO THE REGION. During the early stages of the project, AIR staff based in the US made frequent scoping missions to meet potential project partners and counterparts, explain the project and enlist their support and willingness to participate, and conduct training. AIR staff acknowledge that these frequent trips were costly and created inefficiencies.

COVID-19. The COVID-19 pandemic caused both inefficiencies and efficiencies. Once the pandemic started to spread to project countries in January 2020, the project paused activities and consulted with ILAB as to whether the project should be cancelled. AIR and ILAB eventually decided to continue to implement activities remotely, including virtual meetings and trainings to protect project staff and other key project stakeholders. However, the pause caused delays, which created a certain degree of inefficiency. On the other hand, the decision to conduct meetings remotely and virtual trainings increased efficiency as discussed below

REMOTE AND VIRTUAL ACTIVITIES. Rather than traveling to the region, US-based AIR staff conducted meetings with regional staff, partners, and other stakeholders using Zoom and Microsoft Teams. Likewise, instead of conducting face-to-face training events and technical assistance sessions, the academic partners and LMI consultants conducted virtual workshops and certificate programs and provided remote technical advice. While some project stakeholders said that the remote and virtual formats were less effective, nearly all agreed that they increased efficiency.

TECHNOLOGY GLITCHES. While moving key project activities to remote and virtual formats created efficiency, technology glitches - especially during the workshops and certificate programs - caused inefficiencies. During interviews with training participants, some noted that weak signals and low bandwidth sometimes made it difficult to see and hear the training facilitators. They had to disconnect and reconnect, meaning they missed parts of modules. A few training participants explained that they decided to drop out of the training events due to technology problems they encountered. However, it should be noted that these technology glitches were not the responsibility of the project.

KEY COUNTERPART STAFF TURNOVER. Turnover among government stakeholders caused levels of inefficiency because project activities could not continue under new leadership until the project met the leadership to explain the purpose of the project and reach an agreement to continue. Turnover of key technical positions meant that some of project's investment in technical assistance and training to those individuals was lost.

The project experienced turnover in both El Salvador and Guatemala. In El Salvador, the project signed an agreement and started implementation under the previous administration. Once the new president was elected in 2019, the project had to restart relations with the new Minister of Labor and his vice minister and senior advisors in the process of the transition, MTPS eliminated the labor market observatory and created a new unit of labor market intelligence to operate the LMI system, called SIMEL. In 2021 the vice minister changed again. The director and deputy director of DIGESTYC also changed twice: once in 2019 and again in 2021.

In Guatemala, the election in 2019 resulted in a new administration and a new Minister of Labor and new vice minister. The vice minister changed once in 2020 and again in 2021. The new Minister eliminated the labor market observatory in 2021. The director of INE Guatemala also changed in 2020. In addition, the project's main contact at UVG left the university in 2019

to become the senior advisor to the Minister of Economy. He was later promoted to vice minister in 2021.

In Honduras, key stakeholder staffing remained relatively constant. However, with the elections and change in administration in January 2022, there will be turnover of key project counterpart staff at both leadership and technical levels.

PROJECT STAFF AND PARTNER TURNOVER. The project also experienced a certain degree of turnover of key staff and subcontractors that effected efficiency. In June 2018, AIR decided to replace the project director and add two new subcontractors, MPRC and MSRC. In June 2020, the project again decided to replace the project director and to replace the two proposed subcontractors, MPRC and MSRC, with South American-based LMI consultants. In June 2020, AIR also decided to replace its Guatemala subcontractor, FLACSO Guatemala, with URL.

The project believes that, overall, the changes in the project directors and the decisions to contract the South American LMI expert consultants and replace FLACSO Guatemala with URL increased project's performance and quality of deliverables and services. On the other hand, some key project stakeholders in all three countries noted that the changes in project directors caused some implementation delays. In Guatemala, a couple of key stakeholders noted that when the project replaced the Guatemala-based project director with one based in El Salvador, coordination and communication was less efficient.[55]

## 3.5. SUSTAINABILITY

| Sustainability Questions |
|---|
| Which project outcomes and major outputs show the greatest likelihood of being sustained after project support and resources end? |
| To what extent has the project cultivated ownership, built capacity, and created or strengthened linkages to alternative resources to facilitate sustainability? How has the organizational capacity and willingness of project implementers, target institutions, and implementing partners limited or facilitated the achievement and sustainability of project outcomes? |

### 3.5.1. LIKELIHOOD OF SUSTAINING PROJECT OUTCOMES AND OUTPUTS

The likelihood of sustaining key outputs and outcomes are discussed below.

HOUSEHOLD SURVEYS. The revised household surveys in all three countries appear to be highly sustainable. The corresponding statistical institutions in each country have annual budgets and mandates to conduct the surveys. Thus, the revisions made to the surveys to bring them in line with international standards and increase both effectiveness and efficiency will likely be applied to future household surveys.

ESTABLISHMENT SURVEYS. The likelihood of sustaining the establishment surveys will be difficult in all three countries. All partner universities (UCA-El Salvador, UNAH-Honduras, and UVG-Guatemala) say that they are interested and willing to conduct future establishment surveys but do not have the financial resources. While UCA and UNAH are optimistic that they might be able to access university resources to conduct establishment surveys, these resources have not been secured at the time of this evaluation. UVG does not

> *It will be very difficult for us to sustain the establishment surveys. We have an agreement with UNAH to collaborate and the funds usually comes from donors like USAID. We can support and collaborate, but we do not have funds.*
>
> ***COHEP Representative***

[55] This can be explained, at least in part, by the fact that a Guatemala-based project director had close proximity to Guatemala stakeholders that facilitated communication. The proximity was lost when the project hired the El Salvador-based project director.

have resources to conduct future surveys. University Rafael Landívar (URL) in Guatemala initially intended to sign an agreement to conduct future surveys, but its legal department refused to sign because it would have committed the university to using resources it may not have.[56] Likewise, the business associations representing the pilot establishment survey sectors (tourism and food and beverage manufacturing) are interested in conducting future surveys. However, INGUAT is the only business association that intends to use its resources to conduct future establishment surveys in the tourism sector in Guatemala.[57]

OCCUPATIONAL AND INDUSTRIAL CLASSIFICATION SYSTEMS. Advances made to improve the occupational and industrial classification systems in all three countries and bring them in line with international standards appear to be highly sustainable. In Guatemala and Honduras, the project used existing LMI structures to update the classification systems. The project worked closely with *OCSE Empleo* to update the National Occupational Classifier referred to as CNO-2020 and the Nomenclature of Economic Activities for Guatemala (NAEG). In Honduras, COTICNOH's institutional members have agreed to accept and apply changes to its classification system (CNOH 2018 and CIIU4) that bring it in compliance with international standards. In El Salvador, DIGESTYC updated its national occupational classification system (CNOES 2020) and is in the process of updating the industrial classification system (CLAEES). Most survey respondents in El Salvador and Honduras consider the LMI project was effective in updating the classification systems. Most online respondents think it is probable that these efforts are sustainable. While the evaluator agrees, the challenge in all three countries is to unify and harmonize the classification systems so key LMI institutions use the same classifiers.

ADVANCED SAMPLING AND DATA COLLECTION PROCEDURES AND MANUALS**.** The project made recommendations to the statistical institutions in each country to improve the household survey sampling and data collection procedures. DIGESTYC in El Salvador and INE in Honduras implemented some of the recommendations but not others because they lack resources. The improvements made to the sampling and data collection methodologies should improve the quality of data and are sustainable. In Guatemala, INE declined the project's technical support to improve its sampling methodologies.

ELECTRONIC DATA COLLECTION SYSTEMS. The project provided technical assistance including recommendations to increase the use of electronic data collection systems to improve the effectiveness and efficiency of the household survey data collection and analysis. In Honduras, the project provided technical assistance to INE to install Survey Solutions and provided training to its staff on how to use the software and thus sustainability is likely. On the other hand, the likelihood of sustaining the use of electronic systems in El Salvador is medium-low because while it is interested in and willing to use electronic systems, it lacks the resources to purchase the required hardware. [58] The likelihood of increasing and sustaining the use of electronic data collection systems in Guatemala is low because INE does not have the interest or funds.

LMI CAPACITY BUILDING**.** The likelihood of sustaining the LMI capacity building (technical workshops and LMI certificate programs) is relatively low in all three countries. FLACSO El Salvador and Honduras and URL are willing to continue to provide training and have developed the methodologies, materials, and expertise but lack the required resources.

The online perception survey results support the notion that, overall, respondents are optimistic the interventions can be sustained. Between 64 percent and 67 percent of the

[56] The information ascertained during an interview with URL strongly suggested that the agreement would not be signed. However, the project believes the agreement will be signed before the end of the project.

[57] INGUAT is funded through tourism taxes.

[58] DIGESTYC in El Salvador are currently using smart phones donated by UNFPA to collect some household survey data but do not have the resources to expand the use or adopt other electronic data collection systems.

respondents believe the revised household surveys, occupational and industrial classification systems, and improved sampling methodologies will be sustained. Fifty-nine percent thought that the advances made in using electronic data collection systems would be sustained. While still optimistic, fewer respondents, about 50 percent, believe the establishment surveys and LMI training will be sustained.

### 3.5.2. FACTORS THAT FACILITATE SUSTAINABILITY

USAID's Food for Peace Office, through the FANTA project, commissioned a post project impact study to evaluate the sustainability of 12 USAID funded project in four countries.[59] The USAID study concludes with a set of factors that facilitate long-term sustainability. Three of the most important and inter-related factors that are relevant to the LMI project include Identifying cash or in-kind resources to replace resources provided by the project; building the management and technical capacity of partners (both organizational and individual) to continue to implement activities; maintaining high levels of partner and beneficiary motivation and ownership; and creating linkages to public and private sector entities that might support sustainability. These four factors are discussed below.[60]

- **Replacement resources.** The discussion in the previous section noted that one of the primary reasons that key outcomes and outputs, such as the establishment surveys, electronic data collection systems, and LMI capacity building, will likely not be sustained is due to a lack of resources. The original project design and subsequent project modifications did not include strategies to increase or generate resources to sustain outcomes and outputs such as public private partnerships, which is a missed opportunity and an important lesson for future projects that is discussed in Section 4.1.
- **Capacity building.** The project invested heavily in a variety of capacity building activities aimed at increasing LMI technical skills. There are two main threats to sustaining the LMI capacity building gains. First, there is a relatively high turnover of technical staff in the statistical institutions. Second, to remain current, the technical knowledge and skill gains will require reinforcement training. If LMI capacity building activities cannot be sustained, as suggested in the previous section, technical knowledge and skill gains will likely not be sustained in the medium to long term.
- **Motivation and ownership**. Motivation and ownership translate into willingness to sustain key outcomes and outputs. The sustainability analysis in the previous section shows that the project successfully cultivated ownership of most key project partners such as the statistical institutions, academic institutions, and business associations that contributed to interest and willingness to sustain outcomes and outputs. The exceptions are INE and URL in Guatemala, where institutional willingness is low.
- **Linkages**. Network linkages were created among participants of the regional conferences, among facilitators and participants of the technical workshops and certificate courses, and between institutions participating on the steering committees. While key stakeholders consider these linkages important, the evaluation did not find

[59] Sustaining Development: A Synthesis of Results from a Four-Country Study of Sustainability and Exit Strategies among Development Food Assistance Projects, Gerald J. and Dorothy R. Friedman School of Nutrition Science and Policy at Tufts University, October 2016 https://www.fantaproject.org/research/exit-strategies-ffp

[60] In-kind resources typically consist of human resources (skill sets, competencies), materials, equipment, and other physical assets such as training or conference venues.

evidence that these linkages contributed to the sustainability of the project outputs and outcomes. Furthermore, as discussed above under replacement resources, the original project design and subsequent project modifications did not include strategies to link institutions to resources that could have been used to sustain key outputs and outcomes. These might have included partnerships between public and private sector actors to support future establishment surveys and LMI certificate courses.

# 4. LESSONS LEARNED AND PROMISING PRACTICES

This section describes lessons learned and promising practices OTLA and implementing partners should consider in future projects.

## 4.1. LESSONS LEARNED

1. **It is critical to match training content to the experience and skill level of participants.** To meet the needs of stakeholder staff, the project offered workshops that were more theoretical and geared toward technical staff and an accredited certificate courses that were more practical to meet the needs of a more general group of stakeholders. The project also made a midcourse correction where it consulted training graduates to ascertain suggestions to adjust future training. Nevertheless, training participants opined that there was a mismatch between training content and the experience and skill levels of the participants. Some technical staff thought the training content was too basic to meet their needs while others thought the content was too advanced. **To ensure that learning and its application is maximized, it is important to assess the experience and skill level of participants (i.e., training diagnostic) and ensure that training content meets participant needs.**
2. **It is important to adjust training schedules to accommodate the work responsibilities and ensure maximum attendance and participation.** The project transitioned from face-to-face training to remote training to avoid COVID-19 infections. For many participants, the scheduling created conflict with on-going job responsibilities because the number of hours per day and the number of days per week were too many. Fewer hours per day and fewer days per week would have been more effective. Also, offering training session during non-peak business hours, such as mid-morning and early afternoon, would have been more convenient. Based on a midterm evaluation recommendation, **the project started to record training sessions and make them available online to participants who could not attend.** This is another option that future project might consider when participant work responsibilities conflict with training schedules.
3. **Establishment surveys require trusted actors such as business associations to coordinate the survey and follow-up with establishments to ensure acceptable questionnaire response rates.** As documented in the FOA and project document, there exists a mistrust between the public and private sectors in the project countries. In the past, this mistrust has impeded the willingness of businesses to participate in surveys conducted by government institutions. **The project involved the main business associations of each sector to explain the purpose of the survey to its members and encourage them to fill out the questionnaire, which significantly increased the survey response rate.**
4. **Institutional limitations, especially the lack of financial resources reduces the chances of sustaining key outputs and outcomes.** The likelihood of sustaining key project outputs including the establishment surveys, advanced sampling methodologies,

electronic data collection systems, and LMI capacity building (workshops and certificate courses) is considered low or medium low due primarily to a lack of financial resources or political willingness. **In all three countries, LMI institutions do not have the resources in their budgets to sustain these outputs**. In Guatemala, a lack of political willingness seems to be the main reason that advanced sampling methodologies will not be sustained.

5. **The project's performance indicators did not entirely capture the achievement of the outcomes**. The project developed a set of performance indicators to measure the achievement of the outcomes. ILAB approved the indicators. However, the indicators did not measure all of the dimensions of the outcome statements. For example, while Outcome 1 includes seven indicators that reflect the project's outputs (revised household surveys, establishment surveys, etc.) **it is not clear whether governments are publishing reliable, comprehensive, and current LMI in user-friendly formats for the general public and professional audiences** (Outcome 1).
6. **While each country has a labor market exchange system, they are not considered effective because the labor market information that feed the systems is weak**. El Salvador, Guatemala, and Honduras have some form of a LMI system. Nevertheless, according to experts, these systems are not highly effective because the LMI that feed the systems are of poor quality and often incomplete. Thus, **an effective LMI exchange system requires high quality and complete LMI**.
7. **Countries with small labor markets with limited availability of professional may require a flexible, team approach rather than one highly qualified project director as often required by ILAB as key personnel**. The project had to replace the project director two times. According to AIR, qualified LMI professionals already were employed by government institutions, and it did not want to hire qualified away from these institutions, which as a possibility. Instead, it opted to hire less qualified project directors that did not work out. Eventually, the project decided to use a combination of a highly qualified and respected international consultant, a regionally based manager with strong government contacts, and an AIR manager with ample ILAB project experience. **Together, the team members exceeded the project director requirements and appears to have been effective in fulfilling the project director requirements**.

### 4.2. PROMISING PRACTICES

1. **Establishing project steering committees that helped create interinstitutional communication and collaboration**. The project established steering committees in each country consisting of key partner institutions in the government, academic, and private sectors. In Guatemala, an existing committee (statistical coordination office for employment) served as the steering committee. The main purpose of the committees was to guide the project to make adjustments and provide implementation advice. The steering committees provided a space for LMI institutions to share information and collaborate on important initiatives such as updating the occupational and industrial classification systems. **Prior to the project, these LMI institutions rarely met and shared information.**
2. **Building project interventions on existing institutional structures, processes, and priorities.** The project design included the strategy of working with statistical institutions to improve the household surveys. The strategy also included working with the statistical institutions and other key actors, such as the labor ministries and central

banks, to update the occupational and industrial classification systems. **Since the statistical institutions have the mandate and resources to conduct periodic household surveys, improvements to the survey instruments are highly sustainable.** Likewise, since updating the classification systems is a priority to key LMI institutions and the cost to make the changes is low, the advances to update the systems are also highly sustainable. It should also be noted that the project leveraged previous efforts supported by the ILO and other international organizations to align the household surveys and classification systems with international standards.

3. **Involving credible universities to provide accredited certificate courses**. The project worked with its academic partners to offer university accredited certificate courses covering a range of LMI topics including LMI policies and systems, establishment surveys, occupational and industrial classification systems, sampling and data collection, data analysis, and statistics. While the certificate courses experienced scheduling and technology difficulties when they were shifted from face-to-face to remote formats due to COVID-19, **receipt of a university accredited certificate upon completion of the course was highly appealing to participants and, thus, served as an important motivational factor.**
4. **Contracting respected expert consultants to provide technical assistance and build local capacity**. During the early stages of implementation, the project decided to identify and contract regional LMI expert consultants who were highly qualified, understood LMI contexts in Latin America, and spoke fluent Spanish. Overall, these LMI consultants were highly effective at providing training and technical assistance. At least one of the experts served as an ILO consultant and had a history of working with the project countries on LMI issues. Reputability of experts has helped the project gain respect and credibility. **These are key assets for effective technical assistance and buy in from government and private sector to promote local capacity building through training and use of skills at work.**

# 5. CONCLUSION

The evaluation team's conclusions, based on the findings, are organized according to the evaluation's main categories: relevance, coherence, effectiveness, efficiency, and sustainability.

## 5.1. RELEVANCE

LMI NEEDS. The LMI project was designed to address the generation and use LMI in a relatively well-balance labor market exchange approach. Over time, the project focus shifted to strengthening the generation of LMI, which is an important need and priority of LMI stakeholders in the project countries. While the project design addressed LMI needs of the countries, there remains unmet LMI needs for both the generation and the use of LMI.

ESTABLISHMENT SURVEY SECTORS. After consultation with key stakeholders, the project decided to pilot the establishment surveys in the tourism and food and beverage manufacturing sectors in each country. These satisfied the criteria that included sectors with enough establishments and sufficient organization to ascertain acceptable questionnaire response rates. While the tourism and food and beverage sectors are not the most important sectors in terms of employment, they are nevertheless important sectors and were appropriate to pilot the establishment survey in all three countries.

### 5.2. COHERENCE

COHERENCE WITH PROJECT INTERVENTIONS WITH NATIONAL AND INTERNATIONAL POLICIES AND PROGRAMS. While each country is at a different point in developing LMI systems, the project's aim to strengthen the generation of LMI is consistent with government workforce development policies and efforts in each country. The revision of the household survey instruments, advanced sampling methodologies, and updates to the occupational and industrial classification systems were consistent with international standards. The project efforts to revise the household survey instruments and update the classification systems complemented similar efforts of the ILO, World Bank, and other key international organizations.

COHERENCE WITH U.S. STRATEGIES AND POLICIES. The project was designed to support *2014 U.S. Strategy for Engagement in Central America.* The project's objective and outcomes directly support the 2014 strategy's strategic objectives to reduce poverty, professionalize civil service, and improve the quality of education. The project was originally designed to support the *U.S. Strategy to Address the Root Causes of Migration in Central America* as it preceded this strategy, which was only developed in 2021. While the LMI project interventions have remained consistent with U.S. policy to improve labor market efficiency, OTLA did not request the project to adjust its interventions to focus on labor market efficiency in underserved communities, which is a priority of the Biden administration.

### 5.3. EFFECTIVENESS

ACHIEVEMENT OF OUTCOMES. The project met or exceeded nearly all of its performance indicator targets for each outcome. However, it is not clear whether the outcomes were achieved. Outcome 1 aims to have governments publish reliable, comprehensive, and current LMI in user-friendly formats. It is too early to determine whether the project's interventions resulted in improvements to LMI because (1) the statistical institutions have not reviewed the data collected by the revised survey instruments and (2) and governments have not yet published survey results in user-friendly formats to the public. Outcome 5 aims to increase skill and knowledge of workforce development programs, employers, and policy makers on how to use LMI. The project's LMI training was highly effective. However, when the project shifted its focus from a balanced labor market exchange approach to one focused primarily improving the quality of LMI, training was largely focused on the generation of LMI and less on its use to inform policy, workplace development programs, and overall employment.

EFFECTIVENESS OF OUTPUTS. The most effective outputs were the revised household survey instruments and LMI training. The updated classification systems effectiveness was moderately high. The establishment surveys and sampling methodologies were moderately effective. The effectiveness of the electronic data collection systems was low due largely to a lack of financial resources to make improvements or, in the case of Guatemala, a lack of interest in the project's offer of assistance. The following table summarizes the evaluator's conclusion regarding the effectiveness of each output.

*Table 8: Evaluator's Conclusions on Output Effectiveness*

| Output | Low | Moderate | Above Moderate | High |
|---|---|---|---|---|
| Household Surveys | | | | High |
| Pilot Establishment Surveys | | Moderate | | |
| Classification Systems | | | Above Moderate | |
| Sampling Methods | | | Above Moderate | |
| Electronic Data Collection | | Moderate | | |
| LMI Training | | | | High |

QUALITY OF LMI. The quality of LMI is considered acceptable. The revision to the household survey instruments to align them with ICLS resolutions and directives and updating the occupational and industrial classification systems to meet ISIC and ISCO standards should improve the quality of the household survey data. However, more time is needed to assess the effects of the outputs on the quality of the LMI.

STAKEHOLDER ENGAGEMENT. The statistical institutions collaborated closely with the project to revise the household survey instruments. While DIGESTYC in El Salvador and INE in Honduras implemented many of the recommendations to improve survey sampling methods, INE Guatemala declined assistance. The statistical institutions, labor ministries, central banks, and some private sector actors participated in updating the occupational and industrial classification systems. The university partners in all three countries agreed to store the establishment survey data and receive the methodology and tools so the surveys might be continued in the future. Key business associations supported the two establishment surveys. However, some key generators and users of LMI, such as some social security agencies and revenue authorities, did not actively participate in the project.[61]

VULNERABLE AND UNDERSERVED COMMUNITIES. The employment and income sections of the household surveys were revised to meet ICLS resolutions and directives. They were not revised to specifically capture labor market information on vulnerable or underserved groups or to address DEI&A principles because they are not the appropriate tools to collect this information. However, the revised household survey instruments should capture more accurate LMI from all socio-economic groups in the sample frame.

### 5.4. EFFICIENCY

PROJECT BUDGET AND TIMEFRAME. The project was modified to increase the budget to USD 4.345 and the timeframe from four to five years. The increases in the budget and timeframe were adequate to achieve the outputs.

COST EFFICIENCY FACTORS. Overall, the project was implemented in a cost-effective manner. However, there were factors that affect efficiency. For example, once the COVID-19 pandemic started, the project paused activities to determine how to respond, which caused delays that, in turn, created inefficiencies. The decision to implement activities remotely including virtual meetings and trainings to protect project staff and stakeholders created efficiency. Other factors that caused inefficiencies included technology glitches during the training events and turnover of both project and key stakeholder staff.

[61] The social security agency in Honduras (IHSS) participated but, according to project stakeholders, the participation was limited.

### 5.5. SUSTAINABILITY

LIKELIHOOD OF SUSTAINABILITY. The revisions to the household surveys and the updates made to the occupational and industrial classification systems in all countries will likely be sustained once the project ends. The advanced sampling and data collection procedures in El Salvador and Honduras will also likely be sustained. On the other hand, the establishment surveys, LMI training, and electronic data collection systems in El Salvador and Honduras will be difficult to sustain. While willingness to sustain these outputs is high, the ability is low because the institutions do not have sufficient financial or human resources.

## 6. RECOMMENDATIONS

**In future projects, ILAB might consider the following recommendations.**

1) LEARNING AND IMPROVEMENT. Consider incremental project approaches where components, interventions, or expansions and their funding are phased in over periods of time based on progress, achievements, and learning.

   The project would have benefitted from a longer implementation period so it could assess effect level changes such as improved data from changes in the household survey instruments. It would have also benefitted from starting at a smaller scale so it could gain experience and learn and then expand incorporating lessons learned to improve its effectiveness. One way to achieve this would be to use an incremental approach where components, interventions, geographical expansions, and technology transfers, are phased in over time. The criteria ILAB could use to provide funding to move from one phase to the next might include progress milestones, achievements of key performance indicators, or key deliverables. Key learnings should be incorporated into the next phase.

2) PROJECT DESIGN INFORMATION. Consider implementing a rigorous and structured approach to ascertain the information needed to design effective projects and provide accurate and up-to-date information in the FOAs regarding operating contexts.

   ILAB staff conducted scoping missions to El Salvador, Guatemala, and Honduras to ascertain information to design the LMI project. The scoping mission was a valuable exercise that, by all accounts, improved the project design and documented key LMI issues that each country faces. However, the scoping missions missed documenting key information that would have improved the project's design such as the hesitancy of the private sector to share information with the government, which is critical for establishment surveys; the lack of interest of the statistical institution in Guatemala to receive assistance from the project on sampling methodologies and electronic data collection systems; and the lack of resources that the statistical institutions and the universities have to implement national establishment surveys.

   One of the major challenges that ILAB faces is the short period of time between when ILAB knows funds will be available and the time when the funding FOA has to be published, which is sometimes only 2-3 months. To address this challenge, ILAB recently incorporated a clause in its agreements with its grantees that allows them to modify the project design based on information they might obtain from scoping missions and assessments. While this clause can be considered a good practice and should be maintained, critical information and a thorough understanding of the environment in which a project intends to operate is crucial to designing effective projects.

Thus, ILAB should consider requiring its staff responsible for project design to carry-out a rigorous and structured approach to gather information to inform project design. For example: (1) whether resources exist to sustain interventions (establishment surveys and electronic data collection systems); legal obstacles to implementing interventions (law not allowing changes to occupational classification systems); and unwillingness to provide information (private sector unwilling to provide data to government for establishment surveys).

ILAB might use key informants in countries to help gather information virtually. For example, in Mexico and Central America, ILAB might provide tools to U.S. Embassy labor attachés to help gather critical information. There might be other key informant experts that could be interviewed remotely. ILAB should be clear on what information is required, the best sources for that information, and how the information will be collected.

**ILAB, other U.S. Government donors, grantees might consider the following recommendations**

3) PROJECT MODIFICATIONS. Ensure that when significant changes are made to the project, the changes are reflected in project modifications and project documents. For example:

   - AIR, the grant recipient, proposed establishing virtual labor exchanges to strengthen LMI use but later abandoned the idea so it could focus on generating high quality LMI. This change in the outcome should have been reflected in a project modification and project document.

   - To address the fact that the private sector in all three countries is reluctant to share information with the government and that the statistical institutions do not have resources to conduct establishment surveys, AIR requested and OTLA agreed to change performance indicator 1.2 from governments adopting the establishment surveys to local institutions adopting the surveys. These changes should have been reflected in a project modification and project document.

4) TRAINING NEEDS ASSESSMENTS. Conduct institutional training needs assessments to ensure training is designed to build the capacity of participants to perform their job responsibilities and match the participant's experience and skill level.

   The LMI project offered technical workshops and certificate courses based on the project's outputs suggested by OTLA in the FOA and, subsequently, committed to by AIR in the project document. While these were adjusted during early scoping missions, the project did not conduct a training needs assessment to match training topics and learning objectives to participant job responsibilities and needs. This, at times, resulted in training content that was either too advanced or not advanced enough and that was not always linked to actual job responsibilities. To ensure training is directly linked to improving job performance, which should increase the use of the new skills and knowledge, future ILAB projects should conduct institutional training needs assessments where, within the scope of the project, supervisors at the institutions provide input to the kind of skills and knowledge potential training participants require to improve job performance. This information should be used to design the trainings, set, and evaluate individual learning objectives, and assess how learning was applied to actual jobs.

5) VIRTUAL TRAINING. Provide virtual training and other learning programs, when appropriate, where sessions are recorded and offered online with the corresponding materials and assessments so participants can successfully complete training courses at their pace.

   One of the major concerns that training participants expressed during the midterm and final evaluations was that days and times that training was offered conflicted with work responsibilities, which meant that participants missed sessions or dropped out of the training. Based on a midterm evaluation recommendation, the project started to record training sessions and provide access to participants so, if they had to miss sessions, they could make up for them. However, the change came late in the project. To avoid infection within a pandemic context like COVID-19 or outside of a pandemic context to improve cost-effectiveness, virtual and remote learning will likely increase in the future.[62] Since training and capacity building activities are at the center of many ILAB projects, future projects should anticipate this trend and, when appropriate, provide state-of-art virtual training and other learning programs where the sessions are pre-recorded and posted online with the corresponding educational and assessment materials so participants can take classes when convenient.

6) APPLICATION OF KNOWLEDGE AND SKILLS. Conduct assessments of how individuals and institutions that received technical assistance and training are applying new knowledge and skills to achieve objectives.

   The LMI project invested heavily in LMI training including the technical workshops and certificate courses. While the project measured training effectiveness through the pre and posttests, it did not measure the extent to which participants used or applied their new skills and knowledge to improve LMI in their jobs. Where ILAB projects have a substantial training component, these projects should conduct post training assessments to determine how the participants are applying new skills and knowledge in their jobs. Ideally, participants would be assessed every six to nine months and the learning from the assessment used to improve training.

7) TEAM MANAGEMENT APPROACH. In countries with small labor markets with limited availability of qualified professionals consider a team approach to meet the requirements required personnel such the project director position.

   AIR had difficulty recruiting a qualified project director with adequate LMI experience. It opted not to hire LMI professionals away from national institutions. Rather, it recruited less qualified project managers that did not work out. Thus, AIR decided to use a team approach consisting of a highly qualified LMI international consultant, a regionally based manager with strong government connections, and an experienced AIR manager. The team management team approach appears to have worked well. Thus, ILAB and its grantees might consider opting for a team approach when qualified project directors or other key personnel are not available due to labor market limitations (supply and demand for qualified professionals).

[62] https://www.educations.com/articles-and-advice/5-reasons-online-learning-is-future-of-education-17146

8) IMPACT INDICATORS. Require impact level indicators to measure the achievement of the project objective and ensure outcome indicators measure all of the dimensions of the outcome statement.

   ILAB did not require AIR and, thus AIR did not develop indicators to measure the project objective. In addition, while AIR developed performance indicators to measure the achievement of the outcomes, the indicators focused more on outcomes rather than the dimensions of the outcome statements. Thus, ILAB project should include impact level indicators to measure the achievement of the project objective and its contribution to higher level U.S. government policy goals. ILAB project should also include outcome level indicators that measure all of the dimensions in the outcome statement.

9) SUSTAINED LINKAGES. Where collaboration and coordination between key government institutions are critical to the success of the project, the project should have a strategy to create and sustain effective linkages.

   LMI project formed steering committees that were instrumental in helping create linkages between LMI institutions that, in turn, facilitated communication, coordination, and collaboration. These linkages and the communication, coordination, and collaboration they facilitated between LMI institutions contributed to the project achieving its outputs. The challenge is sustaining these interinstitutional linkages once the project ends. Since neither ILAB nor its grantees can require national institutions to collaborate, the most effective strategy will be one that provides strong incentives and value add for the institutions (support to achieve priority objectives and improve performance). Incentives and value add will range from project to project. Thus, it would be beneficial for ILAB and its grantee to discuss potential incentives and value add and use them to form and sustain linkages.

   **ILAB, USAID, and other international cooperative agencies might consider the following recommendation.**

10) LABOR MARKET INFORMATION PROJECTS. Consider developing and funding labor market information and exchange projects that make labor market information available to policy makers, workforce development programs, and to the public in user-friendly formats.

   The evaluation found that the LMI project was highly relevant and addressed important LMI needs in El Salvador, Guatemala, and Honduras. The need for high quality LMI and its use is often an unmet need in many developing countries.[63] While reliable LMI should be used to inform government policy and workforce development programs, LMI is not available in many developing countries. In addition, LMI is often not used by jobseekers, youth, and underserved communities because it is not available to the public in user-friendly formats.

   USAID and other international cooperation agencies invest significantly in employment and workforce development programs but seldom focus on labor market information and exchange systems. The ILO is one of the few international organizations that is trying to address labor market exchanges. The ILO views LMI systems as an indispensable

[63] https://www.ilo.org/global/topics/dw4sd/themes/lm-info-systems/lang--en/index.htm

instrument to supply decent work-related data and statistics to achieve decent work, which protects labor rights.[64,65] Labor market information and exchange systems appears to be an important unmet need as well as an interesting opportunity to contribute to decent work and labor rights.

*Table 9. Recommendations and Supporting Evidence*

| Recommendation | Evidence | Report Section |
|---|---|---|
| **1. Learning and Improvement**. Consider incremental project approaches where components, interventions, or expansions and their funding are phased in over periods of time based on progress, achievements, and learning. | Stakeholder comments on delays, staff turnover, and other reasons why project require more time.<br>Comments on observation that projects implement and expend resources at the pace of key counterparts. | Section 3.4.1<br>Section 3.4.1 |
| 2. **Project Design Information**. Consider implementing a rigorous and structured approach to ascertain the information needed to design effective projects and provide accurate and up-to-date information in the FOAs regarding operating contexts. | Description of scoping mission and findings.<br>Comment from scoping mission team member on usefulness.<br>Comments on reluctance of private sector to share information with the government, which was necessary for government led establishment surveys (not documented during scoping missions).<br>Comment on INE Guatemala not interested in technical assistance to improve sampling or electronic data collection (not documented during scoping missions).<br>Comments on the fact that statistical institutions do not have resources to conduct establishment surveys (not documented during scoping missions). | Section 3.1.1<br>Section 3.1.1<br>Section 3.3.2<br>Section 3.3.2<br>Section 3.3.4<br>Section 3.3.2<br>Section 3.5.1 |
| **3. Project Modifications.** Ensure that when significant changes are made to the project, the changes are reflected in project modifications and project documents**.** | Original results framework and FOA instruction to omit Outcomes 2, 3, & 4<br>Discussion on focusing on improving LMI instead of virtual labor exchanges.<br>Discussion of U.S. Central America Engagement Strategy & U.S. Strategy to Address the Root Causes of Migration.<br>Discussion on changing the focus from having governments adopt the establishment survey to having local institutions adopt the survey. | Section 3.1.1<br>Section 3.1.1<br>Section 3.2.2<br>Section 3.3.2 |

[64] https://www.ilo.org/global/topics/dw4sd/themes/lm-info-systems/lang--en/index.htm
[65] https://www.ilo.org/public/english/revue/download/pdf/ghai.pdf

| Recommendation | Evidence | Report Section |
|---|---|---|
| **4. Training Needs Assessments.** Conduct institutional training needs assessments to ensure training is designed to build the capacity of participants to perform their job responsibilities and match the participant's experience and skill level. | Discussion on effectiveness LMI training (technical workshops and certificate courses) output. | Section 3.3.2 |
| **5. Virtual Training.** Provide virtual training and other learning programs, when appropriate, where sessions are recorded and offered online with the corresponding materials and assessments so participants can successfully complete training courses at their pace | Discussion on effectiveness LMI training (technical workshops and certificate courses) output.<br>Discussion of midterm evaluation recommendation to record and store course sessions online. | Section 3.3.2<br>Section 3.3.2<br>Section 3.3.5 |
| **6. Application of Knowledge and Skills.** Conduct assessments of how individuals and institutions that received technical assistance and training are applying new knowledge and skills to achieve objectives. | Discussion on effectiveness LMI training (technical workshops and certificate courses) output. | Section 3.3.2 |
| **7. Team Management Approach**. In countries with small labor markets with limited availability of qualified professionals consider a team approach to meet the requirements required personnel such the project director position. | Discussion on project director turnover.<br>Discussion on team management approach as lesson learned. | Section 3.4.2<br>Section 4.1 |
| **8. Impact Indicators**. Require impact level indicators to measure the achievement of the project objective and ensure outcome indicators measure all of the dimensions of the outcome statement | Discussion on achievement of project objective and outcomes.<br>Discussion on performance indicators as a lesson learned. | Section 3.3.1<br>Section 4.1 |
| **9. Sustained Linkages**. Where collaboration and coordination between key government institutions are critical to the success of the project, the project should have a strategy to create and sustain effective linkages | Discussion on effectiveness of interinstitutional coordination.<br>Discussion of steering committees and institutional linkages as a promising practice. | Section 3.3.5<br>Section 4.2 |
| **10. Labor Market Information Projects**. Consider developing and funding labor market information and exchange projects that make labor market information available to policy makers, workforce development programs, and to the public in user-friendly formats. | Discussion on the relevance the LMI project and how it met the needs of the Project countries.<br>Discussion how the LMI project supports government and other key actor policies and programs. | Section 3.2.1<br>Section 3.2.1 |

# ANNEXES

## ANNEX A. TERMS OF REFERENCE[66]

## ANNEX B. METHODOLOGY[67]

## ANNEX C. LIST OF DOCUMENTS REVIEWED

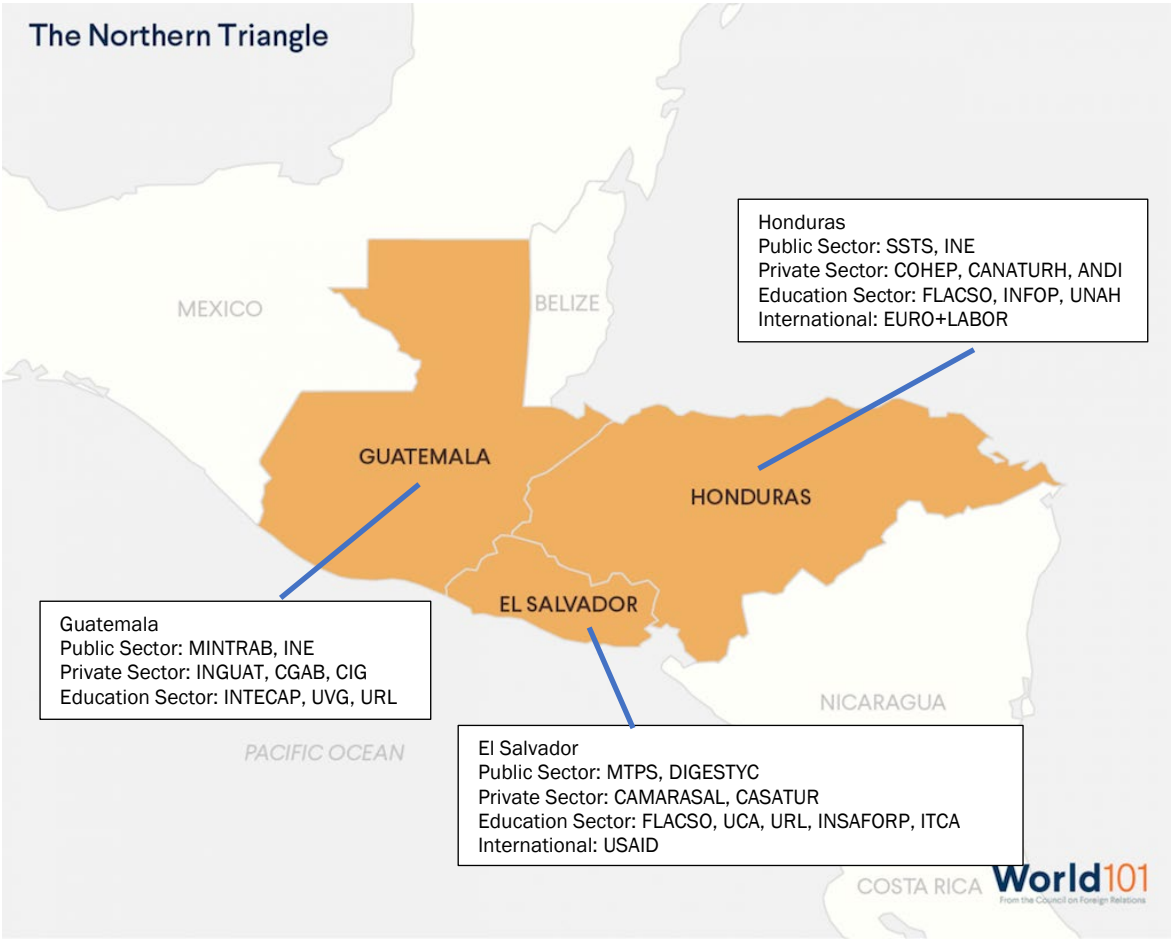
- Award Modification #1, June 2018
- Award Modification #2, June 2020
- Award Modification #3, February 2021
- Encuesta de Establecimientos En El Sector Turismo, El Salvador, 2020
- Encuesta de Establecimientos En El Sector Hotelero, Honduras, November 2020
- Encuesta de Establecimientos En El Sector Hotelero, Guatemala, May 2020
- Encuesta de Hogares de Propósitos Múltiples 2020 El Salvador
- Encuesta Nacional de Empleo e Ingresos, ENEI 1-2021, Guatemala
- Encuesta Permanente de Hogares de Propósitos Múltiples, Honduras
- ILAB/OTLA Funding Opportunity Announcement, Notice of Availability of Funds and Funding Opportunity Announcement for Labor Market Supply and Demand in the Northern Triangle: Leveraging Data to Build an Efficient Labor Market
- In the Footprints of Migrants, Perspectives and Experiences of Migrants From El Salvador, Guatemala and Honduras in The United States, Inter-American Development Bank, 2020
- Labor Market Information Assessment and Action Plan, July 2019
- Memorandum of Agreement between the U.S. Agency for International Development (USAID) and the U.S. Department of Labor to transfer USD 4,000,000 in FY 2016 economic support Fund funds to support a labor market supply and demand project.
- Mobilidad Laboral en la Región Centroamericana, Sistema de Integración de Centro América, 2016
- Multi-Country Interim Performance Evaluation of the Labor Market Supply and Demand in the Northern Triangle: Leveraging Data to Build an Efficient Labor Market, April 2020
- Project Federal Award Terms and Conditions
- Project Budget: Labor Market Supply and Demand in the Northern Triangle: Leveraging Data to Build an Efficient Labor Market, March 2018
- Project Document: Labor Market Supply and Demand in the Northern Triangle: Leveraging Data to Build an Efficient Labor Market, March 2018
- Technical Progress Report, October 1, 2017 to March 31, 2018
- Technical Progress Report, April 1, 2018 to September 30, 2018
- Technical Progress Report, October 1, 2018 to March 31, 2019
- Technical Progress Report, April 1, 2019 to June 30, 2019

[66] https://www.dol.gov/agencies/ilab/leveraging-data-build-efficient-labor-market-central-america
[67] Idem.

- Technical Progress Report, April 1, 2019 to September 30, 2019
- Technical Progress Report, October 1, 2019 to December 31, 2019
- Technical Progress Report, October 1, 2019 to March 31, 2019
- Technical Progress Report, April 1, 2020 to June 30, 2020
- Technical Progress Report, April 1, 2020 to September 30, 2020
- Technical Progress Report, October 1, 2020 March 31, 2021
- Technical Progress Report, April 1, 2021 to September 30, 2021
- Revisión del marco muestral Y del diseño muestral: Evaluación de las etapas de crítica y codificación, El Salvador, April 2020
- Revisión del marco muestral y del diseño muestral: Evaluación de las etapas de crítica y codificación, Honduras, April 2020
- U.S. Strategy for Engagement in Central America, 2014
- U.S. Strategy for Addressing the Root Causes of Migration in Central America, 2021
- U.S. Strategy for Engagement in Central America: Policy Issues for Congress Updated June 12, 2019
- U.S. Strategy for Engagement in Central America Region-Wide Performance Indicators, September 2017

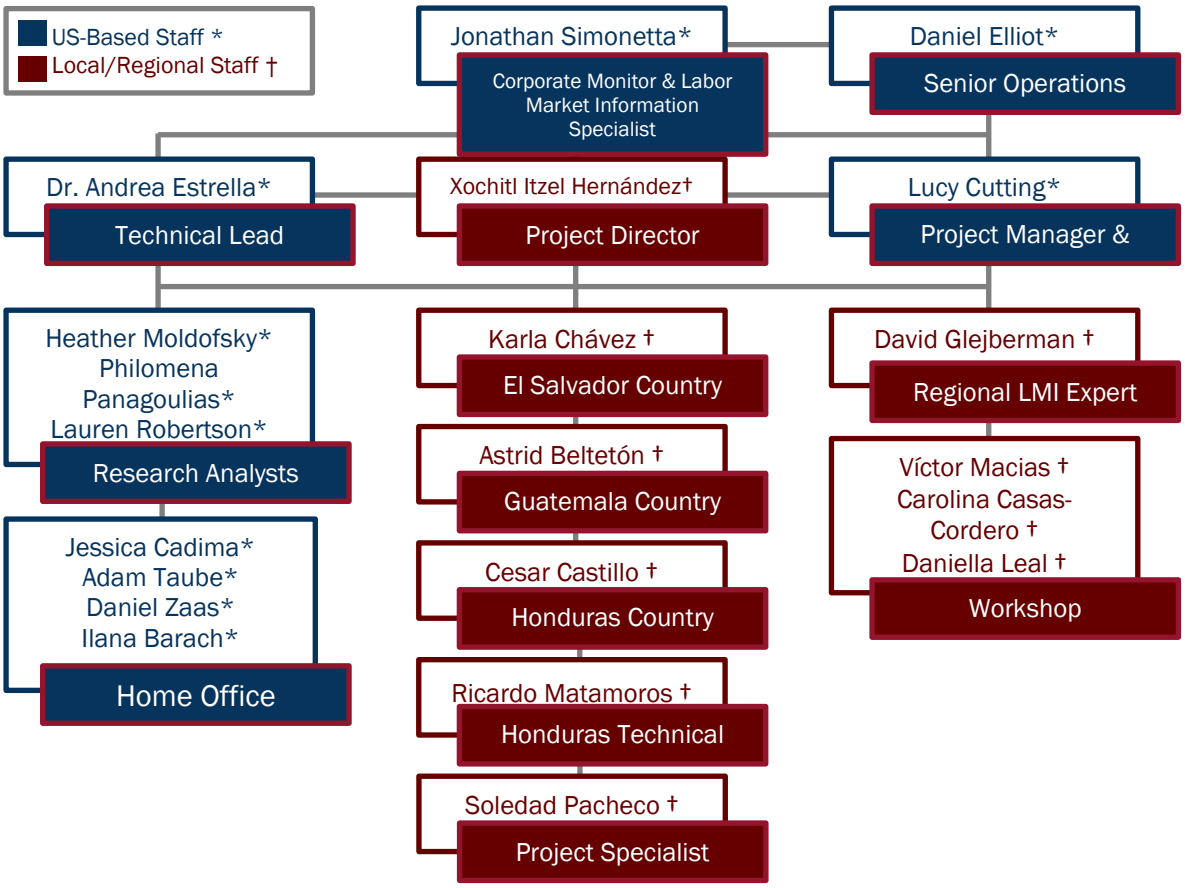
# ANNEX D. PROJECT COUNTRIES MAP AND LIST OF STAKEHOLDERS BY COUNTRY

**Project Institutional Stakeholders by Project Country**[68]

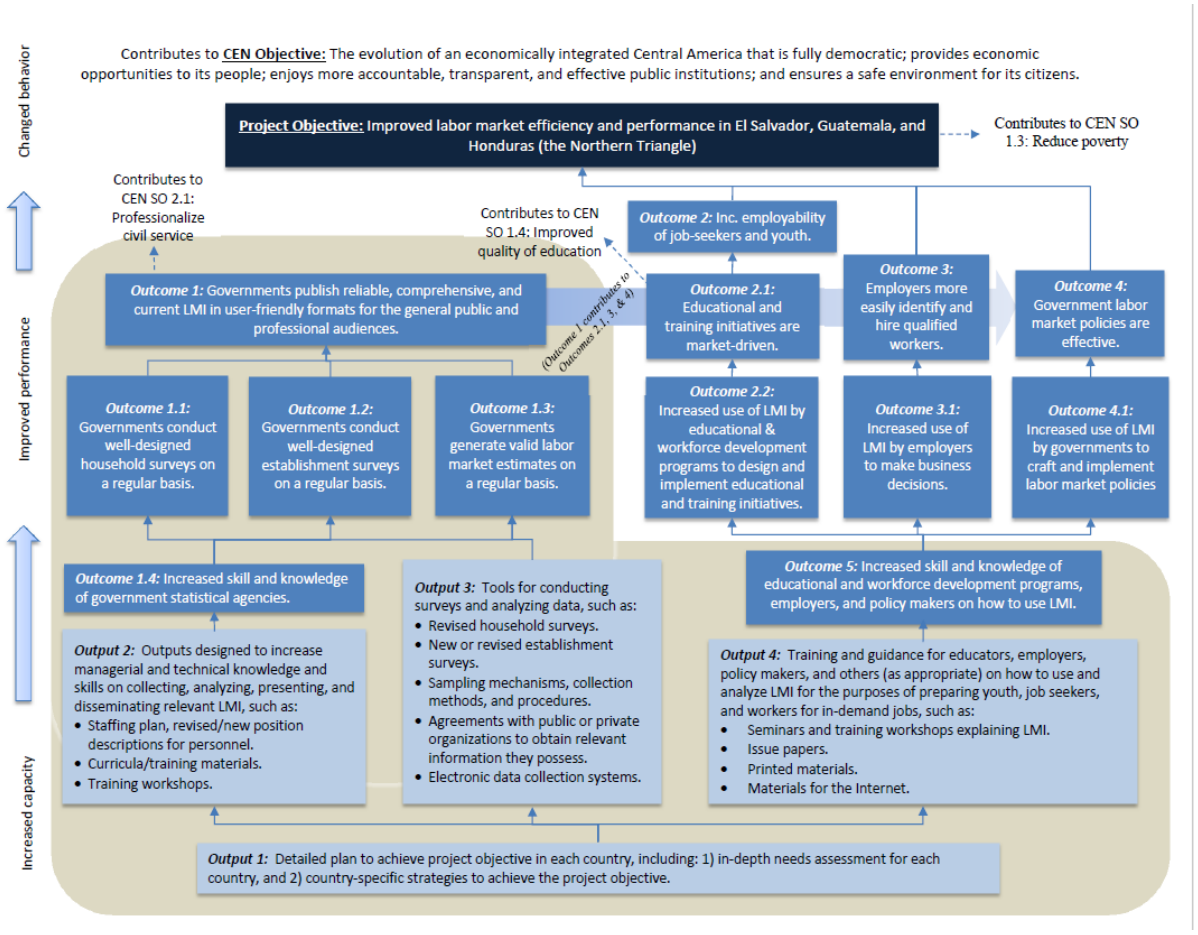



[68] MINTRAB = Ministry of Labor and Social Security; INE = National Institute of Statistics; INGUAT = Guatemalan Institute of Tourism; CGAB = Guatemalan Chamber of Food and Beverage; CGI = Guatemalan Chamber of Industries; INTECAP = Technical Institute of Training and Productivity; UVG = University of the Valley of Guatemala; URL = University of Rafael Landívar; MTPS = Ministry of Labor and Social Security; DIGESTYC = General Directorate of Statistics and Census; CAMARASAL = Salvadoran Chamber of Commerce and Industry; CASATUR = El Salvador Chamber of Tourism; UCA = FLACSO = Latin American Social Sciences Institute; Central American University José Simeón Cañas; INSAFORP = Salvadoran Institute of Professional Formation; ITCA = Central American Technology Institute; USAID = United States Agency for International Development; STSS = Secretariat of Labor and Social Security; COHEP = Honduran Council of Private Enterprise; CANATURH = Honduras National Chamber of Tourism; ANDI = Honduras National Association of Industries; INFOP = National Professional Training Institute; UNAH = National Autonomous University of Honduras; EURO+LABOR = Institutional Strengthening of Decent Employment and Employment Opportunities for Youth in Honduras.

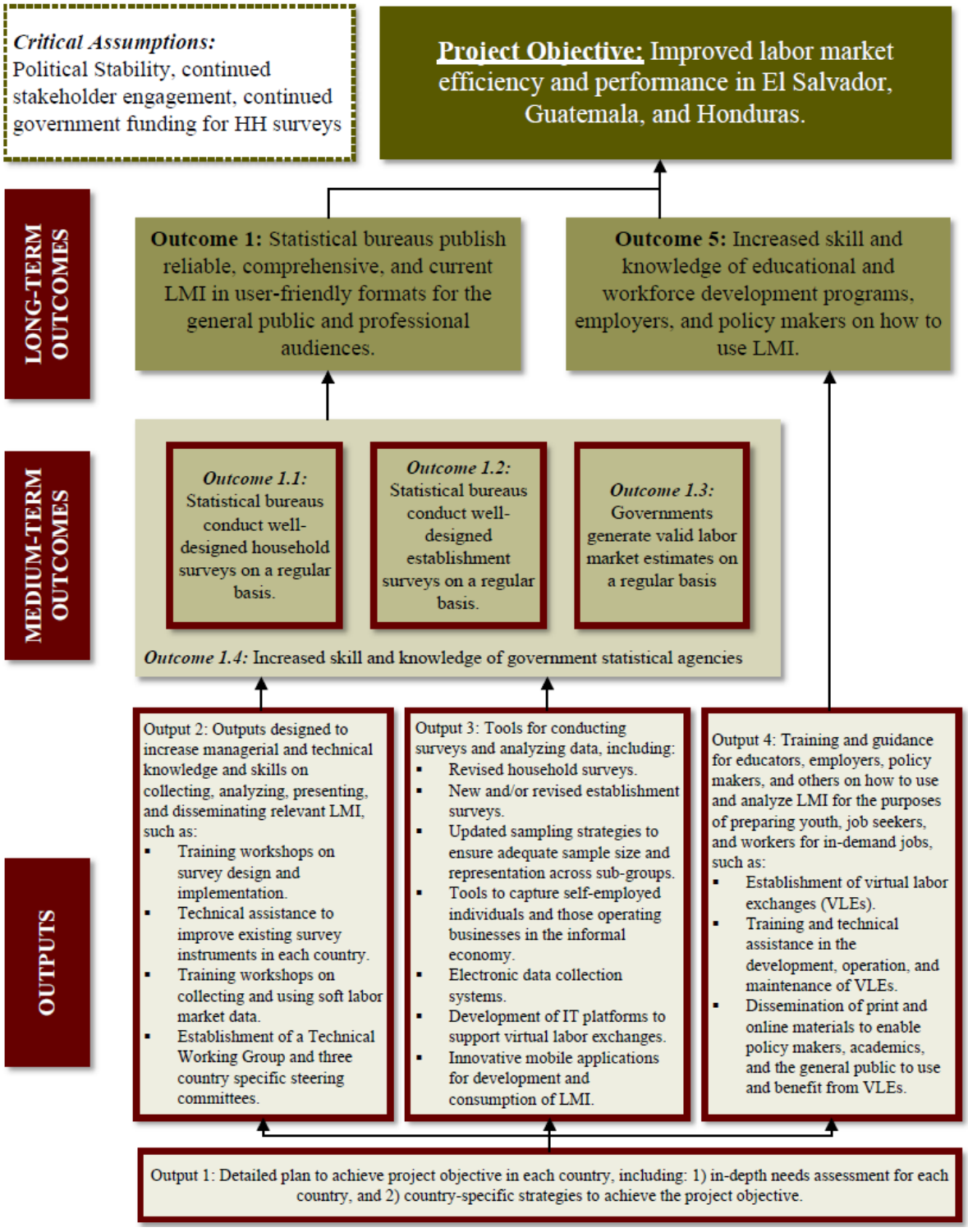
# ANNEX E. LMI PROJECT ORGANIZATIONAL CHART



# ANNEX F. ORIGINAL RESULTS FRAMEWORK FROM FUNDING OPPORTUNITY ANNOUNCEMENT



# ANNEX G. RESULTS FRAMEWORK FROM THE PROJECT DOCUMENT



# ANNEX H. AGREEMENTS WITH PARTNER INSTITUTIONS

| Country | Sector | Institution |
|---|---|---|
| El Salvador | Government | Ministry of Labor and Social Protection (MTPS)<br>General Direction of Statistics and Census (DIGESTYC) |
| | Academic | Technical Institute of Central America (ITCA)<br>Salvadoran Institute of Professional Formation (INSAFORP)<br>The Central American University (UCA) |
| | Private | Chamber of Commerce and Industry of El Salvador (CAMARASAL) |
| Guatemala | Government | Ministry of Labor and Social Protection (MINTRAB)<br>National Institute of Statistics (INE) |
| | Academic | Technical Institute of Training and Productivity (INTECAP)<br>Universidad del Valle Guatemala (UVG)<br>University of Rafael Landívar (URL) |
| | Private | Guatemalan Institute of Tourism (INGUAT) |
| Honduras | Government | Secretary of Labor and Social Security (STSS)<br>National Institute of Statistics (INE) |
| | Academic | National Training Institute (INE)<br>National Autonomous University of Honduras (UNAH) |
| | Private | Honduran Council of Private Enterprise (COHEP) |

# ANNEX I. FULL RESULTS OF THE ONLINE PERCEPTION SURVEY

**Question 01**

*Table 1*

| | ¿En qué medida el proyecto incrementó la capacidad del gobierno de publicar datos del mercado laboral confiables, integrales y al corriente en un formato amigable a cualquier tipo de usuario, incluyendo el público en general y audiencias profesionales? Seleccione una opción. | | | |
|---|---|---|---|---|
| | El Salvador | Guatemala | Honduras | Overall |
| El proyecto no incrementó la capacidad gubernamental | 6.1% (3) | 0.0% (0) | 0.0% (0) | 2.4% (3) |
| El proyecto incrementó muy poco la capacidad gubernamental | 26.5% (13) | 25.8% (8) | 33.3% (15) | 28.8% (36) |
| El proyecto incrementó la capacidad gubernamental | 44.9% (22) | 32.3% (10) | 33.3% (15) | 37.6% (47) |
| El proyecto incrementó significativamente la capacidad gubernamental | 10.2% (5) | 9.7% (3) | 13.3% (6) | 11.2% (14) |
| No sabe | 12.2% (6) | 32.3% (10) | 20.0% (9) | 20.0% (25) |
| Total | 100% (49) | 100% (31) | 100% (45) | 100% (125) |

**Question 02**

*Table 2: b02_1*

| | ¿En qué nivel el proyecto ha mejorado el conocimiento acerca de la información del mercado laboral, así como las habilidades de los empleadores/patrones proveedores de servicios de intermediación laboral, practicantes y tomadores de decisiones de política pública para usar estos datos? Ministerio/Secretaría del Trabajo | | | |
|---|---|---|---|---|
| | El Salvador | Guatemala | Honduras | Overall |
| Bajo | 6.1% (3) | 6.5% (2) | 4.4% (2) | 5.6% (7) |
| Moderado | 14.3% (7) | 25.8% (8) | 37.8% (17) | 25.6% (32) |
| Moderado alto | 30.6% (15) | 25.8% (8) | 22.2% (10) | 26.4% (33) |
| Alto | 22.4% (11) | 16.1% (5) | 17.8% (8) | 19.2% (24) |
| No sabe | 26.5% (13) | 25.8% (8) | 17.8% (8) | 23.2% (29) |
| Total | 100% (49) | 100% (31) | 100% (45) | 100% (125) |

*Table3: b02_2*

| | ¿En qué nivel el proyecto ha mejorado el conocimiento acerca de la información del mercado laboral, así como las habilidades de los empleadores/patrones proveedores de servicios de intermediación laboral, practicantes y tomadores de decisiones de política pública para usar estos datos? Gobierno local Departamento | | | |
|---|---|---|---|---|
| | El Salvador | Guatemala | Honduras | Overall |
| Bajo | 12.2% (6) | 9.7% (3) | 13.3% (6) | 12.0% (15) |
| Moderado | 22.4% (11) | 22.6% (7) | 35.6% (16) | 27.2% (34) |
| Moderado alto | 0.0% (0) | 16.1% (5) | 15.6% (7) | 9.6% (12) |
| Alto | 8.2% (4) | 6.5% (2) | 8.9% (4) | 8.0% (10) |
| No sabe | 57.1% (28) | 45.2% (14) | 26.7% (12) | 43.2% (54) |
| Total | 100% (49) | 100% (31) | 100% (45) | 100% (125) |

*Table 4: b02_3*

| | ¿En qué nivel el proyecto ha mejorado el conocimiento acerca de la información del mercado laboral, así como las habilidades de los empleadores/patrones proveedores de servicios de intermediación laboral, practicantes y tomadores de decisiones de política pública para usar estos datos? Gobierno local Municipio | | | |
|---|---|---|---|---|
| | El Salvador | Guatemala | Honduras | Overall |
| Bajo | 12.2% (6) | 9.7% (3) | 17.8% (8) | 13.6% (17) |
| Moderado | 24.5% (12) | 19.4% (6) | 31.1% (14) | 25.6% (32) |
| Moderado alto | 2.0% (1) | 16.1% (5) | 11.1% (5) | 8.8% (11) |
| Alto | 2.0% (1) | 6.5% (2) | 8.9% (4) | 5.6% (7) |
| No sabe | 59.2% (29) | 48.4% (15) | 31.1% (14) | 46.4% (58) |
| Total | 100% (49) | 100% (31) | 100% (45) | 100% (125) |

*Table 5: b_02_4*

| | ¿En qué nivel el proyecto ha mejorado el conocimiento acerca de la información del mercado laboral, así como las habilidades de los empleadores/patrones proveedores de servicios de intermediación laboral, practicantes y tomadores de decisiones de política pública para usar estos datos? Oficina estadística | | | |
|---|---|---|---|---|
| | El Salvador | Guatemala | Honduras | Overall |
| Bajo | 2.0% (1) | 6.5% (2) | 2.2% (1) | 3.2% (4) |
| Moderado | 22.4% (11) | 25.8% (8) | 22.2% (10) | 23.2% (29) |
| Moderado alto | 28.6% (14) | 25.8% (8) | 35.6% (16) | 30.4% (38) |
| Alto | 26.5% (13) | 25.8% (8) | 28.9% (13) | 27.2% (34) |
| No sabe | 20.4% (10) | 16.1% (5) | 11.1% (5) | 16.0% (20) |
| Total | 100% (49) | 100% (31) | 100% (45) | 100% (125) |

*Table 6: b_02_5*

| | ¿En qué nivel el proyecto ha mejorado el conocimiento acerca de la información del mercado laboral, así como las habilidades de los empleadores/patrones proveedores de servicios de intermediación laboral, practicantes y tomadores de decisiones de política pública para usar estos datos? Empleadores / patronos | | | |
|---|---|---|---|---|
| | El Salvador | Guatemala | Honduras | Overall |
| Bajo | 12.2% (6) | 9.7% (3) | 2.2% (1) | 8.0% (10) |
| Moderado | 18.4% (9) | 19.4% (6) | 35.6% (16) | 24.8% (31) |
| Moderado alto | 12.2% (6) | 25.8% (8) | 22.2% (10) | 19.2% (24) |
| Alto | 8.2% (4) | 6.5% (2) | 17.8% (8) | 11.2% (14) |
| No sabe | 49.0% (24) | 38.7% (12) | 22.2% (10) | 36.8% (46) |
| Total | 100% (49) | 100% (31) | 100% (45) | 100% (125) |

*Table 7: b_02_6*

| | ¿En qué nivel el proyecto ha mejorado el conocimiento acerca de la información del mercado laboral, así como las habilidades de los empleadores/patrones proveedores de servicios de intermediación laboral, practicantes y tomadores de decisiones de política pública para usar estos datos? Servicios vocacionales / servicios de desarrollo de trabajadores | | | |
|---|---|---|---|---|
| | El Salvador | Guatemala | Honduras | Overall |
| Bajo | 12.2% (6) | 3.2% (1) | 4.4% (2) | 7.2% (9) |
| Moderado | 16.3% (8) | 19.4% (6) | 40.0% (18) | 25.6% (32) |
| Moderado alto | 22.4% (11) | 22.6% (7) | 15.6% (7) | 20.0% (25) |
| Alto | 8.2% (4) | 9.7% (3) | 13.3% (6) | 10.4% (13) |
| No sabe | 40.8% (20) | 45.2% (14) | 26.7% (12) | 36.8% (46) |
| Total | 100% (49) | 100% (31) | 100% (45) | 100% (125) |

*Table 8:b_02_7*

| | ¿En qué nivel el proyecto ha mejorado el conocimiento acerca de la información del mercado laboral, así como las habilidades de los empleadores/patrones proveedores de servicios de intermediación laboral, practicantes y tomadores de decisiones de política pública para usar estos datos? Practicantes /aprendices | | | |
|---|---|---|---|---|
| | El Salvador | Guatemala | Honduras | Overall |
| Bajo | 6.1% (3) | 19.4% (6) | 6.7% (3) | 9.6% (12) |
| Moderado | 16.3% (8) | 12.9% (4) | 35.6% (16) | 22.4% (28) |
| Moderado alto | 16.3% (8) | 12.9% (4) | 20.0% (9) | 16.8% (21) |
| Alto | 10.2% (5) | 6.5% (2) | 13.3% (6) | 10.4% (13) |
| No sabe | 51.0% (25) | 48.4% (15) | 24.4% (11) | 40.8% (51) |
| Total | 100% (49) | 100% (31) | 100% (45) | 100% (125) |

### Question 03

*Table9: b_03_1*

| | ¿Qué tan efectivo considera usted que ha sido el proyecto en alcanzar los siguientes resultados? Ajustar las encuestas nacionales de hogar sobre datos laborales | | | |
|---|---|---|---|---|
| | El Salvador | Guatemala | Honduras | Overall |
| Inefectivo | 4.1% (2) | 0.0% (0) | 0.0% (0) | 1.6% (2) |
| Poco efectivo | 22.4% (11) | 22.6% (7) | 8.9% (4) | 17.6% (22) |
| Efectivo | 38.8% (19) | 41.9% (13) | 53.3% (24) | 44.8% (56) |
| Muy efectivo | 12.2% (6) | 9.7% (3) | 26.7% (12) | 16.8% (21) |
| No sabe | 22.4% (11) | 25.8% (8) | 11.1% (5) | 19.2% (24) |
| Total | 100% (49) | 100% (31) | 100% (45) | 100% (125) |

*Table 10: b_03_2*

| | ¿Qué tan efectivo considera usted que ha sido el proyecto en alcanzar los siguientes resultados? Realizar pruebas piloto de encuestas en negocios empleadores | | | |
|---|---|---|---|---|
| | El Salvador | Guatemala | Honduras | Overall |
| Inefectivo | 6.1% (3) | 3.2% (1) | 0.0% (0) | 3.2% (4) |
| Poco efectivo | 10.2% (5) | 12.9% (4) | 15.6% (7) | 12.8% (16) |
| Efectivo | 22.4% (11) | 48.4% (15) | 35.6% (16) | 33.6% (42) |
| Muy efectivo | 20.4% (10) | 16.1% (5) | 33.3% (15) | 24.0% (30) |
| No sabe | 40.8% (20) | 19.4% (6) | 15.6% (7) | 26.4% (33) |
| Total | 100% (49) | 100% (31) | 100% (45) | 100% (125) |

*Table 11: b_03_3*

| | ¿Qué tan efectivo considera usted que ha sido el proyecto en alcanzar los siguientes resultados? Actualizar los sistemas de clasificación laboral | | | |
|---|---|---|---|---|
| | El Salvador | Guatemala | Honduras | Overall |
| Inefectivo | 6.1% (3) | 6.5% (2) | 0.0% (0) | 4.0% (5) |
| Poco efectivo | 10.2% (5) | 22.6% (7) | 17.8% (8) | 16.0% (20) |
| Efectivo | 38.8% (19) | 29.0% (9) | 33.3% (15) | 34.4% (43) |
| Muy efectivo | 26.5% (13) | 16.1% (5) | 37.8% (17) | 28.0% (35) |
| No sabe | 18.4% (9) | 25.8% (8) | 11.1% (5) | 17.6% (22) |
| Total | 100% (49) | 100% (31) | 100% (45) | 100% (125) |

*Table 12: b_03_4*

| | ¿Qué tan efectivo considera usted que ha sido el proyecto en alcanzar los siguientes resultados? Establecer mecanismos avanzados de muestreo y métodos de levantamiento de datos con manuales. | | | |
|---|---|---|---|---|
| | El Salvador | Guatemala | Honduras | Overall |
| Inefectivo | 6.1% (3) | 9.7% (3) | 0.0% (0) | 4.8% (6) |
| Poco efectivo | 20.4% (10) | 19.4% (6) | 17.8% (8) | 19.2% (24) |
| Efectivo | 28.6% (14) | 32.3% (10) | 40.0% (18) | 33.6% (42) |
| Muy efectivo | 20.4% (10) | 16.1% (5) | 28.9% (13) | 22.4% (28) |
| No sabe | 24.5% (12) | 22.6% (7) | 13.3% (6) | 20.0% (25) |
| Total | 100% (49) | 100% (31) | 100% (45) | 100% (125) |

*Table 13: b_03_5*

| | ¿Qué tan efectivo considera usted que ha sido el proyecto en alcanzar los siguientes resultados? Celebrar acuerdos formales con instituciones públicas y privadas para transferir el manejo de encuestas laborales y proteger su sostenibilidad. | | | |
|---|---|---|---|---|
| | El Salvador | Guatemala | Honduras | Overall |
| Inefectivo | 4.1% (2) | 6.5% (2) | 0.0% (0) | 3.2% (4) |
| Poco efectivo | 24.5% (12) | 19.4% (6) | 20.0% (9) | 21.6% (27) |
| Efectivo | 22.4% (11) | 38.7% (12) | 37.8% (17) | 32.0% (40) |
| Muy efectivo | 24.5% (12) | 16.1% (5) | 22.2% (10) | 21.6% (27) |
| No sabe | 24.5% (12) | 19.4% (6) | 20.0% (9) | 21.6% (27) |
| Total | 100% (49) | 100% (31) | 100% (45) | 100% (125) |

*Table 14: b_03_6*

| | ¿Qué tan efectivo considera usted que ha sido el proyecto en alcanzar los siguientes resultados? Establecer e implementar sistemas electrónicos para recolectar datos. | | | |
|---|---|---|---|---|
| | El Salvador | Guatemala | Honduras | Overall |
| Infectivo | 2.0% (1) | 9.7% (3) | 2.2% (1) | 4.0% (5) |
| Poco efectivo | 18.4% (9) | 22.6% (7) | 17.8% (8) | 19.2% (24) |
| Efectivo | 24.5% (12) | 25.8% (8) | 40.0% (18) | 30.4% (38) |
| Muy efectivo | 22.4% (11) | 12.9% (4) | 24.4% (11) | 20.8% (26) |
| No sabe | 32.7% (16) | 29.0% (9) | 15.6% (7) | 25.6% (32) |
| Total | 100% (49) | 100% (31) | 100% (45) | 100% (125) |

*Table 15: b_03_7*

| | ¿Qué tan efectivo considera usted que ha sido el proyecto en alcanzar los siguientes resultados? Organizar talleres de formación y conferencias sobre información del mercado laboral. | | | |
|---|---|---|---|---|
| | El Salvador | Guatemala | Honduras | Overall |
| Infectivo | 0.0% (0) | 0.0% (0) | 0.0% (0) | 0.0% (0) |
| Poco efectivo | 8.2% (4) | 16.1% (5) | 13.3% (6) | 12.0% (15) |
| Efectivo | 28.6% (14) | 38.7% (12) | 28.9% (13) | 31.2% (39) |
| Muy efectivo | 49.0% (24) | 29.0% (9) | 37.8% (17) | 40.0% (50) |
| No sabe | 14.3% (7) | 16.1% (5) | 20.0% (9) | 16.8% (21) |
| Total | 100% (49) | 100% (31) | 100% (45) | 100% (125) |

**Question 04**

*Table 16: b_04_v1*

| | Teniendo en mente el desarrollo de este proyecto en [País], ¿considera que el proyecto ha logrado mejorar la calidad de los datos del mercado laboral producidos por el gobierno? | | | |
|---|---|---|---|---|
| | El Salvador | Guatemala | Honduras | Overall |
| Inefectivo | 4.1% (2) | 0.0% (0) | 0.0% (0) | 1.6% (2) |
| Poco efectivo | 22.4% (11) | 29.0% (9) | 18.2% (8) | 22.6% (28) |
| Efectivo | 46.9% (23) | 41.9% (13) | 47.7% (21) | 46.0% (57) |
| Muy efectivo | 16.3% (8) | 6.5% (2) | 25.0% (11) | 16.9% (21) |
| No sabe | 10.2% (5) | 22.6% (7) | 9.1% (4) | 12.9% (16) |
| Total | 100% (49) | 100% (31) | 100% (44) | 100% (124) |

*Table 17: b_04_v2*

| | Teniendo en mente el desarrollo de este proyecto en los países del Triángulo del Norte, ¿considera que el proyecto ha logrado mejorar la calidad de los datos del mercado laboral producidos por los gobiernos de los tres países? | | | |
|---|---|---|---|---|
| | El Salvador | Guatemala | Honduras | Overall |
| Inefectivo | .% (0) | .% (0) | 0.0% (0) | 0.0% (0) |
| Poco efectivo | .% (0) | .% (0) | 0.0% (0) | 0.0% (0) |
| Efectivo | .% (0) | .% (0) | 100.0% (1) | 100.0% (1) |
| Muy efectivo | .% (0) | .% (0) | 0.0% (0) | 0.0% (0) |
| No sabe | .% (0) | .% (0) | 0.0% (0) | 0.0% (0) |
| Total | 100% (0) | 100% (0) | 100% (1) | 100% (1) |

*Table 18: b_04*

| | Teniendo en mente el desarrollo de este proyecto en los países del Triángulo del Norte, ¿considera que el proyecto ha logrado mejorar la calidad de los datos del mercado laboral producidos por los gobiernos de los tres países? | | | |
|---|---|---|---|---|
| | El Salvador | Guatemala | Honduras | Overall |
| Inefectivo | 4.1% (2) | 0.0% (0) | 0.0% (0) | 1.6% (2) |
| Poco efectivo | 22.4% (11) | 29.0% (9) | 17.8% (8) | 22.4% (28) |
| Efectivo | 46.9% (23) | 41.9% (13) | 48.9% (22) | 46.4% (58) |
| Muy efectivo | 16.3% (8) | 6.5% (2) | 24.4% (11) | 16.8% (21) |
| No sabe | 10.2% (5) | 22.6% (7) | 8.9% (4) | 12.8% (16) |
| Total | 100.0% (49) | 100.0% (31) | 100.0% (45) | 100.0% (125) |

**Question 05**

*Table 19: b_05*

| | ¿Qué tan bien alineado ha estado este proyecto con la Estrategia del Gobierno de Estados Unidos para América Central de 2016 y otras estrategias de política exterior para atender las causas de la migración? Otras estrategias incluyen la Estrategia del Gobierno de Estados Unidos para América Central 2017-2021 y la Estrategia de E.E.U.U. para Atender las Causas Principales de la Emigración en América Central 2021. | | | |
|---|---|---|---|---|
| | El Salvador | Guatemala | Honduras | Overall |
| Proyecto sin alineación | 4.7% (2) | 0.0% (0) | 2.4% (1) | 2.7% (3) |
| Proyecto poco alineado | 14.0% (6) | 35.7% (10) | 21.4% (9) | 22.1% (25) |
| Proyecto bien alineado | 30.2% (13) | 10.7% (3) | 47.6% (20) | 31.9% (36) |
| Proyecto muy bien alineado | 0.0% (0) | 3.6% (1) | 2.4% (1) | 1.8% (2) |
| No sabe | 51.2% (22) | 50.0% (14) | 26.2% (11) | 41.6% (47) |
| Total | 100% (43) | 100% (28) | 100% (42) | 100% (113) |

**Question 06**

*Table 20: b_06_v1*

| | ¿Qué tan efectiva ha sido la intervención del proyecto en ayudar a los grupos más vulnerables y tradicionalmente desatendidos en [País] a adquirir las habilidades necesarias para obtener un empleo que les asegure un ingreso seguro y estable? | | | |
|---|---|---|---|---|
| | El Salvador | Guatemala | Honduras | Overall |
| Inefectivo | 10.2% (5) | 12.9% (4) | 6.8% (3) | 9.7% (12) |
| Poco efectivo | 26.5% (13) | 29.0% (9) | 31.8% (14) | 29.0% (36) |
| Efectivo | 20.4% (10) | 19.4% (6) | 25.0% (11) | 21.8% (27) |
| Muy efectivo | 2.0% (1) | 3.2% (1) | 9.1% (4) | 4.8% (6) |
| No sabe | 40.8% (20) | 35.5% (11) | 27.3% (12) | 34.7% (43) |
| Total | 100% (49) | 100% (31) | 100% (44) | 100% (124) |

*Table 21: b_06_v2*

| | ¿Qué tan efectiva ha sido la intervención del proyecto en ayudar a los grupos más vulnerables y tradicionalmente desatendidos en los países del Triángulo del Norte a adquirir las habilidades necesarias para obtener un empleo que les asegure un ingreso seguro y estable? | | | |
|---|---|---|---|---|
| | El Salvador | Guatemala | Honduras | Overall |
| Inefectivo | .% (0) | .% (0) | 0.0% (0) | 0.0% (0) |
| Poco efectivo | .% (0) | .% (0) | 0.0% (0) | 0.0% (0) |
| Efectivo | .% (0) | .% (0) | 100.0% (1) | 100.0% (1) |
| Muy efectivo | .% (0) | .% (0) | 0.0% (0) | 0.0% (0) |
| No sabe | .% (0) | .% (0) | 0.0% (0) | 0.0% (0) |
| Total | 100% (0) | 100% (0) | 100% (1) | 100% (1) |

*Table 22: b_6*

| | ¿Qué tan efectiva ha sido la intervención del proyecto en ayudar a los grupos más vulnerables y tradicionalmente desatendidos en los países del Triángulo del Norte a adquirir las habilidades necesarias para obtener un empleo que les asegure un ingreso seguro y estable? | | | |
|---|---|---|---|---|
| | El Salvador | Guatemala | Honduras | Overall |
| Inefectivo | 10.2% (5) | 12.9% (4) | 6.7% (3) | 9.6% (12) |
| Poco efectivo | 26.5% (13) | 29.0% (9) | 31.1% (14) | 28.8% (36) |
| Efectivo | 20.4% (10) | 19.4% (6) | 26.7% (12) | 22.4% (28) |
| Muy efectivo | 2.0% (1) | 3.2% (1) | 8.9% (4) | 4.8% (6) |
| No sabe | 40.8% (20) | 35.5% (11) | 26.7% (12) | 34.4% (43) |
| Total | 100.0% (49) | 100.0% (31) | 100.0% (45) | 100.0% (125) |

**Question 07**

*Table 23: b_07_v1*

| | El proyecto en [País] decidió concentrarse en el sector turismo. ¿Considera usted que ese sector es el más relevante para atender las necesidades de los programas de formación para el trabajo, en particular para los grupos más vulnerables y tradicionalmente desatendidos? | | | |
|---|---|---|---|---|
| | El Salvador | Guatemala | Honduras | Overall |
| Irrelevante | 4.1% (2) | 3.2% (1) | 0.0% (0) | 2.4% (3) |
| Poco relevante | 18.4% (9) | 32.3% (10) | 29.5% (13) | 25.8% (32) |
| Relevante | 53.1% (26) | 35.5% (11) | 43.2% (19) | 45.2% (56) |
| Muy relevante | 14.3% (7) | 25.8% (8) | 18.2% (8) | 18.5% (23) |
| No sabe | 10.2% (5) | 3.2% (1) | 9.1% (4) | 8.1% (10) |
| Total | 100% (49) | 100% (31) | 100% (44) | 100% (124) |

*Table 24: b_07_v2*

| | El proyecto en los países del Triángulo del Norte decidió concentrarse en el sector turismo. ¿Considera usted que ese sector es el más relevante para atender las necesidades de los programas de formación para el trabajo, en particular para los grupos más vulnerables y tradicionalmente desatendidos? | | | |
|---|---|---|---|---|
| | El Salvador | Guatemala | Honduras | Overall |
| Irrelevante | .% (0) | .% (0) | 0.0% (0) | 0.0% (0) |
| Poco relevante | .% (0) | .% (0) | 100.0% (1) | 100.0% (1) |
| Relevante | .% (0) | .% (0) | 0.0% (0) | 0.0% (0) |
| Muy relevante | .% (0) | .% (0) | 0.0% (0) | 0.0% (0) |
| No sabe | .% (0) | .% (0) | 0.0% (0) | 0.0% (0) |
| Total | 100% (0) | 100% (0) | 100% (1) | 100% (1) |

*Table 25: b_07*

| | El proyecto en los países del Triángulo del Norte decidió concentrarse en el sector turismo. ¿Considera usted que ese sector es el más relevante para atender las necesidades de los programas de formación para el trabajo, en particular para los grupos más vulnerables y tradicionalmente desatendidos? | | | |
|---|---|---|---|---|
| | El Salvador | Guatemala | Honduras | Overall |
| Irrelevante | 4.1% (2) | 3.2% (1) | 0.0% (0) | 2.4% (3) |
| Poco relevante | 18.4% (9) | 32.3% (10) | 31.1% (14) | 26.4% (33) |
| Relevante | 53.1% (26) | 35.5% (11) | 42.2% (19) | 44.8% (56) |
| Muy relevante | 14.3% (7) | 25.8% (8) | 17.8% (8) | 18.4% (23) |
| No sabe | 10.2% (5) | 3.2% (1) | 8.9% (4) | 8.0% (10) |
| Total | 100.0% (49) | 100.0% (31) | 100.0% (45) | 100.0% (125) |

**Question 08** *(select multiple question. percentages within country)*

*Table 26: b_8 numbers*

| | ¿Qué otros sectores hubieran sido más relevantes para el proyecto? [Elija las opciones que considere más relevantes] | | | |
|---|---|---|---|---|
| | El Salvador (n=49) | Guatemala (n=31) | Honduras (n=45) | Overall (n=125) |
| Automotriz | 4.00 | 1.00 | 3.00 | 8.00 |
| Textil | 4.00 | 3.00 | 4.00 | 11.00 |
| Farmacéutico | 4.00 | 1.00 | 1.00 | 6.00 |
| Comercial | 4.00 | 5.00 | 7.00 | 16.00 |
| Agricultura | 5.00 | 8.00 | 10.00 | 23.00 |
| Manufactura | 5.00 | 4.00 | 8.00 | 17.00 |
| Construcción | 3.00 | 7.00 | 7.00 | 17.00 |

*Table 27*

| | ¿Qué otros sectores hubieran sido más relevantes para el proyecto? [Elija las opciones que considere más relevantes] | | | |
|---|---|---|---|---|
| | El Salvador (n=49) | Guatemala (n=31) | Honduras (n=45) | Overall (n=125) |
| Automotriz | 8% | 3% | 7% | 6% |
| Textil | 8% | 10% | 9% | 9% |
| Farmacéutico | 8% | 3% | 2% | 5% |
| Comercial | 8% | 16% | 16% | 13% |
| Agricultura | 10% | 26% | 22% | 18% |
| Manufactura | 10% | 13% | 18% | 14% |
| Construcción | 6% | 23% | 16% | 14% |

**Question 09**

*Table 28: b-09_v1 El Salvador*

| ¿En qué medida considera que las intervenciones del proyecto apoyaron y fueron consistentes con las políticas y programas del Ministerio del Trabajo en materia de información del mercado laboral y desarrollo de la fuerza laboral? | | |
|---|---|---|
| | El Salvador | Overall |
| Inconsistentes y sin relación alguna | 2.0% (1) | 2.0% (1) |
| Algo consistentes y prestaron poco apoyo | 18.4% (9) | 18.4% (9) |
| Consistentes y prestaron apoyo | 38.8% (19) | 38.8% (19) |
| Muy consistentes y de gran apoyo | 20.4% (10) | 20.4% (10) |
| No sabe | 20.4% (10) | 20.4% (10) |
| Total | 100% (49) | 100% (49) |

*Table 29: b_09_v2 Guatemala*

| ¿En qué medida considera que las intervenciones del proyecto apoyaron y fueron consistentes con las políticas y programas del Ministerio de Economía en materia de información del mercado laboral y desarrollo de la fuerza laboral? | | |
|---|---|---|
| | Guatemala | Overall |
| Inconsistentes y sin relación alguna | 3.2% (1) | 3.2% (1) |
| Algo consistentes y prestaron poco apoyo | 16.1% (5) | 16.1% (5) |
| Consistentes y prestaron apoyo | 35.5% (11) | 35.5% (11) |
| Muy consistentes y de gran apoyo | 0.0% (0) | 0.0% (0) |
| No sabe | 45.2% (14) | 45.2% (14) |
| Total | 100% (31) | 100% (31) |

*Table 30: b_09_v3*

| ¿En qué medida considera que las intervenciones del proyecto apoyaron y fueron consistentes con las políticas y programas del Ministerio de Economía en materia de información del mercado laboral y desarrollo de la fuerza laboral? | | |
|---|---|---|
| | Honduras | Overall |
| Inconsistentes y sin relación alguna | 0.0% (0) | 0.0% (0) |
| Algo consistentes y prestaron poco apoyo | 18.2% (8) | 18.2% (8) |
| Consistentes y prestaron apoyo | 45.5% (20) | 45.5% (20) |
| Muy consistentes y de gran apoyo | 15.9% (7) | 15.9% (7) |
| No sabe | 20.5% (9) | 20.5% (9) |
| Total | 100% (44) | 100% (44) |

*Table 31: b_09_v4*

| | ¿En qué medida considera que las intervenciones del proyecto apoyaron y fueron consistentes con las políticas y programas de los ministerios del trabajo en materia de información del mercado laboral y desarrollo de la fuerza laboral? | | | |
|---|---|---|---|---|
| | El Salvador | Guatemala | Honduras | Overall |
| Inconsistentes y sin relación alguna | .% (0) | .% (0) | 0.0% (0) | 0.0% (0) |
| Algo consistentes y prestaron poco apoyo | .% (0) | .% (0) | 0.0% (0) | 0.0% (0) |
| Consistentes y prestaron apoyo | .% (0) | .% (0) | 100.0% (1) | 100.0% (1) |
| Muy consistentes y de gran apoyo | .% (0) | .% (0) | 0.0% (0) | 0.0% (0) |
| No sabe | .% (0) | .% (0) | 0.0% (0) | 0.0% (0) |
| Total | 100% (0) | 100% (0) | 100% (1) | 100% (1) |

**Table 9 Combined**:

*Table 32: b_09*

| ¿En qué medida considera que las intervenciones del proyecto apoyaron y fueron consistentes con las políticas y programas del Ministerio de Economía en materia de información del mercado laboral y desarrollo de la fuerza laboral? | | | | |
|---|---|---|---|---|
| | El Salvador | Guatemala | Honduras | Overall |
| Inconsistentes y sin relación alguna | 2.0% (1) | 3.2% (1) | 0.0% (0) | 1.6% (2) |
| Algo consistentes y prestaron poco apoyo | 18.4% (9) | 16.1% (5) | 17.8% (8) | 17.6% (22) |
| Consistentes y prestaron apoyo | 38.8% (19) | 35.5% (11) | 46.7% (21) | 40.8% (51) |
| Muy consistentes y de gran apoyo | 20.4% (10) | 0.0% (0) | 15.6% (7) | 13.6% (17) |
| No sabe | 20.4% (10) | 45.2% (14) | 20% (9) | 26.4% (33) |
| Total | 100% (49) | 100% (31) | 100% (45) | 100% (125) |

## Question 10

*Table 33: b_10_v1*

| | ¿En qué medida considera que las intervenciones del proyecto apoyaron y fueron consistentes con las políticas y programas del Ministerio de Educación en materia de formación para el desarrollo de la fuerza laboral? | | | |
|---|---|---|---|---|
| | El Salvador | Guatemala | Honduras | Overall |
| Inconsistentes y sin relación alguna | 8.2% (4) | 9.7% (3) | .% (0) | 8.8% (7) |
| Algo consistentes y prestaron poco apoyo | 24.5% (12) | 12.9% (4) | .% (0) | 20.0% (16) |
| Consistentes y prestaron apoyo | 22.4% (11) | 19.4% (6) | .% (0) | 21.3% (17) |
| Muy consistentes y de gran apoyo | 4.1% (2) | 0.0% (0) | .% (0) | 2.5% (2) |
| No sabe | 40.8% (20) | 58.1% (18) | .% (0) | 47.5% (38) |
| Total | 100% (49) | 100% (31) | 100% (0) | 100% (80) |

*Table 34: b_10_v2*

| | ¿En qué medida considera que las intervenciones del proyecto apoyaron y fueron consistentes con las políticas y programas de la Secretaría de Educación en materia de formación para el desarrollo de la fuerza laboral? | | | |
|---|---|---|---|---|
| | El Salvador | Guatemala | Honduras | Overall |
| Inconsistentes y sin relación alguna | .% (0) | .% (0) | 4.5% (2) | 4.5% (2) |
| Algo consistentes y prestaron poco apoyo | .% (0) | .% (0) | 22.7% (10) | 22.7% (10) |
| Consistentes y prestaron apoyo | .% (0) | .% (0) | 34.1% (15) | 34.1% (15) |
| Muy consistentes y de gran apoyo | .% (0) | .% (0) | 9.1% (4) | 9.1% (4) |
| No sabe | .% (0) | .% (0) | 29.5% (13) | 29.5% (13) |
| Total | 100% (0) | 100% (0) | 100% (44) | 100% (44) |

*Table 36: b_10_v3*

| | ¿En qué medida considera que las intervenciones del proyecto apoyaron y fueron consistentes con las políticas y programas de los ministerios de educación en materia de formación para el desarrollo de la fuerza laboral? | | | |
|---|---|---|---|---|
| | El Salvador | Guatemala | Honduras | Overall |
| Inconsistentes y sin relación alguna | .% (0) | .% (0) | 0.0% (0) | 0.0% (0) |
| Algo consistentes y prestaron poco apoyo | .% (0) | .% (0) | 0.0% (0) | 0.0% (0) |
| Consistentes y prestaron apoyo | .% (0) | .% (0) | 100.0% (1) | 100.0% (1) |
| Muy consistentes y de gran apoyo | .% (0) | .% (0) | 0.0% (0) | 0.0% (0) |

| | ¿En qué medida considera que las intervenciones del proyecto apoyaron y fueron consistentes con las políticas y programas de los ministerios de educación en materia de formación para el desarrollo de la fuerza laboral? | | | |
|---|---|---|---|---|
| | El Salvador | Guatemala | Honduras | Overall |
| No sabe | .% (0) | .% (0) | 0.0% (0) | 0.0% (0) |
| Total | 100% (0) | 100% (0) | 100% (1) | 100% (1) |

**Table 10 Combined**:

*Table 36: b_10*

| | ¿En qué medida considera que las intervenciones del proyecto apoyaron y fueron consistentes con las políticas y programas del Ministerio de Educación en materia de formación para el desarrollo de la fuerza laboral? | | | |
|---|---|---|---|---|
| | El Salvador | Guatemala | Honduras | Overall |
| Inconsistentes y sin relación alguna | 8.2% (4) | 9.7% (3) | 4.4% (2) | 7.2% (9) |
| Algo consistentes y prestaron poco apoyo | 24.5% (12) | 12.9% (4) | 22.2% (10) | 20.8% (26) |
| Consistentes y prestaron apoyo | 22.4% (11) | 19.4% (6) | 35.6% (15) | 26.4% (33) |
| Muy consistentes y de gran apoyo | 4.1% (2) | 0.0% (0) | 8.9% (4) | 4.8% (6) |
| No sabe | 40.8% (20) | 58.1% (18) | 28.9% (13) | 40.8% (51) |
| Total | 100% (49) | 100% (31) | 100% (45) | 100% (125) |

**Question 11**

*Table 37: b_11_v1*

| | ¿En qué medida considera que las intervenciones del proyecto apoyaron y fueron consistentes con las políticas y programas del Ministerio de Economía en materia de información del mercado laboral y de promoción del empleo? | | | |
|---|---|---|---|---|
| | El Salvador | Guatemala | Honduras | Overall |
| Inconsistentes y sin relación alguna | 2.0% (1) | 3.2% (1) | .% (0) | 2.5% (2) |
| Algo consistentes y prestaron poco apoyo | 20.4% (10) | 9.7% (3) | .% (0) | 16.3% (13) |
| Consistentes y prestaron apoyo | 32.7% (16) | 35.5% (11) | .% (0) | 33.8% (27) |
| Muy consistentes y de gran apoyo | 12.2% (6) | 6.5% (2) | .% (0) | 10.0% (8) |
| No sabe | 32.7% (16) | 45.2% (14) | .% (0) | 37.5% (30) |
| Total | 100% (49) | 100% (31) | 100% (0) | 100% (80) |

*Table 38: b_11_v2*

| | ¿En qué medida considera que las intervenciones del proyecto apoyaron y fueron consistentes con las políticas y programas de la Secretaría de Desarrollo Económico en materia de información del mercado laboral y de promoción del empleo? | | | |
|---|---|---|---|---|
| | El Salvador | Guatemala | Honduras | Overall |
| Inconsistentes y sin relación alguna | .% (0) | .% (0) | 0.0% (0) | 0.0% (0) |
| Algo consistentes y prestaron poco apoyo | .% (0) | .% (0) | 27.3% (12) | 27.3% (12) |
| Consistentes y prestaron apoyo | .% (0) | .% (0) | 36.4% (16) | 36.4% (16) |
| Muy consistentes y de gran apoyo | .% (0) | .% (0) | 9.1% (4) | 9.1% (4) |
| No sabe | .% (0) | .% (0) | 27.3% (12) | 27.3% (12) |
| Total | 100% (0) | 100% (0) | 100% (44) | 100% (44) |

*Table 39: b_11_v3*

| | ¿En qué medida considera que las intervenciones del proyecto apoyaron y fueron consistentes con las políticas y programas de los ministerios de comercio e industria en materia de información del mercado laboral y de promoción del empleo? | | | |
|---|---|---|---|---|
| | El Salvador | Guatemala | Honduras | Overall |
| Inconsistentes y sin relación alguna | .% (0) | .% (0) | 0.0% (0) | 0.0% (0) |
| Algo consistentes y prestaron poco apoyo | .% (0) | .% (0) | 0.0% (0) | 0.0% (0) |
| Consistentes y prestaron apoyo | .% (0) | .% (0) | 100.0% (1) | 100.0% (1) |
| Muy consistentes y de gran apoyo | .% (0) | .% (0) | 0.0% (0) | 0.0% (0) |
| No sabe | .% (0) | .% (0) | 0.0% (0) | 0.0% (0) |
| Total | 100% (0) | 100% (0) | 100% (1) | 100% (1) |

**Table 11 Combined**:

*Table 40: b_11*

| | ¿En qué medida considera que las intervenciones del proyecto apoyaron y fueron consistentes con las políticas y programas de los ministerios de comercio e industria en materia de información del mercado laboral y de promoción del empleo? | | | |
|---|---|---|---|---|
| | El Salvador | Guatemala | Honduras | Overall |
| Inconsistentes y sin relación alguna | 2.0% (1) | 3.2% (1) | 0.0% (0) | 1.6% (2) |
| Algo consistentes y prestaron poco apoyo | 20.4% (10) | 9.7% (3) | 26.7% (12) | 20.0% (25) |

| | ¿En qué medida considera que las intervenciones del proyecto apoyaron y fueron consistentes con las políticas y programas de los ministerios de comercio e industria en materia de información del mercado laboral y de promoción del empleo? | | | |
|---|---|---|---|---|
| | El Salvador | Guatemala | Honduras | Overall |
| Consistentes y prestaron apoyo | 32.7% (16) | 35.5% (11) | 37.8% (17) | 35.2% (44) |
| Muy consistentes y de gran apoyo | 12.2% (6) | 6.5% (2) | 8.9% (4) | 9.6% (12) |
| No sabe | 32.7% (16) | 45.2% (14) | 26.7% (12) | 33.6% (42) |
| Total | 100.0% (49) | 100.0% (31) | 100.0% (45) | 100.0% (125) |

**Question 12**

*Table 41: b_12_v1*

| | ¿En qué medida considera que las intervenciones del proyecto apoyaron y fueron consistentes con las políticas y programas de la Dirección General de Estadística y Censos DIGESTYC en materia de información del mercado laboral? | | | |
|---|---|---|---|---|
| | El Salvador | Guatemala | Honduras | Overall |
| Inconsistentes y sin relación alguna | 2.0% (1) | .% (0) | .% (0) | 2.0% (1) |
| Algo consistentes y prestaron poco apoyo | 16.3% (8) | .% (0) | .% (0) | 16.3% (8) |
| Consistentes y prestaron apoyo | 38.8% (19) | .% (0) | .% (0) | 38.8% (19) |
| Muy consistentes y de gran apoyo | 30.6% (15) | .% (0) | .% (0) | 30.6% (15) |
| No sabe | 12.2% (6) | .% (0) | .% (0) | 12.2% (6) |
| Total | 100% (49) | 100% (0) | 100% (0) | 100% (49) |

*Table 42: b_12_v2*

| | ¿En qué medida considera que las intervenciones del proyecto apoyaron y fueron consistentes con las políticas y programas del Instituto Nacional de Estadística en materia de información del mercado laboral? | | | |
|---|---|---|---|---|
| | El Salvador | Guatemala | Honduras | Overall |
| Inconsistentes y sin relación alguna | .% (0) | 3.2% (1) | 0.0% (0) | 1.4% (1) |
| Algo consistentes y prestaron poco apoyo | .% (0) | 6.5% (2) | 9.3% (4) | 8.1% (6) |
| Consistentes y prestaron apoyo | .% (0) | 35.5% (11) | 34.9% (15) | 35.1% (26) |
| Muy consistentes y de gran apoyo | .% (0) | 19.4% (6) | 39.5% (17) | 31.1% (23) |
| No sabe | .% (0) | 35.5% (11) | 16.3% (7) | 24.3% (18) |
| Total | 100% (0) | 100% (31) | 100% (43) | 100% (74) |

*Table 43: b_12_v3*

| | ¿En qué medida considera que las intervenciones del proyecto apoyaron y fueron consistentes con las políticas y programas del Instituto Nacional de Estadística en materia de información del mercado laboral? | | | |
|---|---|---|---|---|
| | El Salvador | Guatemala | Honduras | Overall |
| Inconsistentes y sin relación alguna | .% (0) | .% (0) | 0.0% (0) | 0.0% (0) |
| Algo consistentes y prestaron poco apoyo | .% (0) | .% (0) | 0.0% (0) | 0.0% (0) |
| Consistentes y prestaron apoyo | .% (0) | .% (0) | 100.0% (1) | 100.0% (1) |
| Muy consistentes y de gran apoyo | .% (0) | .% (0) | 0.0% (0) | 0.0% (0) |
| No sabe | .% (0) | .% (0) | 0.0% (0) | 0.0% (0) |
| Total | 100% (0) | 100% (0) | 100% (1) | 100% (1) |

*Table 44: b_12*

| | ¿En qué medida considera que las intervenciones del proyecto apoyaron y fueron consistentes con las políticas y programas del Instituto Nacional de Estadística en materia de información del mercado laboral? | | | |
|---|---|---|---|---|
| | El Salvador | Guatemala | Honduras | Overall |
| Inconsistentes y sin relación alguna | 2.0% (1) | 3.2% (1) | 0.0% (0) | 1.6% (2) |
| Algo consistentes y prestaron poco apoyo | 16.3% (8) | 6.5% (2) | 9.1% (4) | 11.3% (14) |
| Consistentes y prestaron apoyo | 38.8% (19) | 35.5% (11) | 36.4% (16) | 37.1% (46) |
| Muy consistentes y de gran apoyo | 30.6% (15) | 19.4% (6) | 38.6% (17) | 30.6% (38) |
| No sabe | 12.2% (6) | 35.5% (11) | 15.9% (7) | 19.4% (24) |
| Total | 100% (49) | 100% (31) | 100% (44) | 100% (124) |

**Question 13**

*Table 45: b_13_1*

| | ¿En qué medida considera que los siguientes actores clave se involucraron en las actividades del proyecto? Ministerios / secretarías del trabajo | | | |
|---|---|---|---|---|
| | El Salvador | Guatemala | Honduras | Overall |
| Poco involucramiento | 0.0% (0) | 6.5% (2) | 0.0% (0) | 1.6% (2) |
| Involucramiento moderado | 22.4% (11) | 35.5% (11) | 37.8% (17) | 31.2% (39) |
| Involucramiento moderado alto | 24.5% (12) | 19.4% (6) | 28.9% (13) | 24.8% (31) |

| | ¿En qué medida considera que los siguientes actores clave se involucraron en las actividades del proyecto? Ministerios / secretarías del trabajo | | | |
|---|---|---|---|---|
| | El Salvador | Guatemala | Honduras | Overall |
| Mucho involucramiento | 30.6% (15) | 12.9% (4) | 20.0% (9) | 22.4% (28) |
| No sabe | 22.4% (11) | 25.8% (8) | 13.3% (6) | 20.0% (25) |
| Total | 100% (49) | 100% (31) | 100% (45) | 100% (125) |

*Table 46: b_13_2*

| | ¿En qué medida considera que los siguientes actores clave se involucraron en las actividades del proyecto? Oficinas de estadística | | | |
|---|---|---|---|---|
| | El Salvador | Guatemala | Honduras | Overall |
| Poco involucramiento | 0.0% (0) | 3.2% (1) | 2.2% (1) | 1.6% (2) |
| Involucramiento moderado | 18.4% (9) | 22.6% (7) | 24.4% (11) | 21.6% (27) |
| Involucramiento moderado alto | 32.7% (16) | 22.6% (7) | 31.1% (14) | 29.6% (37) |
| Mucho involucramiento | 36.7% (18) | 29.0% (9) | 35.6% (16) | 34.4% (43) |
| No sabe | 12.2% (6) | 22.6% (7) | 6.7% (3) | 12.8% (16) |
| Total | 100% (49) | 100% (31) | 100% (45) | 100% (125) |

*Table 48: b_13_3*

| | ¿En qué medida considera que los siguientes actores clave se involucraron en las actividades del proyecto? Empleadores / patrones | | | |
|---|---|---|---|---|
| | El Salvador | Guatemala | Honduras | Overall |
| Poco involucramiento | 12.2% (6) | 19.4% (6) | 8.9% (4) | 12.8% (16) |
| Involucramiento moderado | 20.4% (10) | 16.1% (5) | 37.8% (17) | 25.6% (32) |
| Involucramiento moderado alto | 18.4% (9) | 19.4% (6) | 22.2% (10) | 20.0% (25) |
| Mucho involucramiento | 8.2% (4) | 6.5% (2) | 15.6% (7) | 10.4% (13) |
| No sabe | 40.8% (20) | 38.7% (12) | 15.6% (7) | 31.2% (39) |
| Total | 100% (49) | 100% (31) | 100% (45) | 100% (125) |

*Table 49: b_13_4*

| | ¿En qué medida considera que los siguientes actores clave se involucraron en las actividades del proyecto? Universidades | | | |
|---|---|---|---|---|
| | El Salvador | Guatemala | Honduras | Overall |
| Poco involucramiento | 4.1% (2) | 12.9% (4) | 2.2% (1) | 5.6% (7) |

| | ¿En qué medida considera que los siguientes actores clave se involucraron en las actividades del proyecto? Universidades | | | |
|---|---|---|---|---|
| | El Salvador | Guatemala | Honduras | Overall |
| Involucramiento moderado | 12.2% (6) | 22.6% (7) | 17.8% (8) | 16.8% (21) |
| Involucramiento moderado alto | 30.6% (15) | 22.6% (7) | 40.0% (18) | 32.0% (40) |
| Mucho involucramiento | 26.5% (13) | 16.1% (5) | 24.4% (11) | 23.2% (29) |
| No sabe | 26.5% (13) | 25.8% (8) | 15.6% (7) | 22.4% (28) |
| Total | 100% (49) | 100% (31) | 100% (45) | 100% (125) |

*Table 49: b_13_6*

| | ¿En qué medida considera que los siguientes actores clave se involucraron en las actividades del proyecto? Oficinas de Desarrollo profesional y de la fuerza laboral | | | |
|---|---|---|---|---|
| | El Salvador | Guatemala | Honduras | Overall |
| Poco involucramiento | 6.1% (3) | 19.4% (6) | 2.2% (1) | 8.0% (10) |
| Involucramiento moderado | 14.3% (7) | 22.6% (7) | 37.8% (17) | 24.8% (31) |
| Involucramiento moderado alto | 24.5% (12) | 19.4% (6) | 35.6% (16) | 27.2% (34) |
| Mucho involucramiento | 22.4% (11) | 12.9% (4) | 11.1% (5) | 16.0% (20) |
| No sabe | 32.7% (16) | 25.8% (8) | 13.3% (6) | 24.0% (30) |
| Total | 100% (49) | 100% (31) | 100% (45) | 100% (125) |

**Question 14**

*Table 50: b_14_1*

| | ¿En qué medida considera que los siguientes actores clave se beneficiaron con las actividades del proyecto? Ministerios / secretarías del trabajo | | | |
|---|---|---|---|---|
| | El Salvador | Guatemala | Honduras | Overall |
| Poco involucramiento | 4.1% (2) | 3.2% (1) | 2.2% (1) | 3.2% (4) |
| Involucramiento moderado | 16.3% (8) | 19.4% (6) | 24.4% (11) | 20.0% (25) |
| Involucramiento moderado alto | 18.4% (9) | 25.8% (8) | 24.4% (11) | 22.4% (28) |
| Mucho involucramiento | 40.8% (20) | 25.8% (8) | 37.8% (17) | 36.0% (45) |
| No sabe | 20.4% (10) | 25.8% (8) | 11.1% (5) | 18.4% (23) |
| Total | 100% (49) | 100% (31) | 100% (45) | 100% (125) |

*Table 51: b_14_2*

| | ¿En qué medida considera que los siguientes actores clave se beneficiaron con las actividades del proyecto? Oficinas de estadística | | | |
|---|---|---|---|---|
| | El Salvador | Guatemala | Honduras | Overall |
| Poco involucramiento | 4.1% (2) | 3.2% (1) | 2.2% (1) | 3.2% (4) |
| Involucramiento moderado | 16.3% (8) | 16.1% (5) | 17.8% (8) | 16.8% (21) |
| Involucramiento moderado alto | 26.5% (13) | 19.4% (6) | 28.9% (13) | 25.6% (32) |
| Mucho involucramiento | 42.9% (21) | 41.9% (13) | 44.4% (20) | 43.2% (54) |
| No sabe | 10.2% (5) | 19.4% (6) | 6.7% (3) | 11.2% (14) |
| Total | 100% (49) | 100% (31) | 100% (45) | 100% (125) |

*Table 52: b_14_3*

| | ¿En qué medida considera que los siguientes actores clave se beneficiaron con las actividades del proyecto? Empleadores / patrones | | | |
|---|---|---|---|---|
| | El Salvador | Guatemala | Honduras | Overall |
| Poco involucramiento | 14.3% (7) | 9.7% (3) | 6.7% (3) | 10.4% (13) |
| Involucramiento moderado | 12.2% (6) | 25.8% (8) | 26.7% (12) | 20.8% (26) |
| Involucramiento moderado alto | 20.4% (10) | 19.4% (6) | 35.6% (16) | 25.6% (32) |
| Mucho involucramiento | 16.3% (8) | 9.7% (3) | 15.6% (7) | 14.4% (18) |
| No sabe | 36.7% (18) | 35.5% (11) | 15.6% (7) | 28.8% (36) |
| Total | 100% (49) | 100% (31) | 100% (45) | 100% (125) |

*Table 53: b_14_4*

| | ¿En qué medida considera que los siguientes actores clave se beneficiaron con las actividades del proyecto? Universidades | | | |
|---|---|---|---|---|
| | El Salvador | Guatemala | Honduras | Overall |
| Poco involucramiento | 6.1% (3) | 6.5% (2) | 0.0% (0) | 4.0% (5) |
| Involucramiento moderado | 12.2% (6) | 25.8% (8) | 24.4% (11) | 20.0% (25) |
| Involucramiento moderado alto | 24.5% (12) | 19.4% (6) | 35.6% (16) | 27.2% (34) |
| Mucho involucramiento | 28.6% (14) | 22.6% (7) | 28.9% (13) | 27.2% (34) |
| No sabe | 28.6% (14) | 25.8% (8) | 11.1% (5) | 21.6% (27) |
| Total | 100% (49) | 100% (31) | 100% (45) | 100% (125) |

*Table 54: b_14_5*

| | ¿En qué medida considera que los siguientes actores clave se beneficiaron con las actividades del proyecto? Oficinas de Desarrollo profesional y de la fuerza laboral | | | |
|---|---|---|---|---|
| | El Salvador | Guatemala | Honduras | Overall |
| Poco involucramiento | 8.2% (4) | 19.4% (6) | 2.2% (1) | 8.8% (11) |
| Involucramiento moderado | 14.3% (7) | 3.2% (1) | 35.6% (16) | 19.2% (24) |
| Involucramiento moderado alto | 24.5% (12) | 25.8% (8) | 24.4% (11) | 24.8% (31) |
| Mucho involucramiento | 20.4% (10) | 19.4% (6) | 20.0% (9) | 20.0% (25) |
| No sabe | 32.7% (16) | 32.3% (10) | 17.8% (8) | 27.2% (34) |
| Total | 100% (49) | 100% (31) | 100% (45) | 100% (125) |

*Table 55: b_14_6*

| | ¿En qué medida considera que los siguientes actores clave se beneficiaron con las actividades del proyecto? Organizaciones internacionales | | | |
|---|---|---|---|---|
| | El Salvador | Guatemala | Honduras | Overall |
| Poco involucramiento | 4.1% (2) | 16.1% (5) | 6.7% (3) | 8.0% (10) |
| Involucramiento moderado | 22.4% (11) | 6.5% (2) | 20.0% (9) | 17.6% (22) |
| Involucramiento moderado alto | 16.3% (8) | 22.6% (7) | 35.6% (16) | 24.8% (31) |
| Mucho involucramiento | 16.3% (8) | 12.9% (4) | 22.2% (10) | 17.6% (22) |
| No sabe | 40.8% (20) | 41.9% (13) | 15.6% (7) | 32.0% (40) |
| Total | 100% (49) | 100% (31) | 100% (45) | 100% (125) |

**Question 15**

*Table 56: b_15*

| | ¿Hubo factores externos cambio de políticas públicas, COVID19 u otros similares que afectaron la capacidad del proyecto para alcanzar sus objetivos? | | | |
|---|---|---|---|---|
| | El Salvador | Guatemala | Honduras | Overall |
| Sí | 49.0% (24) | 74.2% (23) | 62.2% (28) | 60.0% (75) |
| No | 20.4% (10) | 6.5% (2) | 17.8% (8) | 16.0% (20) |
| No sabe | 30.6% (15) | 19.4% (6) | 20.0% (9) | 24.0% (30) |
| Total | 100% (49) | 100% (31) | 100% (45) | 100% (125) |

### Question 16

*Table 57: b_16*

| | ¿Qué tan efectivo ha sido este proyecto en relación a sus costos? | | | |
|---|---|---|---|---|
| | El Salvador | Guatemala | Honduras | Overall |
| Nada efectivo | 2.0% (1) | 0.0% (0) | 0.0% (0) | 0.8% (1) |
| Poco efectivo | 10.2% (5) | 22.6% (7) | 8.9% (4) | 12.8% (16) |
| Efectivo | 30.6% (15) | 19.4% (6) | 42.2% (19) | 32.0% (40) |
| Muy efectivo | 16.3% (8) | 9.7% (3) | 20.0% (9) | 16.0% (20) |
| No sabe | 40.8% (20) | 48.4% (15) | 28.9% (13) | 38.4% (48) |
| Total | 100% (49) | 100% (31) | 100% (45) | 100% (125) |

### Question 17

*Table 58: b_17_1_1*

| | ¿Cuál es la probabilidad de que los siguientes elementos continúen funcionando una vez que el proyecto concluya?: Encuestas nacionales a nivel de hogar ajustadas | | | |
|---|---|---|---|---|
| | El Salvador | Guatemala | Honduras | Overall |
| Improbable | 2.0% (1) | 3.2% (1) | 2.2% (1) | 2.4% (3) |
| Poco probable | 10.2% (5) | 16.1% (5) | 8.9% (4) | 11.2% (14) |
| Probable | 40.8% (20) | 12.9% (4) | 28.9% (13) | 29.6% (37) |
| Muy probable | 30.6% (15) | 38.7% (12) | 42.2% (19) | 36.8% (46) |
| No sabe | 16.3% (8) | 29.0% (9) | 17.8% (8) | 20.0% (25) |
| Total | 100% (49) | 100% (31) | 100% (45) | 100% (125) |

*Table 59: b_17_1_2*

| | ¿Cuál es la probabilidad de que los siguientes elementos continúen funcionando una vez que el proyecto concluya?: Encuestas para negocios | | | |
|---|---|---|---|---|
| | El Salvador | Guatemala | Honduras | Overall |
| Improbable | 4.3% (2) | 6.5% (2) | 4.4% (2) | 4.9% (6) |
| Poco probable | 12.8% (6) | 22.6% (7) | 17.8% (8) | 17.1% (21) |
| Probable | 34.0% (16) | 29.0% (9) | 31.1% (14) | 31.7% (39) |
| Muy probable | 21.3% (10) | 12.9% (4) | 17.8% (8) | 17.9% (22) |
| No sabe | 27.7% (13) | 29.0% (9) | 28.9% (13) | 28.5% (35) |
| Total | 100% (47) | 100% (31) | 100% (45) | 100% (123) |

*Table 60: b_17_1_3*

| | ¿Cuál es la probabilidad de que los siguientes elementos continúen funcionando una vez que el proyecto concluya?: Sistemas de clasificación laboral actualizados | | | |
|---|---|---|---|---|
| | El Salvador | Guatemala | Honduras | Overall |
| Improbable | 2.1% (1) | 3.2% (1) | 0.0% (0) | 1.6% (2) |
| Poco probable | 8.3% (4) | 16.1% (5) | 13.3% (6) | 12.1% (15) |
| Probable | 33.3% (16) | 29.0% (9) | 33.3% (15) | 32.3% (40) |
| Muy probable | 33.3% (16) | 29.0% (9) | 37.8% (17) | 33.9% (42) |
| No sabe | 22.9% (11) | 22.6% (7) | 15.6% (7) | 20.2% (25) |
| Total | 100% (48) | 100% (31) | 100% (45) | 100% (124) |

*Table 61: b_17_1_4*

| | ¿Cuál es la probabilidad de que los siguientes elementos continúen funcionando una vez que el proyecto concluya?: Mecanismos de muestreo y métodos de levantamiento de datos mejorados con manuales | | | |
|---|---|---|---|---|
| | El Salvador | Guatemala | Honduras | Overall |
| Improbable | 4.2% (2) | 3.2% (1) | 0.0% (0) | 2.4% (3) |
| Poco probable | 6.3% (3) | 12.9% (4) | 13.3% (6) | 10.5% (13) |
| Probable | 41.7% (20) | 22.6% (7) | 35.6% (16) | 34.7% (43) |
| Muy probable | 25.0% (12) | 25.8% (8) | 35.6% (16) | 29.0% (36) |
| No sabe | 22.9% (11) | 35.5% (11) | 15.6% (7) | 23.4% (29) |
| Total | 100% (48) | 100% (31) | 100% (45) | 100% (124) |

*Table 62: b_17_1_5*

| | ¿Cuál es la probabilidad de que los siguientes elementos continúen funcionando una vez que el proyecto concluya?: Sistemas electrónicos de levantamiento de datos | | | |
|---|---|---|---|---|
| | El Salvador | Guatemala | Honduras | Overall |
| Improbable | 4.1% (2) | 6.5% (2) | 0.0% (0) | 3.2% (4) |
| Poco probable | 8.2% (4) | 16.1% (5) | 13.3% (6) | 12.0% (15) |
| Probable | 42.9% (21) | 19.4% (6) | 31.1% (14) | 32.8% (41) |
| Muy probable | 22.4% (11) | 19.4% (6) | 35.6% (16) | 26.4% (33) |
| No sabe | 22.4% (11) | 38.7% (12) | 20.0% (9) | 25.6% (32) |
| Total | 100% (49) | 100% (31) | 100% (45) | 100% (125) |

*Table 63: b_17_1_6*

| | ¿Cuál es la probabilidad de que los siguientes elementos continúen funcionando una vez que el proyecto concluya?: Talleres de formación y conferencias acerca de información del mercado laboral | | | |
|---|---|---|---|---|
| | El Salvador | Guatemala | Honduras | Overall |
| Improbable | 0.0% (0) | 3.2% (1) | 0.0% (0) | 0.8% (1) |
| Poco probable | 20.8% (10) | 22.6% (7) | 20.0% (9) | 21.0% (26) |

| | ¿Cuál es la probabilidad de que los siguientes elementos continúen funcionando una vez que el proyecto concluya?: Talleres de formación y conferencias acerca de información del mercado laboral | | | |
|---|---|---|---|---|
| | El Salvador | Guatemala | Honduras | Overall |
| Probable | 33.3% (16) | 19.4% (6) | 31.1% (14) | 29.0% (36) |
| Muy probable | 18.8% (9) | 22.6% (7) | 28.9% (13) | 23.4% (29) |
| No sabe | 27.1% (13) | 32.3% (10) | 20.0% (9) | 25.8% (32) |
| Total | 100% (48) | 100% (31) | 100% (45) | 100% (124) |

**Question 18**

*Table 64: b_18_1*

| | ¿Qué tan efectivo ha sido el proyecto en los siguientes objetivos? Construir capacidad organizacional de los actores clave para generar y utilizar mejor información del mercado laboral una vez que el proyecto termine. | | | |
|---|---|---|---|---|
| | El Salvador | Guatemala | Honduras | Overall |
| Inefectivo | 2.0% (1) | 0.0% (0) | 0.0% (0) | 0.8% (1) |
| Algo efectivo | 18.4% (9) | 22.6% (7) | 20.0% (9) | 20.0% (25) |
| Efectivo | 30.6% (15) | 35.5% (11) | 40.0% (18) | 35.2% (44) |
| Muy efectivo | 32.7% (16) | 22.6% (7) | 31.1% (14) | 29.6% (37) |
| No sabe | 16.3% (8) | 19.4% (6) | 8.9% (4) | 14.4% (18) |
| Total | 100% (49) | 100% (31) | 100% (45) | 100% (125) |

*Table 65: b_18_2*

| | ¿Qué tan efectivo ha sido el proyecto en los siguientes objetivos? Crear pertenencia del proyecto en los actores clave para continuar generando y utilizando mejor información del mercado laboral una vez que el proyecto termine. | | | |
|---|---|---|---|---|
| | El Salvador | Guatemala | Honduras | Overall |
| Inefectivo | 6.1% (3) | 3.2% (1) | 0.0% (0) | 3.2% (4) |
| Algo efectivo | 18.4% (9) | 22.6% (7) | 17.8% (8) | 19.2% (24) |
| Efectivo | 32.7% (16) | 41.9% (13) | 35.6% (16) | 36.0% (45) |
| Muy efectivo | 28.6% (14) | 16.1% (5) | 31.1% (14) | 26.4% (33) |
| No sabe | 14.3% (7) | 16.1% (5) | 15.6% (7) | 15.2% (19) |
| Total | 100% (49) | 100% (31) | 100% (45) | 100% (125) |

*Table 66: b_18_3*

| | ¿Qué tan efectivo ha sido el proyecto en los siguientes objetivos? Vincular actores clave a recursos alternos que puedan utilizarse para mejorar la calidad de la información sobre el mercado laboral una vez que el proyecto termine. | | | |
|---|---|---|---|---|
| | El Salvador | Guatemala | Honduras | Overall |
| Inefectivo | 6.1% (3) | 3.2% (1) | 0.0% (0) | 3.2% (4) |
| Algo efectivo | 12.2% (6) | 29.0% (9) | 26.7% (12) | 21.6% (27) |
| Efectivo | 32.7% (16) | 32.3% (10) | 40.0% (18) | 35.2% (44) |

| | ¿Qué tan efectivo ha sido el proyecto en los siguientes objetivos? Vincular actores clave a recursos alternos que puedan utilizarse para mejorar la calidad de la información sobre el mercado laboral una vez que el proyecto termine. | | | |
|---|---|---|---|---|
| | El Salvador | Guatemala | Honduras | Overall |
| Muy efectivo | 30.6% (15) | 12.9% (4) | 24.4% (11) | 24.0% (30) |
| No sabe | 18.4% (9) | 22.6% (7) | 8.9% (4) | 16.0% (20) |
| Total | 100% (49) | 100% (31) | 100% (45) | 100% (125) |

**Question 21**

*Table 67: b_21*

| | ¿En qué medida el proyecto ha brindado apoyo técnico de calidad para mejorar la calidad y oportunidad de la información del mercado laboral de manera realista? | | | |
|---|---|---|---|---|
| | El Salvador | Guatemala | Honduras | Overall |
| El apoyo ha sido de muy baja calidad o no ha sido realista | 4.1% (2) | 0.0% (0) | 0.0% (0) | 1.6% (2) |
| El apoyo ha sido de baja calidad o no ha sido realista | 8.2% (4) | 12.9% (4) | 4.4% (2) | 8.0% (10) |
| El apoyo ha sido de buena baja calidad y ha sido realista | 32.7% (16) | 45.2% (14) | 40.0% (18) | 38.4% (48) |
| El apoyo ha sido de muy buena baja calidad y ha sido realista | 36.7% (18) | 16.1% (5) | 35.6% (16) | 31.2% (39) |
| No sabe | 18.4% (9) | 25.8% (8) | 20.0% (9) | 20.8% (26) |
| Total | 100% (49) | 100% (31) | 100% (45) | 100% (125) |

# ANNEX J. Data Quality Assessment (DQA)

## 1. DATA QUALITY ASSESSMENT FOR GUATEMALA

### 1.1. PILOT ESTABLISHMENT SURVEYS, WAVE 1 – GUATEMALA

Data collection for Wave 1 of the Pilot Establishment Surveys in Guatemala occurred between September and October 2019. For Wave 1, the hospitality industry was the target sector for data collection. Survey administration was tablet-based.

| SUMMARY | |
|---|---|
| What is the overall conclusion regarding the quality of the data? | *Somewhat High Quality* |


| DQA QUESTION | ADDITIONAL DETAILS |
|---|---|
| **VALIDITY – Data should represent the intended result clearly and adequately.** | |
| Was the sampling methodology appropriately followed? | |

| | |
|---|---|
| **Yes** | The sampling strategy established a sample frame from a directory of hotels from the Guatemalan Institute of Tourism (INGUAT). The frame was stratified by region and hotel price range. 100% of "high price" hotels, 96% of "mid-price", and 80% of "low price" hotels were selected for a final sample size of 1,043. While it is clear this was followed, some aspects of the sampling methodology could be stated more clearly in the survey documents:<br>• Says "sample is composed of all hotels classified as 'recommended' in the INGUAT directory and a portion of hotels classified as 'not recommended'". Unclear if this was explicitly used in sampling strategy though, or how.<br>  • Would be helpful for the report to show the selected sample by strata (report only shows the sample frame and survey achievement by strata). |
| Is the response rate high enough so that we can be confident the data is reflective of the selected sample? | |
| **Yes** | • 2019 response rate: 77%<br>NORC suggests a minimum target of 60% response rate for establishment surveys. The response rate here compares favorably to existing establishment surveys in the United States, such as the OEWS (70.9% - June 2019), ARS (76.7% - June 2019), ORS (70.6% - Dec 2019), and the CESS (60.0% - Oct 2019). [69], [70] |
| Do results collected fall within a plausible range? | |
| **No** | NORC examined the dataset to ensure responses fall within valid and plausible rangers. Issues encountered were:<br>• *ciiu_principal*: 4 observations have "0" as their main activity<br>• *salario_trabajo*: Response option "Igual o mayor a 5.000 quetzales" is inconsistent with questionnaire and codebook.<br>• *vacantes_cantidad*: 1 observation where number of vacancies is "0", despite saying that there were vacancies.<br>• *subcontratados_establecimiento*: responses are "NA" or missing for 77% of observations, but it appears the question should apply *to* all observations.<br>• *curso*_capacitacion_*copy*: a large share of responses should be missing, but contain values like "1", "2", "5", or "7", which are not valid. All come from *curso_capacitacion_copy_6_recode*.<br>• *horas_habituales_copy*: one observation contains an invalid response, "1", when it should be missing.<br>• *inguat5*: responses are "NA" for 1% of observations but appears the question should apply to all. Question also differs in format from questionnaire, which asks this question separately for high and low seasons.<br>• *remuneracion*: Some wages appear too low to be plausible. 6% of responses are 6 quetzales or less (approx. USD $0.75). Some others also appear too low, and well below Guatemala's minimum wage, but since the question does not specify a period for the wage |

[69] OEWS = Occupational Employment and Wage Statistics Survey, ARS = Annual Refiling Survey, ORS = Occupational Requirements Survey, CESS = Current Employment Statistics Survey

[70] https://www.bls.gov/osmr/response-rates/

| | |
|---|---|
| | (e.g., hourly, daily, monthly, annual), it is impossible to tell. Without specifying a time period for the question, the data is difficult or impossible for an outside party to use. |
| **RELIABILITY – Data should reflect stable and consistent data-collection processes and analysis methods over time.** | |
| Did the data collection produce responses that are internally consistent? | |
| **Yes** | • NORC created 8 internal consistency checks. On average, there were 0.24 consistency problems per survey.<br>  ○ 77.8% had no problems raised.<br>  ○ 20.9% had just one failed consistency check<br>  ○ 1.2% had two or three failed consistency checks<br>• Checks with the greatest share of interviews with problems were:<br>  ○ Business has no kitchen staff reported, but restaurant services are reported as one of its main economic activities (11.3%)<br>  ○ Average salaries reported for operational staff are higher than salaries reported for managers (5.1%)<br>  ○ Total number of staff reported does not equal the number of staff in disaggregated categories (e.g., by gender) (2.2%)<br>Results suggest a high degree of internal consistency in the data. |
| Are data collection and analysis methods documented in writing that can be used to ensure the same procedures are followed each time? | |
| **No** | • Project materials contain summaries of the sampling methodology, but it is not presented in sufficient detail to run a new survey with the same methodology, and descriptions in different documents conflict with each other.<br>  ○ The Final Report says the sample was stratified by region and price range (21 strata), while the manual says the sample was stratified by price range only (3 strata).<br>  ○ Final Report and Manual say all hotels classified as “recommended” by INGUAT were included, along with a fraction of hotels “not recommended.” It is not clear if this represents a separate level of stratification, how the fraction of “not recommended” hotels were selected, and in what proportion these hotels were selected.<br>• The organization of the dataset is insufficient to ensure it can be used reliably for reproducible analysis. Dataset must be compared against the codebook to find question and value labels, though the variables are out of order compared to the questionnaire, and the codebook is also out of order. Variable labels in the codebook are phrased differently from the questionnaire, and neither the dataset nor codebook include the question tags (e.g., “C01”). All of this makes the dataset difficult to work with reliably. |
| **TIMELINESS – Data should be available at a useful frequency, should be current, and should be timely enough to influence decision-making.** | |
| Is the data collected within the range of time anticipated by the survey methodology? | |
| **Yes** | • Data was collected between September and October 2019. Data collection period is reasonable to capture a snapshot of a single moment in time, without worrying about the comparability of data collected at different times and is consistent with the time period envisioned in the methodology.<br>• The dataset itself does not include a variable to show the date of the interview. |

| PRECISION – Data have a sufficient level of detail to permit policy makers and program managers to make decisions based on clear information. | |
|---|---|
| Are responses as precise as intended by the question (or is there any evidence of systematically rounding or approximating numeric responses)? For example, in a question about age, are responses evenly distributed (or are they systemically rounded to the nearest "5" or "10")? | |
| **No** | NORC looked for evidence of rounding total number of workers, number of guests, percentage of guests that are foreigners, number of workers in individual jobs, number of job vacancies, number of training hours, and employee pay. The level of rounding is generally appropriate for these variables, with two important exceptions:<br>• Evidence of rounding number of guests: **yes**<br>  ○ 30.1% of responses are multiples of 100.<br>• Evidence of rounding employee pay: **yes**<br>  ○ 36.4% of responses are multiples of 1000 quetzales (approx. $130 USD). Assuming rounding to 100 quetzales is acceptable, this is considerably higher than the expected 10%, and is likely to coarse to detect changes over time, given mean salaries of approximately 3000 quetzales. |
| How was sample size determined, and were power calculations conducted to ensure the survey would be adequately powered for informing policymaking decisions? | |
| **NA** | • The sampling strategy established a sample frame from a directory of hotels from the Guatemalan Institute of Tourism (INGUAT), limited the geographic scope to 7 departments of the country, and included only hotels with at least 2 workers, for a total sample frame of 1,251 hotels.<br>• The frame was stratified by region and hotel price range. 100% of "high price" hotels, 96% of "mid-price", and 80% of "low price" hotels were selected for a final sample size of 1,043.<br>• The sampling method did not include any power calculations.<br>• Weights were applied to the final analysis to adjust for the representativeness of the effective sample.<br><br>Although no power calculations are discussed in the methodology, sample size was determined by the limits of the sample frame. Therefore, this point is not applicable. |
| Does the collected data allow for disaggregated analysis for underserved populations? | |
| **No** | • Collected data allows for disaggregating most information on employees by gender and age group, and disaggregating some by level of education.<br>• It is important to note the data does not allow for disaggregation by ethnic or linguistic minority groups or rural/urban. |
| **INTEGRITY – Data collected should have safeguards to minimize the risk of bias, data transcription, or manipulation.** | |
| Are appropriate procedures or safeguards in place to minimize the risk of bias, or data transcription errors? | |

| | |
|---|---|
| Yes | • Data was collected by tablet, minimizing the risk of transcription errors.<br>• After completing an initial interview, the data collection included a verification step, where each survey was reviewed for completeness and accurate recording of answers, including consistency of responses.<br>  • According to the Methodology Protocol document, specific quality control checks performed included checks for: duplicate responses, range of responses, invalid values, examining performance by enumerator, survey duration, completed interviews per day, and response rate. This document also states that backcheck interviews were conducted on 25% of interviews, where original interview responses were compared against the responses in validation backcheck interviews to detect discrepancies. The checks described here are established best practices for quality control safeguards. |

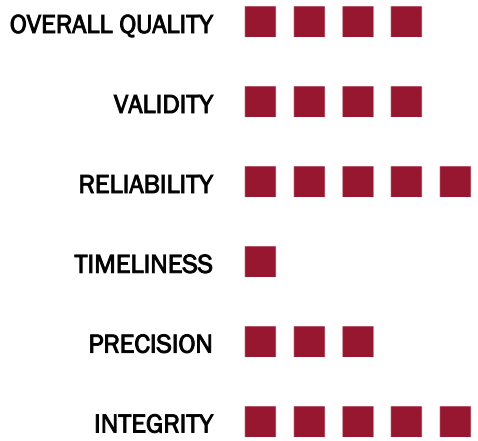
## RECOMMENDATIONS

- **The current CSV-formatted data must be compared against the codebook to understand the meaning of individual variables. Many users will read the questionnaire and then look for specific variables in the dataset – this is very difficult in the dataset's current format, because variables are out of order from the questionnaire, the codebook uses different phrasing than appears in the questionnaire, and question tags (e.g., "C01") are absent. At a minimum, variables in the datasets should be presented in the same order as they appear in the questionnaire, and the codebook should include the question tags from the questionnaire.**
- **Findings around the internal consistency of survey responses suggest internal consistency was widely maintained. However, results also suggest that these checks were not programmed directly into the survey logic. Future surveys should consider internal consistency and program hard and soft checks into the survey logic (e.g., to generate an error message if the number of male and female employees is greater than the total number of reported employees).**
- **The survey should employ similar programming to check for implausible responses, such as wages too low to be plausible. The number of questions with values outside the range of permitted answers is concerning and suggests appropriate checks were not programmed into the survey.**
- **The survey must specify for a time period for questions sensitive to time, including wage payment (e.g., hourly, daily, weekly, annually), for these data to be usable.**
- **The survey asks, for each level of employment (e.g., upper managers, middle managers, operations) how many of the employees speak English, providing some indication of the extent to which establishments have oriented their services to foreigners. As part of ILAB's focus on underserved populations, the survey could also ask about how many employees speak an Indigenous Guatemalan language. This would provide some indication of the extent to which businesses are employing underserved Indigenous populations, as well as providing services that cater to these populations.**
- **For questions at high risk for rounding answers (e.g., average salary), enumerators should be trained to identify the appropriate level of detail responses are expected at, and to probe for more specific answers if the respondent provides an answer that appears to be rounded to a higher level. These questions should be monitored by the data manager during data collection to detect rounding issues and follow up with enumerators.**

### 1.2. PILOT ESTABLISHMENT SURVEYS, WAVE 2 – GUATEMALA

The data collection period for Wave 2 of the Pilot Establishment Surveys in Guatemala is not specified in survey documents. For Wave 2, the food and beverage processing industry was the target sector for data collection. Survey administration was phone-based.

| SUMMARY | |
|---|---|
| What is the overall conclusion regarding the quality of the data? | *Mostly High Quality* |




| DQA QUESTION | ADDITIONAL DETAILS |
|---|---|
| **VALIDITY – Data should represent the intended result clearly and adequately.** | |
| Was the sampling methodology appropriately followed? | |
| **Yes** | The sampling strategy established a sample frame from three directories of companies in the food and beverage processing sector, considered the entire country of Guatemala in its geographic scope, and included only food and beverage processing companies that operated between July 2020 to July 2021 with at least 2 workers, for a frame of 583 establishments. Enumerators attempted to contact each establishment via telephone with the purpose of confirming the commercial name and contact information. The records of 328 establishments could not be confirmed and were discarded. Enumerators went on to screen the remaining 255. establishments in the field |

| | |
|---|---|
| | on the requisites and found 149 did not pass eligibility requirements. The final sample of responding establishments who passed the screener was 106. |
| Is the response rate high enough so that we can be confident the data is reflective of the selected sample? | |
| **No** | • **2021 response rate: 48%**<br>**NORC suggests a minimum target of 60% response rate for establishment surveys. The response rate here is significantly lower. Therefore, we cannot confidently say that the data is reflective of the selected sample.** |
| Do results collected fall within a plausible range? | |
| **Yes** | NORC examined the dataset to ensure responses fall within valid and plausible ranges. Issues encountered were:<br>• *ano_inicial*: 1 observation where the year the company was founded is "NA".<br>• *existe_temporada*: 1 response was "NA" although it appears the question should apply to all observations<br>This suggests appropriate safeguards were in place to ensure response validity. |
| RELIABILITY – Data should reflect stable and consistent data-collection processes and analysis methods over time. | |
| Did the data collection produce responses that are internally consistent? | |
| **Yes** | • NORC created 7 internal consistency checks. On average, there were 0.08 consistency problems per survey.<br>  ○ 92.5% had no problems raised.<br>  ○ 6.6% had just one failed consistency check<br>  ○ 0.9% had two or three failed consistency checks<br>• Checks with the greatest share of interviews with problems were:<br>  ○ Business reported no machine equipment, but employs machine operators (6.6%)<br>  ○ The number of employees trained is greater than the number of employees (1.9%)<br>Results suggest a high degree of internal consistency in the data. |
| Are data collection and analysis methods documented in writing that can be used to ensure the same procedures are followed each time? | |
| **Yes** | • Project materials present sufficient summaries of the sampling methodology to replicate a new survey with the same methodology. Other methods, including survey software as well as contact methods and protocols are clearly detailed. |

- The organization of the dataset is sufficient to ensure it can be used reliably for reproducible analysis. The codebook includes question tags which ensure variables in the codebook can be appropriately linked to questions in the questionnaire. Variables in the Wave 2 dataset are ordered appropriately in relation to the questionnaire and codebook.
- One important exception to the above: survey weights are required to analyze the data but are not included in the dataset. This requires the user to find the weights in the report, and manually incorporate them into the dataset. This generates a high risk for error.

**TIMELINESS – Data should be available at a useful frequency, should be current, and should be timely enough to influence decision-making.**

Is the data collected within the range of time anticipated by the survey methodology?

**No**

- The Methodology Protocol document does not include the data collection period, and the data itself does not include a variable to show the date of the interview. As such, we are unable to estimate whether the data collection period is sufficient or whether it was the time period envisioned by the methodology. Information about the data collection period must be easily identifiable in survey documents for the data to be useful to outside users.

**PRECISION – Data have a sufficient level of detail to permit policy makers and program managers to make decisions based on clear information.**

Are responses as precise as intended by the question (or is there any evidence of systematically rounding or approximating numeric responses)? For example, in a question about age, are responses evenly distributed (or are they systemically rounded to the nearest "5" or "10")?

**Yes**

NORC looked for evidence of rounding total number of workers, number of workers who completed the training courses, percentage of production workers, percentage of sales for the main product, and number of workers in individual jobs. NORC found only limited evidence of systematic rounding of responses:

- Evidence of rounding total number of workers: yes
  - 39.6% of responses are multiples of 10

How was sample size determined, and were power calculations conducted to ensure the survey would be adequately powered for informing policymaking decisions?

**NA**

Although no power calculations are discussed in the methodology, sample size was determined mostly by the limits of the sample frame. Therefore, this point is not applicable.

Does the collected data allow for disaggregated analysis for underserved populations?

| | |
|---|---|
| No | • Collected data allows for disaggregating most information on employees by gender and age group, and disaggregating some by level of education.<br>• It is important to note the data does not allow for disaggregation by ethnic or linguistic minority groups or rural/urban. |

INTEGRITY – Data collected should have safeguards to minimize the risk of bias, data transcription, or manipulation.

Are appropriate procedures or safeguards in place to minimize the risk of bias, or data transcription errors?

| | |
|---|---|
| Yes | • Data was collected by tablet, minimizing the risk of transcription errors.<br>According to the Methodology Protocol document, there was a quality control check following survey implementation, where the survey team will review 100% of the questionnaires to verify the survey is filled out appropriately. In the cases where errors are detected, the surveyors called the informant to retrieve the information prior to updating the complete survey record. |

RECOMMENDATIONS

- **Survey weights must be included in the dataset. It is not sufficient to assume data users will find these weights in the methodology description and manually incorporate them.**
- **Survey documentation should include the dates during which data was collected.**
- **Although NORC considers the quality checks described in survey materials to be minimally sufficient, these materials do not describe other best practices. NORC recommends data collection include a backcheck of a random selection of interviews, and including checks on the main data for: duplicate responses, range of responses, invalid values, examining performance by enumerator, survey duration, completed interviews per day, and response rate.**
- **Levels of rounding of responses are generally appropriate, with some exceptions. For open-ended numeric responses, enumerators should be trained to know the appropriate level of detail to look for, and to prove further if respondents appear to be rounding at a higher level than desired.**
- **The dataset could include a variable to show the date of each survey interview. At minimum, the survey methodology document should include the range of time in which the survey data was collected to better understand the timeliness of the data collection process.**

**In addition to the demographic variables offering the age range and gender of employees, it is also valuable to allow disaggregation by Indigenous status, as well as the demographic composition of the establishment's leadership and senior management.**

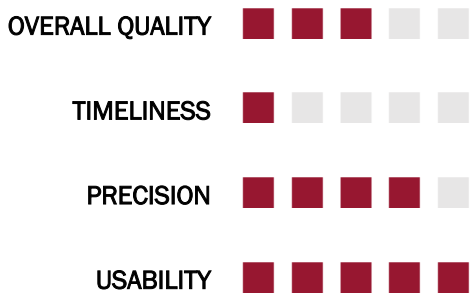
### 1.3. HOUSEHOLD LABOR FORCE SURVEYS - GUATEMALA (ENCUESTA NACIONAL DE EMPLEO E INGRESOS - ENEI)

The data from the Encuesta Nacional de Empleo e Ingresos (ENEI) is publicly available on a semi-annual basis, conducted by Guatemala's national statistics agency, Instituto Nacional de Estadística (INE). The most recent iteration of the survey available at the time of writing was September/October 2021, with a sample size of 5,790 households across 593 primary sampling units.

**SUMMARY**[71]

What is the overall conclusion regarding the quality of the data?

*Somewhat High Quality*




| DQA QUESTION | ADDITIONAL DETAILS |
|---|---|
| **TIMELINESS – Data should be available at a useful frequency, should be current, and should be timely enough to influence policymaking decisions.** | |
| Are data available frequently enough to inform policymaking decisions? | |
| **No** | • ENEI data is publicly available at semi-annual frequency from 2013-2019, with the exception of 2016 and 2017, when data was collected with trimestral frequency. It is available annually for 2010-2012.<br>• Data was not collected in 2020 or the first half of 2021, owing to COVID-19. The datasets and results from the September/October 2021 survey were not posted until the end of February 2022, suggesting a lag of at least 4 months between data collection and publication. |

[71] While the DQA evaluation of the establishment surveys rates five data quality indicators, the evaluation of the national household labor market surveys rates three data quality indicators. This decision was made following ILAB's interests and learning priorities for understanding different aspects of the data quality for each survey.

| | |
|---|---|
| | • For comparable surveys among other countries in the region: Colombia (*Gran Encuesta Integrada de Hogares*), conducts surveys monthly, with data posted publicly with a lag of approximately 2 months; Costa Rica (*Encuesta Continua de Empleo*), conducts surveys quarterly, with data reported with a lag of approximately 2 months.<br>• Frequency of data availability for ENEI is sufficient to inform basic policy and investment decisions, particularly those that are not especially sensitive to small changes from month to month. The frequency may be insufficient to guide policymakers through turbulent events that result in large swings from one month to the next, or that require close monitoring of small changes.<br>• There has not been any sustained improvement in the frequency of data collection since 2012. Importantly, while the frequency of data collection has continued at a fairly consistent semi-annual pace since 2013, the months data is collected change from year to year. This makes year-over-year comparisons difficult, since employment figures in October may not be comparable to those in December, owing to seasonal changes.<br>• It is important to note that while the timeliness of data collection and reporting are outside high-quality standards, these elements were outside of the NTLMI program's scope. |
| PRECISION – **Data have a sufficient level of detail to permit informed policymaking decisions.** | |
| Has the margin of error been reported along with the data? | |
| **Yes** | Although the margin of error is not provided directly in the reports or survey materials, this is acceptable given how the materials are presented. The methodological description of the survey and calculations for precision are sufficient to allow a user to calculate this on their own, given the data. |
| Are the margins of error acceptable for program/policy decision making? | |
| **No** | • The sample of the Oct 2021 survey included 5,790 households across 593 primary sampling units.<br>• For comparison, Costa Rica's Encuesta Continua de Empleo includes a sample of nearly 10,000 households across 800 primary sampling units.<br>• While Guatemala's sample size is adequately powered for most outcomes at the national or regional levels, it is likely to fall short for sub-populations of interest to policymakers, such as measuring changes in specific economic sectors, minority groups, or smaller geographic levels.<br>• It is important to note that while the project provided some assistance on sampling methods, increasing the sample size of the survey to ensure it was adequately powered for sub-populations of interest was outside the NTLMI project's scope. |
| Does the collected data allow for disaggregated analysis for traditionally underserved populations? | |
| Yes | • The data allow results to be disaggregated by household socioeconomic characteristics, age group, location (rural/urban), gender, level of education, and indigenous identity. |

| USABILITY – **The ease with which an outside user can access, understand, and use the data to inform policy, business, recruitment, job training, and talent acquisition decisions.** | |
|---|---|
| Is the data easy for outside users to access? | |
| **Yes** | • Data is easy to find and download online and is publicly available. The website is well-organized, with functioning links and clear labels. |
| Is the available data well-documented, labelled, properly formatted, and easy enough to understand to be usable for outside users? | |
| **Yes** | • Since 2010, data is available with clear labels for variables and values. Accompanying codebooks, data dictionaries, and questionnaires facilitate the process of identifying survey questions in the data to fully understand question context and the meaning of responses.<br>• There is some variation from wave-to-wave regarding exactly what is available. For example, questionnaires and codebooks are not available for all survey waves. However, because the structure of datasets does not vary much from one wave to the next, what is available is sufficient for use by outside users. |
| Does the data have wide enough geographic coverage to inform policy making decisions? | |
| **Yes** | • The sample frame for ENEI includes all rural and urban communities across all 334 municipalities in the country.<br>• The design ensures a sample that is representative of the population, with sufficient allocation of the sample across socioeconomic sectors and location to permit calculating figures for the national capital area, other urban areas, and rural. |

**RECOMMENDATIONS**

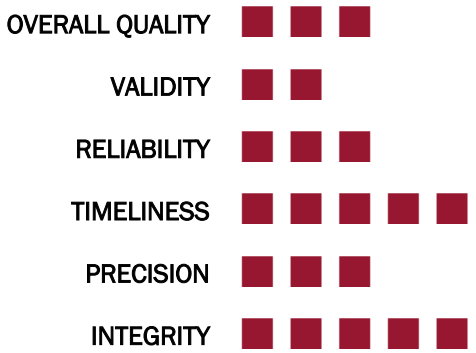
- **Consistency in the months data is collected in will ensure year-over-year comparability, eliminating uncertainty over whether changes over time are due to structural or seasonal changes.**
- **The INE has already shown some capacity to conduct these surveys with trimestral frequency, as it did in 2016 and 2017, but it does not appear to have been able to sustain this. Resuming and sustaining data collection at least at trimestral frequency is a reasonable near-term goal, and would move Guatemala closer to Costa Rica, which collects this data at quarterly frequency.**
- **For this data to better reach its potential value, INE should aim for lags of no more than two months between the end of data collection and when results are reported, and the data are published.**
- **Moving forward, INE should ensure a codebook, data dictionary, and questionnaire is provided for each round of the survey. These accompanying materials are currently available for some, but not all survey waves.**

# 2. DATA QUALITY ASSESSMENT FOR EL SALVADOR

## 2.1. PILOT ESTABLISHMENT SURVEYS, WAVE 1 – EL SALVADOR

The data collection period for Wave 1 of the Pilot Establishment Surveys in El Salvador was from October to December 2019. For Wave 1, the hospitality industry was the target sector for data collection. Survey administration was phone-based, with responses recorded via tablet.

| SUMMARY | |
|---|---|
| What is the overall conclusion regarding the quality of the data? | *Somewhat High Quality* |




| DQA QUESTION | ADDITIONAL DETAILS |
|---|---|
| **VALIDITY – Data should represent the intended result clearly and adequately.** | |
| Was the sampling methodology appropriately followed? | |
| **No** | The sampling frame was constructed using the Registry of Members of the Salvadoran Chamber of Tourism (CASASUR), with additional samples from the "Inventory 2018", the "National Registry of Tourism (2016)", as well as online search using Booking, Google Travel, and Kayak.com. As a result, the final sample included 407 hotels and hostels, 89 restaurants, and 27 tour operators, across 14 departments.<br><br>In the end, a total of 180 hotels, 18 tourist operators, and 35 restaurants were successfully interviewed. The table below summarizes the distribution of different types of establishments in the planned sample and effective sample. |

| Type | Planned Sample (n = 523) | Effective Sample (n = 233) |
|---|---|---|
| Hotels and hostels | 77.8% | 77.3% |
| Restaurants | 17% | 8% |
| Tour operators | 5% | 15% |

The inadequacy of the originally intended sample frame (CASASUR) was outside the program's control. The decision to supplement this frame with the results of an online search, rather than resort to sampling geographic units and conducting a listing exercise, was likely due to budgetary constraints but does have implications for the survey's external validity. Likewise, the survey's internal validity is compromised because no adjustments have been made for non-response. In summary, the sampling strategy is clearly stated, but the effective sample is not strictly representative of the intended population.

Is the response rate high enough so that we can be confident the data is reflective of the selected sample?

**No**

The overall response rate is 44.6%. Separated by the establishment type, the response rates are:

- Hotels and Hostels: 44.2%
- Restaurants: 39.3%
- Tourist operators: 66.7%

NORC suggests a minimum target of 60% response rate for establishment surveys. The response rates here are significantly lower for hotels and restaurants, and comparable in the tourist operator sector. Therefore, we can't confidently say that the data is reflective of the selected sample.

Do results collected fall within a plausible range?

**Yes**

NORC examined the dataset to ensure responses fall within valid and plausible rangers. Only one issue was encountered:

- *curso_capacitacion_1*: one person selected "10", one person selected "12", and two people selected "11", while the expected range is from 1 to 9.

This suggests data quality procedures were sufficient and effective for ensuring collecting data fall within the appropriate ranges for each variable.

**RELIABILITY – Data should reflect stable and consistent data-collection processes and analysis methods over time.**

Did the data collection produce responses that are internally consistent?

| | |
|---|---|
| | • NORC created 7 internal consistency checks. On average, there were 0.07 consistency problems per survey.<br>  ○ 98.3% had no problems raised.<br>  ○ 1.7% had just one failed consistency check |
| **Yes** | • The issue identified was:<br>  ○ Four respondents noted their establishment type as "Restaurant" but didn't report any kitchen staff (*cantidad_actual1, cantidad_actual2, cantidad_actual3*) (1.7%)<br><br>Results suggest a high degree of internal consistency in the data. |
| Are data collection and analysis methods documented in writing that can be used to ensure the same procedures are followed each time? | |
| **No** | • In addition to the registry census, a likely convenience sampling step (i.e., online search) was included to supplement the original sample. This may not be easily replicated in future surveys, since it is dependent on specific sites, search terms, and inclusion criteria which vary depending on the individual conducting the search.<br>• The organization of the dataset is insufficient to ensure it can be used reliably for reproducible analysis. Dataset must be compared against the codebook to find question and value labels, though the variables are out of order compared to the questionnaire, and the codebook is also out of order. Variable labels in the codebook are phrased differently from the questionnaire, and neither the dataset nor codebook include the question tags (e.g., "C01"). All of this makes the dataset difficult to work with reliably. |
| **TIMELINESS – Data should be available at a useful frequency, should be current, and should be timely enough to influence decision-making.** | |
| Is the data collected within the range of time anticipated by the survey methodology? | |
| **Yes** | • Data collection period is reasonable to capture a snapshot of a single moment in time, without worrying about the comparability of data collected at different times and is the time period envisioned in the methodology.<br>• The dataset itself does not include a variable to show the date of the interview. |
| **PRECISION – Data have a sufficient level of detail to permit policy makers and program managers to make decisions based on clear information.** | |
| Are responses as precise as intended by the question (or is there any evidence of systematically rounding or approximating numeric responses)? For example, in a question about age, are responses evenly distributed (or are they systemically rounded to the nearest "5" or "10")? | |
| **Yes** | NORC looked for evidence of rounding total number of workers, number of guests, percentage of guests that are foreigners, number of workers in individual jobs, number of job vacancies, number of training hours, and employee pay. There was no significant evidence of rounding. |
| How was sample size determined, and were power calculations conducted to ensure the survey would be adequately powered for informing policymaking decisions? | |

| | |
|---|---|
| **NA** | The survey was carried out in a census form. Therefore, its sampling method didn't include any power calculation and this point is not applicable. In addition, the final analysis did not include weights, and the results were analyzed based on unweighted data. |

Does the collected data allow for disaggregated analysis for underserved populations?

| | |
|---|---|
| **No** | • Collected data allows for disaggregating most information on employees by gender and age group, and disaggregating some by level of education.<br>• It is important to note the data does not allow for disaggregation by ethnic or linguistic minority groups, rural/urban, or other variables that allow identification of underserved populations. |

## INTEGRITY – Data collected should have safeguards to minimize the risk of bias, data transcription, or manipulation.

Are appropriate procedures or safeguards in place to minimize the risk of bias, or data transcription errors?

| | |
|---|---|
| **Yes** | • Data was collected by tablet, minimizing the risk of transcription errors.<br>• After completing an initial interview, the data collection included a verification step, where each survey was reviewed for completeness and accurate recording of answers, including consistency of responses.<br>  • According to the Methodology Protocol document, specific quality control checks performed included checks for: duplicate responses, range of responses, invalid values, examining performance by enumerator, survey duration, completed interviews per day, and response rate. This document also states that backcheck interviews were conducted on 25% of interviews, where original interview responses were compared against the responses in validation backcheck interviews to detect discrepancies. The checks described here are established best practices for quality control safeguards. |

## RECOMMENDATIONS

- **Many users will read the questionnaire and then look for specific variables in the dataset – this is very difficult in the dataset's current format, because variables are out of order from the questionnaire, the codebook uses different phrasing than appears in the questionnaire, and question tags (e.g., "C01") are absent. At a minimum, variables in the datasets should be presented in the same order as they appear in the questionnaire, and the codebook should include the question tags from the questionnaire.**
- **In addition to the two demographic variables (gender and age range) used to understand the employment situation in this sector, it is also valuable to allow disaggregation by indigenous status, as well as the demographic composition of a hotel's leadership and senior management.**

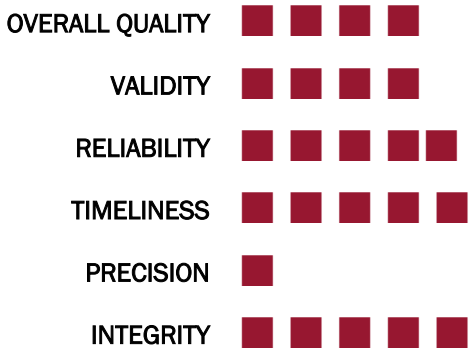
## 2.2. PILOT ESTABLISHMENT SURVEYS, WAVE 2 – EL SALVADOR

The data collection period for Wave 2 of the Pilot Establishment Surveys in El Salvador was from September to October 2021. For Wave 2, the food and beverage processing sector was the target for data collection. Survey administration was phone-based with responses recorded via tablet.

### SUMMARY

What is the overall conclusion regarding the quality of the data?

*Mostly High Quality*




| DQA QUESTION | ADDITIONAL DETAILS |
|---|---|
| **VALIDITY – Data should represent the intended result clearly and adequately.** | |
| Was the sampling methodology appropriately followed? | |
| **Yes** | The sampling strategy established a sample frame from three directories of companies in the food and beverage processing sector. The sample strategy considered the entire country of El Salvador in its geographic scope and included only food and beverage processing companies that operated between August 2020 to August 2021 with at least 2 workers, for an initial sample of 415 establishments. Following a verification process of confirming the commercial name and contact information via telephone, surveyors further reduced the list to the final consolidated survey sample of 298 establishments. |
| Is the response rate high enough so that we can be confident the data is reflective of the selected sample? | |

| | |
|---|---|
| **No** | • 2021 response rate: 53%<br><br>NORC suggests a minimum target of 60% response rate for establishment surveys. The response rate here is significantly lower. Therefore, we cannot confidently say that the data is reflective of the selected sample. |
| Do results collected fall within a plausible range? | |
| **Yes** | • NORC examined the dataset to ensure responses fall within valid and plausible rangers. There were no issues encountered in the examination.<br><br>This suggests data quality procedures were sufficient and effective for ensuring collected data falls within the appropriate ranges for each variable. |
| **RELIABILITY – Data should reflect stable and consistent data-collection processes and analysis methods over time.** | |
| Did the data collection produce responses that are internally consistent? | |
| **Yes** | • NORC created 7 internal consistency checks. On average, there were 0.03 consistency problems per survey.<br>○ 96.99% had no problems raised.<br>○ 3.01% had just one failed consistency check<br><br>• The issues identified were:<br>○ One respondent noted having trained more individuals than worked at their establishment (personas_capacitadas, trabajadores_total) (1.7%)<br>○ Three respondents noted having machine operators but no machines<br><br>Results suggest a high degree of internal consistency in the data. |
| Are data collection and analysis methods documented in writing that can be used to ensure the same procedures are followed each time? | |
| **Yes** | • Project materials present sufficient summaries of the sampling methodology to replicate a new survey with the same methodology.<br>• Other project methods, including survey software as well as contact methods and protocols are clearly detailed.<br>• The organization of the dataset is sufficient to ensure it can be used reliably for reproducible analysis. Variables in the Wave 2 dataset are ordered appropriately in relation to the questionnaire and codebook, and variables in the codebook include question tags (e.g., “C01”). |
| **TIMELINESS – Data should be available at a useful frequency, should be current, and should be timely enough to influence decision-making.** | |
| Is the data collected within the range of time anticipated by the survey methodology? | |

| | |
|---|---|
| **Yes** | • Data was collected between September and October 2021. The data collection time period is reasonable to capture a snapshot of a single moment in time, without worrying about the comparability of data collected at different times, and is the time period envisioned in the methodology.<br>• The data itself does not include a variable to show the date of the interview. |

**PRECISION – Data have a sufficient level of detail to permit policy makers and program managers to make decisions based on clear information.**

Are responses as precise as intended by the question (or is there any evidence of systematically rounding or approximating numeric responses)? For example, in a question about age, are responses evenly distributed (or are they systemically rounded to the nearest "5" or "10")?

**No**

NORC looked for evidence of rounding total number of workers, number of workers who completed training courses, percentage of production workers, percentage of sales for the main product, and number of workers in individual jobs. There is evidence of systematically rounding numeric responses, including the following:

- Evidence of rounding total number of workers: **yes**
  - 22.6% of responses are multiples of 10
- Evidence of rounding number of workers in individual jobs: **yes**
  - 38.5% of responses are multiples of 10
- Evidence of rounding percentage of production workers: **yes**
  - 63.9% of responses are multiples of 10

How was sample size determined, and were power calculations conducted to ensure the survey would be adequately powered for informing policymaking decisions?

**NA**

- The sampling strategy established a sample frame from three directories of companies in the food and beverage processing sector. The sample strategy considered the entire country of El Salvador in its geographic scope and included only food and beverage processing companies that operated between August 2020 to August 2021 with at least 2 workers, for an initial sample of 415 establishments. The directories were sourced from the Directorate-General for Statistics and Censuses (DIGESTYC), the Salvadoran Association of Industrialists (ASI), and the Export and Investment Promoter of El Salvador (PROESA).
- The sampling method did not include power calculations, survey stratification, or survey weights.

Although no power calculations are discussed in the methodology, sample size was determined mostly by the limits of the sample frame. Therefore, this point is not applicable.

Does the collected data allow for disaggregated analysis for underserved populations?

**No**

- Collected data allows for disaggregating most information on employees by gender and age group, and disaggregating some by level of education.
- It is important to note the data does not allow for disaggregation by ethnic or linguistic minority groups or rural/urban.

| INTEGRITY – Data collected should have safeguards to minimize the risk of bias, data transcription, or manipulation. | |
|---|---|
| Are appropriate procedures or safeguards in place to minimize the risk of bias, or data transcription errors? | |
| Yes | • Data was collected by tablet, minimizing the risk of transcription errors.<br>• According to the Methodology Protocol document, there was a quality control check following survey implementation, where the survey team will review 100% of the questionnaires to verify the survey is filled out appropriately. In the cases where errors are detected, the surveyors will call the informant to retrieve the information prior to updating the complete survey record. Other than this, there were no specific quality control checks performed. Based on the information provided, there were limited quality control checks during survey implementation. |

**RECOMMENDATIONS**

- **The current CSV-formatted data must be compared against the codebook to understand the meaning of individual variables. Many users will read the questionnaire and then look for specific variables in the dataset – this is very difficult in the dataset's current format, because one would have to reference the codebook to find question and value labels. The question tags in the codebook and questionnaire should appear in the dataset.**
- **Although NORC considers the quality checks described in survey materials to be minimally sufficient, these materials do not describe other best practices. NORC recommends data collection include a backcheck of a random selection of interviews and including checks on the main data for: duplicate responses, range of responses, invalid values, examining performance by enumerator, survey duration, completed interviews per day, and response rate. These checks were in place for the Wave 1 Establishment Surveys but are not described in the materials for Wave 2.**
- **In addition to the demographic variables offering the age range and gender of employees, it is also valuable to allow disaggregation by Indigenous status, as well as the demographic composition of the establishment's leadership and senior management.**

### 2.3. NATIONAL STATISTICS AGENCY HOUSEHOLD LABOR FORCE SURVEYS – EL SALVADOR (ENCUESTA DE HOGARES DE PROPÓSITOS MÚLTIPLES - EHPM)

The data from the Encuesta de Hogares de Propósitos Múltiples (EHPM) is publicly available at an annual frequency from 2010 to 2020, conducted by El Salvador's national statistics agency, Dirección General de Estadística y Censos (DIGESTYC). The most recent iteration of the survey that is publicly available is 2020, with 1,664 primary sampling units.

| SUMMARY[72] | |
|---|---|
| What is the overall conclusion regarding the quality of the data? | *Somewhat High Quality* |

| | |
|---|---|
| OVERALL QUALITY | ■ ■ ■ |
| TIMELINESS | ■ ■ ■ |
| PRECISION | ■ ■ ■ |
| USABILITY | ■ ■ ■ |

| DQA QUESTION | ADDITIONAL DETAILS |
|---|---|
| **TIMELINESS – Data should be available at a useful frequency, should be current, and should be timely enough to influence policymaking decisions.** | |
| Are data available frequently enough to inform policymaking decisions? | |
| **Somewhat** | • EHPM data is published publicly at annual frequency from 2010-2020. Within each annual dataset, data collection occurs throughout the year, and is intended to be representative with quarterly frequency.<br>• Data is published all at once for the entire year, rather than publishing quarterly datasets throughout the year. Given that data for 2021 was not publicly available as of April 2022, the lag between the close of data collection and publication is at least 4 months, and at least 1 year from the end of data collection for Quarter 1. |

[72] While the DQA evaluation of the establishment surveys rates five data quality indicators, the evaluation of the national household labor market surveys rates three data quality indicators. This decision was made following ILAB's interests and learning priorities for understanding different aspects of the data quality for each survey.

| | |
|---|---|
| | • For comparable surveys among other countries in the region: Colombia (*Gran Encuesta Integrada de Hogares*), conducts surveys monthly, with data posted publicly with a lag of approximately 2 months; Costa Rica (*Encuesta Continua de Empleo*), conducts surveys quarterly, with data reported with a lag of approximately 2 months.<br>• Frequency of data availability for EHPM (quarterly frequency) is sufficient to guide policymakers through turbulent events that result in large swings from one month to the next, or that require close monitoring of small changes. However, because the data is published all at once after the end of the year, as opposed to publishing data throughout the year, the data is of more limited use to outside users for informing decisions in real time. In other words, the data exists at an appropriate frequency, but is published too infrequently for outside users to take advantage of this.<br>• It is important to note that while the timeliness for reporting and publishing data are outside high-quality standards, these elements were outside of the NTLMI program's scope. |
| PRECISION – **Data have a sufficient level of detail to permit informed policymaking decisions.** | |
| Has the margin of error been reported along with the data? | |
| **Yes** | Although the margin of error is not provided directly in the reports or survey materials, this is acceptable given how the materials are presented. The methodological description of the survey and calculations for precision are sufficient to allow a user to calculate this on their own, given the data. Note however, that the methodological description does not clearly state the number of households included in the sample; thus, margin of error can only be calculated from the published dataset using the number of observations found in the data. |
| Are the margins of error acceptable for program/policy decision making? | |
| **No** | • The data included 1,664 primary sampling units (PSUs). These are distributed throughout the year, with approximately 139 selected per month (416 per quarter). Survey materials do not clearly state the number of households included in the sample. The 2019 dataset includes 21,331 households (approximately 5,333 per quarter).<br>• For comparison, Costa Rica's Encuesta Continua de Empleo includes a sample of nearly 10,000 households across 800 primary sampling units per quarter.<br>• While El Salvador's sample size is adequately powered for most outcomes at the national or regional levels, it is likely to fall short for sub-populations of interest to policymakers, such as measuring changes in specific economic sectors, minority groups, or smaller geographic levels.<br>• It is important to note that while the project provided some assistance on sampling methods, increasing the sample size of the survey to ensure it was adequately powered for sub-populations of interest was outside the NTLMI project's scope.<br>• Sampling is based on the outdated 2007 census, which may impact the accuracy of estimates. |
| Does the collected data allow for disaggregated analysis for traditionally underserved populations? | |
| **Yes** | • **Data allows the analyst to disaggregate by gender, age group, poverty indicators, urban/rural, and other indicators typically of interest for identifying traditionally underserved populations.** |

| | |
|---|---|
| | • **Importantly, however, the data does not allow the analyst to disaggregate by Indigenous, Afro-Salvadoran, or other racial identification.** |
| USABILITY – **The ease with which an outside user can access, understand, and use the data to inform policy, business, recruitment, job training, and talent acquisition decisions.** | |
| Is the data easy for outside users to access? | |
| **Yes** | • Data is easy to find and download online and is publicly available. The website is well-organized, with functioning links and clear labels.<br>• However, the published data is only a subset of the full survey, including approximately half of the total number of observations. The full dataset is not publicly available. |
| Is the available data well-documented, labelled, properly formatted, and easy enough to understand to be usable for outside users? | |
| **No** | • Organization of the data varies widely from year to year and requires significant effort to understand some of these differences.<br>• Variables required for survey analysis, such as household ID and PSU, are not clearly labelled.<br>• Structure of the data varies from the sampling methods described in the accompanying documentation for 2020, though there is no accompanying documentation to clarify this. Survey materials describe a sample of 1,664 primary sampling units (PSUs), though the data includes only 852. It is unclear if the discrepancy is due to not publishing the full version of the data, or sampling methods that were not carried out as described in the materials (perhaps due to the 2020 COVID-19 outbreak). This makes it even more challenging to identify variables that are not clearly labelled, such as household ID and PSU.<br>• Variables that relate to survey questions are clearly named and labelled to relate back to the survey questionnaire, and the survey questionnaire is consistently published as an appendix to the annual report.<br>• Documentation on sampling methodology often uses language that describes what “can” be done or what “is recommended,” but is not always clear about what was actually done in practice. |
| Does the data have wide enough geographic coverage to inform policy making decisions? | |
| **Yes** | • The sample frame for EHPM includes all rural and urban communities across all 14 departments of the country.<br>• The design ensures a sample that is representative of the population, with sufficient allocation of the sample across to inform decisions at national or regional levels. However, certain key geographic variables, such as department, are missing from the dataset, which limits its usefulness for making decisions below the national level. |
| RECOMMENDATIONS | |
| • **Publishing datasets with quarterly frequency would prove more useful for making decisions in real time. With the current practice of publishing data single annual datasets with data from all 4 quarters of data collection throughout the year, public access users cannot see data from the first quarter until it is already well over a year old.** | |

- Publishing the full dataset, as opposed to a subset, will allow users to make decisions based on more complete data, reducing the margin of error in the published dataset. If full data cannot be published, data should be accompanied by a README file clarifying that published data are a subset of the full dataset, and clarifying the process used for selecting the observations in the published dataset (e.g., random selection of observations, selection of PSUs, etc.).
- Sampling should be based on the most recently available census data.
- The methodological description is important and must be clear and concise for outside users to be able to use the data since an analyst must program the survey structure into the statistical software to obtain accurate estimates. The existing descriptions are difficult to read. This could be improved through a concise, one-paragraph summary at the beginning of the sampling methodology appendix of the annual report (or in the README file recommended above). The paragraph should clearly identify the variable(s) used for stratification, primary sampling units, and secondary sampling units. It should also identify the number of unique units for each of these sampling variables (e.g., 14 stratas).
- Include department as a variable in the dataset to allow users to include finer levels of geographic information in their analysis. While it is understandable that very detailed geographic information, such as municipality or community name, may be undesirable to include in a public dataset, department name should be coarse enough to avoid concerns about data privacy, and would prove very useful for analysis.

# 3. DATA QUALITY ASSESSMENT FOR HONDURAS

## 3.1. PILOT ESTABLISHMENT SURVEYS, WAVE 1 – HONDURAS

Data collection for Wave 1 of the Pilot Establishment Surveys in Honduras occurred from October to December 2019. For Wave 1, the hospitality industry was the target for data collection. Survey administration was tablet-based.

| SUMMARY | |
|---|---|
| What is the overall conclusion regarding the quality of the data? | *Mostly High Quality* |


| DQA QUESTION | ADDITIONAL DETAILS |
|---|---|
| VALIDITY – **Data should represent the intended result clearly and adequately.** | |
| Was the sampling methodology appropriately followed? | |
| **Yes** | The sampling frame was constructed from the National Registry of Tourism and the Directory of Tourist Establishments (DET) in Honduras. The table below summarizes the distribution of sample (both planned and effective) by department. The distribution in the effective sample corresponds to the initial design. |

| Department | Planned Sample (n = 774) | Effective Sample (n = 437) |
|---|---|---|
| ATLANTIDA | 16% | 18% |
| COLON | 4% | 4% |
| COMPAYAGUA | 5% | 5% |
| COPAN | 14% | 15% |
| CORTAS | 22% | 23% |
| FRANCISCO MORAZAN | 15% | 13% |
| INTIBUCA | 2% | 1% |
| ISLAS DE LA BAHIA | 15% | 16% |
| LEMPIRA | 5% | 5% |
| YORO | 1% | NA |

| | |
|---|---|
| Is the response rate high enough so that we can be confident the data is reflective of the selected sample? | |
| **Yes** | The survey response rate is 65%.<br>NORC suggests a minimum target of 60% response rate for establishment surveys. The response rate here is comparable to other existing establishment surveys in the United States, such as the OEWS (70.9% - June 2019), ARS (76.7% - June 2019), ORS (70.6% - Dec 2019), and the CESS (60.0% - Oct 2019). [73], [74] |
| Do results collected fall within a plausible range? | |
| **Yes** | NORC examined the dataset to ensure responses fall within valid and plausible rangers. Most of the data appeared fine. A few issues encountered were:<br>• *educacion_puesto_*: Response option in the questionnaire is inconsistent with dataset and codebook. |

[73] OEWS = Occupational Employment and Wage Statistics Survey, ARS = Annual Refiling Survey, ORS = Occupational Requirements Survey, CESS = Current Employment Statistics Survey
[74] https://www.bls.gov/osmr/response-rates/

| | |
|---|---|
| | • *salario_trabajo*: Response option "Igual o mayor 10.000 lempiras" in the questionnaire is inconsistent with dataset and codebook.<br>• *vacantes_cantidad*: 3 observations where number of vacancies is "0", despite saying that there were vacancies. |
| RELIABILITY – **Data should reflect stable and consistent data-collection processes and analysis methods over time.** | |
| Did the data collection produce responses that are internally consistent? | |
| **Yes** | • NORC created 6 internal consistency checks for this dataset. On average, there were 0.23 consistency problems per survey.<br>○ 76.6% had no problems raised.<br>○ 22.7% had just one failed consistency check<br>○ 0.69% had two or three failed consistency checks<br>• Checks with the greatest share of interviews with problems were:<br>○ Business has no kitchen staff reported, but restaurant services are reported as one of its main economic activities (14.0%)<br>○ Business has kitchen staff reported but doesn't report restaurant services as one of their main activities (6.2%)<br>Results suggest a high degree of internal consistency in the data. |
| Are data collection and analysis methods documented in writing that can be used to ensure the same procedures are followed each time? | |
| **No** | • The project materials contain summaries of the sampling methodology. Given the nature of the sample (census based on available registries), it is possible to run a new survey with the same methodology. In other words, the data collection method is replicable over time.<br>• The data collection method, including contact protocols, scripts, and survey software (SurveyCTO), is also clearly documented.<br>• The methodology protocol describes the limitations on using available registries and proposes approaches to mitigate these problems. However, there is no documentation on any approach adopted to mitigate these limitations in actual practice.<br>• The organization of the dataset is insufficient to ensure it can be used reliably for reproducible analysis. Dataset must be compared against the codebook to find question and value labels, though the dataset variables are out of order compared to the questionnaire, and the codebook is also out of order. The variable labels in the codebook are phrased differently from the questionnaire, and neither the dataset nor codebook include question tags (e.g., "C01"). All of this makes the dataset difficult to work with reliably. |
| TIMELINESS – **Data should be available at a useful frequency, should be current, and should be timely enough to influence decision-making.** | |
| Is the data collected within the range of time anticipated by the survey methodology? | |

| | |
|---|---|
| **Yes** | • The survey was implemented for 8 weeks between October and December 2019. This range of time falls within the timeline (10 weeks) envisioned in the methodology protocol. |

**PRECISION – Data have a sufficient level of detail to permit policy makers and program managers to make decisions based on clear information.**

Are responses as precise as intended by the question (or is there any evidence of systematically rounding or approximating numeric responses)? For example, in a question about age, are responses evenly distributed (or are they systemically rounded to the nearest "5" or "10")?

| | |
|---|---|
| **Yes** | NORC looked for evidence of rounding total number of workers, number of workers in individual jobs, number of job vacancies, and number of training hours. There was no significant evidence of rounding. |

How was sample size determined, and were power calculations conducted to ensure the survey would be adequately powered for informing policymaking decisions?

| | |
|---|---|
| **NA** | The survey was carried out in a census form. Therefore, its sampling method didn't include any power calculation and this point is not applicable. In addition, the final analysis didn't include weights, and the results were analyzed based on the original input. |

Does the collected data allow for disaggregated analysis for underserved populations?

| | |
|---|---|
| **No** | The data doesn't allow for disaggregated analysis by demographic variables. The only analysis that accounts for underserved populations includes female participation rate and age distribution of the personnel. |

**INTEGRITY – Data collected should have safeguards to minimize the risk of bias, data transcription, or manipulation.**

Are appropriate procedures or safeguards in place to minimize the risk of bias, or data transcription errors?

| | |
|---|---|
| **Yes** | • Data was collected by tablet, minimizing the risk of transcription errors.<br>• After completing an initial interview, the data collection included a verification step, where each survey was reviewed for completeness and accurate recording of answers, including consistency of responses.<br>  • According to the Methodology Protocol document, specific quality control checks performed included checks for: duplicate responses, range of responses, invalid values, examining performance by enumerator, survey duration, completed interviews per day, and response rate. This document also states that backcheck interviews were conducted on 25% of interviews, where original interview responses were compared against the responses in validation backcheck interviews to detect discrepancies. The checks described here are established best practices for quality control safeguards. |

**RECOMMENDATIONS**

- **Many users will read the questionnaire and then look for specific variables in the dataset – this is very difficult in the dataset's current format, because variables are out of order from the questionnaire, the codebook uses different phrasing than appears in the**

questionnaire, and question tags (e.g., "C01") are absent. At a minimum, variables in the datasets should be presented in the same order as they appear in the questionnaire, and the codebook should include the question tags from the questionnaire.

- Findings around the internal consistency of survey responses suggest internal consistency was widely maintained. However, results also suggest that these checks were not programmed directly into the survey logic. Future surveys should consider internal consistency and program hard and soft checks into the survey logic (e.g., to generate an error message if the number of male and female employees is greater than the total number of reported employees).
- In addition to the two demographic variables (gender and age range) used to understand the employment situation in this sector, it is also valuable to allow disaggregation by indigenous status, as well as the demographic composition of a hotel's leadership and senior management.

### 3.2. PILOT ESTABLISHMENT SURVEYS, WAVE 2 – HONDURAS

The data collection period for Wave 2 of the Pilot Establishment Surveys in Honduras is not specified in survey documents. For Wave 2, the food and beverage processing industry was the target for data collection. Survey administration was phone-based.

| SUMMARY | |
|---|---|
| What is the overall conclusion regarding the quality of the data?<br>*Mostly High Quality* | OVERALL QUALITY ■■■<br>VALIDITY ■■■■<br>RELIABILITY ■■■■■<br>TIMELINESS ■<br>PRECISION ■■■<br>INTEGRITY ■■■■■ |

| DQA QUESTION | ADDITIONAL DETAILS |
|---|---|

| VALIDITY – **Data should represent the intended result clearly and adequately.** | |
|---|---|
| Was the sampling methodology appropriately followed? | |
| **Yes** | • The sampling strategy established a sample frame from three directories of companies in the food and beverage processing sector, considered the entire country of Honduras in its geographic scope, and included only food and beverage processing companies that operated between March 2020 to March 2021 with at least 2 workers for an initial sample of 662.<br>• Surveyors attempted to contact each establishment via telephone with the purpose of confirming the commercial name and contact information. In this process, the records of 366 establishment were unable to be confirmed and were discarded. Surveyors went on to screen establishments in the field on the requisites and further reduced the list to the final consolidated survey sample of 344 establishments. |
| Is the response rate high enough so that we can be confident the data is reflective of the selected sample? | |
| **No** | • 2021 response rate: 35%<br>NORC suggests a minimum target of 60% response rate for establishment surveys. The response rate here is significantly lower. Therefore, we cannot confidently say that the data is reflective of the selected sample. |
| Do results collected fall within a plausible range? | |
| **Yes** | NORC examined the dataset to ensure responses fall within valid and plausible rangers. No issues were encountered. |
| RELIABILITY – **Data should reflect stable and consistent data-collection processes and analysis methods over time.** | |
| Did the data collection produce responses that are internally consistent? | |
| **Yes** | NORC created 7 internal consistency checks. On average, there were 0.04 consistency problems per the survey.<br>• 97% had no problems raised.<br>• 2% had just one failed consistency check<br>• 1% had failed more than one consistency check<br>• The issues identified were:<br>  ○ Two responses noted having trained more individuals than worked at their establishment *(personas_capacitadas, trabajadores_total)*<br>  ○ One response reported having IT staff (*cantidad_actual14)* but no technical equipment *(equipo_fabricacion)* |

| | |
|---|---|
| | ○ One response reported having machine operators (*cantidad_actual2*) but no machine equipment (*equipo_fabricacion*)<br><br>Results suggest a high degree of internal consistency in the data. |
| Are data collection and analysis methods documented in writing that can be used to ensure the same procedures are followed each time? | |
| **Yes** | • Project materials present sufficient summaries of the sampling methodology to replicate a new survey with the same methodology.<br>• The data collection method, including contact protocols and survey software is clearly documented.<br>• The organization of the dataset is sufficient to ensure it can be used reliably for reproducible analysis. Variables in the Wave 2 dataset are ordered appropriately in relation to the questionnaire and codebook, and variables in the codebook include question tags (e.g., "C01"). |
| **TIMELINESS – Data should be available at a useful frequency, should be current, and should be timely enough to influence decision-making.** | |
| Is the data collected within the range of time anticipated by the survey methodology? | |
| **No** | • The Methodology Protocol document does not include the data collection period. As such, we are unable to determine whether the data collection period is sufficient or whether it was the time period envisioned by the methodology. The time period for data collection must be included in survey documentation for the data to be useful to data users. |
| **PRECISION – Data have a sufficient level of detail to permit policy makers and program managers to make decisions based on clear information.** | |
| Are responses as precise as intended by the question (or is there any evidence of systematically rounding or approximating numeric responses)? For example, in a question about age, are responses evenly distributed (or are they systemically rounded to the nearest "5" or "10")? | |
| **Yes** | NORC looked for evidence of rounding total number of workers, number of workers who completed the training courses, percentage of production workers, percentage of sales for the main product, and number of workers in individual jobs. NORC found only limited evidence of systematic rounding of responses:<br>• Evidence of rounding total number of workers: **yes**<br>○ 32% of responses are multiples of 10 |
| How was sample size determined, and were power calculations conducted to ensure the survey would be adequately powered for informing policymaking decisions? | |
| **NA** | Although no power calculations are discussed in the methodology, sample size was determined mostly by the limits of the sample frame. Therefore, this point is not applicable. |
| Does the collected data allow for disaggregated analysis for underserved populations? | |

| | |
|---|---|
| No | • Collected data does not allow for disaggregating most information on employees by gender and age group, and disaggregating some by level of education.<br>• It is important to note the data does not allow for disaggregation by ethnic or linguistic minority groups or rural/urban. |

**INTEGRITY – Data collected should have safeguards to minimize the risk of bias, data transcription, or manipulation.**

Are appropriate procedures or safeguards in place to minimize the risk of bias, or data transcription errors?

| | |
|---|---|
| Yes | • Data was collected by tablet, minimizing the risk of transcription errors.<br>• According to the Methodology Protocol document, there was a quality control check to review 100% of the questionnaires to verify the survey was filled out appropriately. In the cases where errors were detected, the surveyors called the informant to retrieve the correct information prior to updating the complete survey record.<br>• Based on the information provided, there were limited quality control checks throughout survey implementation. |

**RECOMMENDATIONS**

- For questions at high risk for rounding answers (e.g., number of workers), enumerators should be trained to identify the appropriate level of detail responses are expected at, and to probe for more specific answers if the respondent provides an answer that appears to be rounded to a higher level. These questions should be monitored by the data manager during data collection to detect rounding issues and follow up with enumerators.
- Although NORC considers the quality checks described in survey materials to be minimally sufficient, these materials do not describe other best practices. NORC recommends data collection include a backcheck of a random selection of interviews and including checks on the main data for: duplicate responses, range of responses, invalid values, examining performance by enumerator, survey duration, completed interviews per day, and response rate. These checks were in place for the Wave 1 Establishment Surveys but are not described in the materials for Wave 2.
- Survey materials should include a date range for data collection for the data to be usable by outside users.
- The dataset could include a variable to show the date of each survey interview. At minimum, the survey methodology document should include the range of time in which the survey data was collected to better understand the timeliness of the data collection process.
- In addition to the demographic variables offering the age range and gender of employees, it may be valuable to allow disaggregation by ethnic group identification, as well as the demographic composition of the establishment's leadership and senior management.
- Specific and consistent quality control checks should be performed throughout data collection, including checks for: duplicate responses, range of responses, invalid values, examining performance by enumerator, survey duration, completed interviews per day, and response rate. The current quality control checks are insufficient in limiting data transcription errors.

### 3.3. NATIONAL STATISTICS AGENCY HOUSEHOLD LABOR FORCE SURVEYS – HONDURAS (ENCUESTA PERMANENTE DE HOGARES DE PROPÓSITOS MÚLTIPLES - EPHPM)

The data from the Encuesta Permanente de Hogares de Propósitos Múltiples (EPHPM) is conducted once per year by Honduras's national statistics agency, Instituto Nacional de Estadística (INE). The most recent iteration of the survey for the year 2019 included 7,200 households and 1,200 primary sampling units.

| SUMMARY[75] | |
|---|---|
| What is the overall conclusion regarding the quality of the data? | *Not Very High Quality* |
| | OVERALL QUALITY ■■□□□ |
| | TIMELINESS ■□□□□ |
| | PRECISION ■■□□□ |
| | USABILITY ■■□□□ |

| DQA QUESTION | ADDITIONAL DETAILS |
|---|---|
| **TIMELINESS – Data should be available at a useful frequency, should be current, and should be timely enough to influence policymaking decisions.** | |
| Are data available frequently enough to inform policymaking decisions? | |
| **No** | • Public data availability for EPHPM is insufficient for even basic analysis incorporating anything more than 2018 and 2019.<br>• EPHPM is conducted once per year. Once collected, public availability of the data is inconsistent from year to year. No data is currently available for 2020 or 2021. |

[75] While the DQA evaluation of the establishment surveys rates five data quality indicators, the evaluation of the national household labor market surveys rates three data quality indicators. This decision was made following ILAB's interests and learning priorities for understanding different aspects of the data quality for each survey.

| | |
|---|---|
| | • For comparable surveys among other countries in the region: Colombia (*Gran Encuesta Integrada de Hogares*), conducts surveys monthly, with data posted publicly with a lag of approximately 2 months; Costa Rica (*Encuesta Continua de Empleo*), conducts surveys quarterly, with data reported with a lag of approximately 2 months. |
| PRECISION – **Data have a sufficient level of detail to permit informed policymaking decisions.** | |
| Has the margin of error been reported along with the data? | |
| **Yes** | Although the margin of error is not provided directly in the reports or survey materials, this is acceptable given how the materials are presented. The methodological description of the survey and calculations for precision are sufficient to allow a user to calculate this on their own, given the data. |
| Are the margins of error acceptable for program decision making? | |
| **No** | • The sample of the 2021 survey included 7,200 households across 1,200 primary sampling units. Statistical power is lower in publicly available datasets, since only a subset is available, which does not include all observations and PSUs.<br>• For comparison, Costa Rica's Encuesta Continua de Empleo includes a sample of nearly 10,000 households across 800 primary sampling units per quarter (40,000 households and 3,200 PSUs per year).<br>• While Honduras's sample size is adequately powered for most outcomes at the national or regional levels, it is likely to fall short for sub-populations of interest to policymakers, such as measuring changes in specific economic sectors, minority groups, or smaller geographic levels.<br>• It is important to note that while the project provided some assistance on sampling methods, increasing the sample size of the survey to ensure it was adequately powered for sub-populations of interest was outside the NTLMI project's scope. |
| Does the collected data allow for disaggregated analysis for traditionally underserved populations? | |
| **No** | • **Data allows the analyst to disaggregate by gender, age group, poverty indicators, urban/rural, and other indicators typically of interest for identifying traditionally underserved populations.**<br>• **Importantly, however, the data does not allow the analyst to disaggregate by Indigenous, Afro-Honduran, or other racial or ethnic identification.**<br>• **Further, the two departments not included in the survey, Gracias a Dios and Islas de Bahia, have much larger concentrations of ethnic minority populations than other parts of the country. This implies a degree of explicit underrepresentation of these populations in the survey.** |

| USABILITY – **The ease with which an outside user can access, understand, and use the data to inform policy, business, recruitment, job training, and talent acquisition decisions.** | |
|---|---|
| Is the data easy for outside users to access? | |
| **No** | • Data is easy to find and download online and is publicly available. However, datasets are only available for 2018 and 2019. The structure of the linked pages for each survey year varies greatly from year to year, with 2018 and 2019 leading to a direct download of the survey data, and earlier years leading to a unique page for each survey wave with accompanying survey documentation and summary statistics, but no downloadable data. |
| Is the available data well-documented, labelled, properly formatted, and easy enough to understand to be usable for outside users? | |
| **No** | • Variables required for survey analysis, such PSU, are not clearly labelled.<br>• The structure of the dataset varies from the sampling methods described in the accompanying documentation because the published data is not the complete dataset, though there is no accompanying documentation to clarify this. This makes it even more challenging to identify variables that are not clearly labelled, such as PSU.<br>• Variables that relate to survey questions are clearly named and labelled. However, the survey questionnaire is only available for download for years prior to 2018, which limits the analyst's ability to refer back to the documentation if they have questions about specific variables in the dataset. No data dictionary or codebook is available for any survey year.<br>• Documentation on sampling methodology often uses language that describes what "can" be done or what "is recommended", but is not always clear about what was actually done in practice. |
| Does the data have wide enough geographic coverage to inform policy making decisions? | |
| **Somewhat** | • The sample frame for EPHPM includes all rural and urban communities of the country, with the exception of those in the Gracias a Dios and Islas de Bahia departments.<br>• Sampling is based on the 2013 census, which is the most recent available.<br>• The design ensures a sample that is representative of the population, with sufficient allocation of the sample across location to permit calculating figures for the national capital area, San Pedro Sula, other urban areas, and rural.<br>• However, the exclusion of Gracias a Dios and Islas de Bahia has implications for the geographic and sociodemographic representativity of the survey. Additionally, higher proportions of ethnic minority and underserved communities in these departments limits the usefulness of these surveys for making informed policy decisions related to these geographies and communities. |

## RECOMMENDATIONS

- Publishing the full datasets for each survey year, as opposed to either a subset of the complete data or summary statistics and no data, will allow users to make decisions based on more complete data, reducing the margin of error in the published dataset and allowing more flexibility in the analysis they can conduct. At a minimum, a partial dataset should be publicly available for each survey wave, as the current availability of data for surveys prior to 2018 is insufficient for even basic analyses.
- Budget is surely a major consideration for not including all departments in the survey. However, the survey should consider how Gracias a Dios and Islas de Bahia departments might be included. The exclusion of these departments limits the usefulness of the survey for understanding the situation of some of the most vulnerable populations in the country.
- If only a partial set of the full data can be published, data should be accompanied by a README file clarifying that published data are a subset of the full dataset, and clarifying the process used for selecting the observations in the published dataset (e.g., random selection of observations, selection of PSUs, etc.).
- Consistently make the survey questionnaire available for download for all survey years.

# ANNEX K. Data Analytics

This annex presents labor market statistics calculated from the national household labor force surveys and pilot establishment surveys for Guatemala, El Salvador, and Honduras. National household labor force surveys are conducted by each country's national statistics office, with frequency of data availability and variables identifying population sub-groups that vary by country. Pilot establishment surveys were conducted by AIR as part of the NTLMI program. Results are presented for key population sub-groups, and include labor market growth sectors, labor force participation rates, average pay in the top labor market sectors, and key barriers to labor force participation.

Labor force participation in all three countries is characterized by low levels of formal employment, high levels of informal employment, and low levels of unemployed individuals looking for work. However, labor force participation rates (i.e., those either working or looking for work) vary widely by different sub-populations, with rates that are much higher for men than women, lower for youth than older individuals, and higher for rural areas than urban. Similarly, the composition of labor force participation varies by sub-group in each country, with levels of formal employment that are much higher in urban areas than rural, and lower for women and youth. In general, the top reasons for not participating in the labor force were similar among the three countries, with women most likely to say they were not participating in the labor force due to household responsibilities, and men most likely to say they were not participating in the labor force due to their pursuit of educational or training opportunities.

While gender, age and location correlate with formal employment and labor force participation in all three countries, they do so to different degrees. Notably, the largest differences in formal employment in Guatemala are seen by gender, and when comparing urban men and women to those who identify as indigenous Guatemalans. This distinguishes Guatemala from Honduras, where the largest differences are seen comparing those in urban and rural areas. Below, we pursue a country-by-country analysis of labor market trends.

## 1. GUATEMALA

Labor statistics for Guatemala are calculated from the October 2021 and October 2010 National Survey on Employment and Income (ENEI).

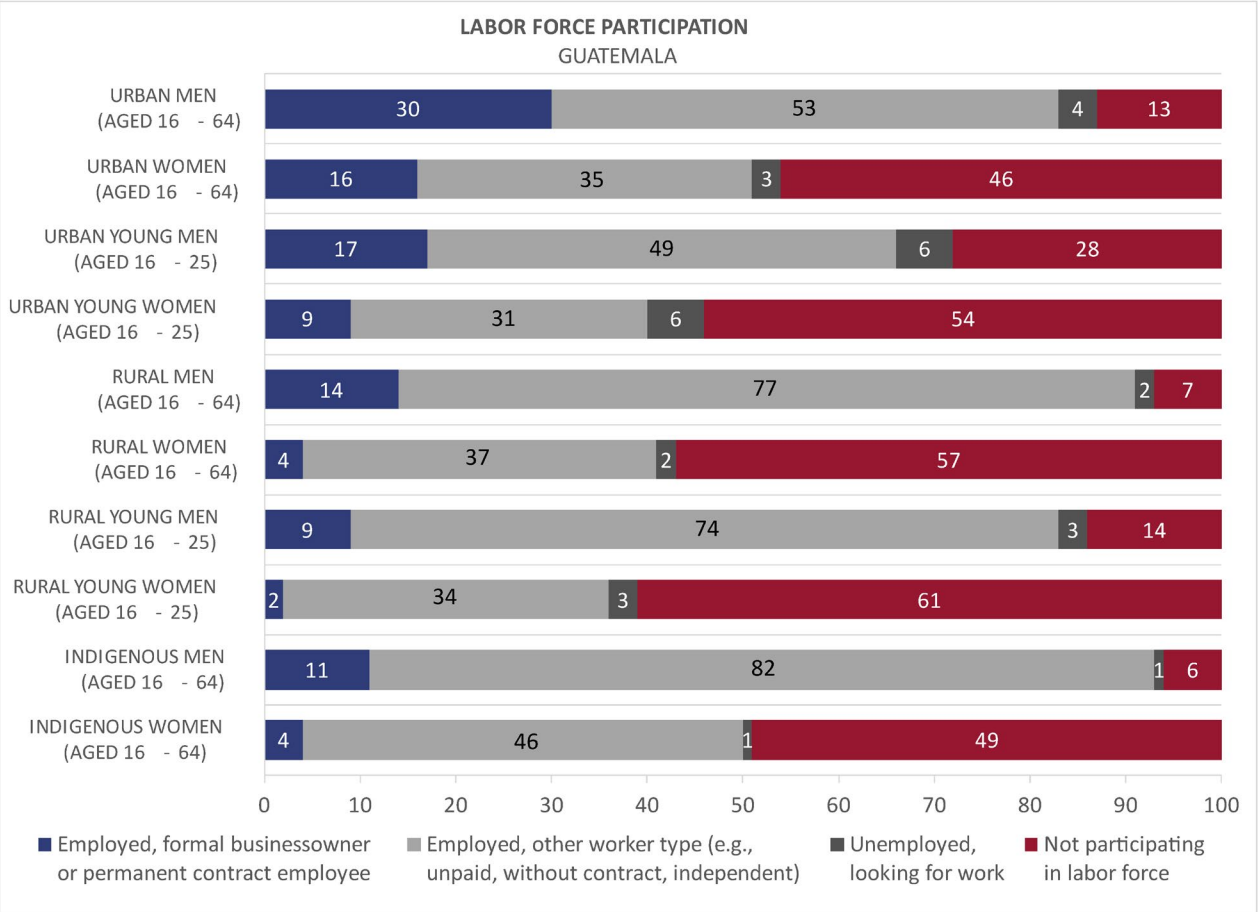
### 1.1. LABOR FORCE PARTICIPATION

The labor force participation rate is calculated for different sub-populations of interest for survey respondents in Guatemala between the ages of 16 and 64. Labor force participation is defined as the percentage of the population who were either working or looking for work during the week before the survey.

Given the importance of the informal labor market in Central America, it is important to distinguish between formal and informal employment. With the data available in the ENEI, we proxy formal employment as those who are either formal business owners or private or public sector employees with contracts. Our proxy for informal employment is a category that includes public and private sector employees without contracts, unpaid workers, and independent workers.

Figure A3.1 shows the results. Of the Guatemalan population between the ages of 16 and 64, Indigenous men had the highest labor force participation rate in 2021, at 94 percent either employed or unemployed and looking for work. Like other sub-populations, however, this high labor force participation rate is characterized by a low level of unemployment and high levels

*Figure A3.1: Guatemalan Labor Force Participation Rates, October 2021*




Source: October 2021 ENEI.

of informal employment: just 11 percent of working age men who identify as indigenous Guatemalans are formally employed. Levels of formal employment are low for all sub-groups, as urban men have the highest levels of formal employment at just 30 percent, while rural young women have the lowest levels at only 2 percent.

The data show women in Guatemala experience lower levels of labor force participation compared to their male counterparts. Urban women have the highest labor force participation rate among women in Guatemala, with formal and informal employment rates of 16 percent and 35 percent, respectively, and three percent unemployed and looking for work, for a total labor force participation rate of 54 percent. Labor force participation rates among women are significantly lower among women aged 16-25, and among rural women.

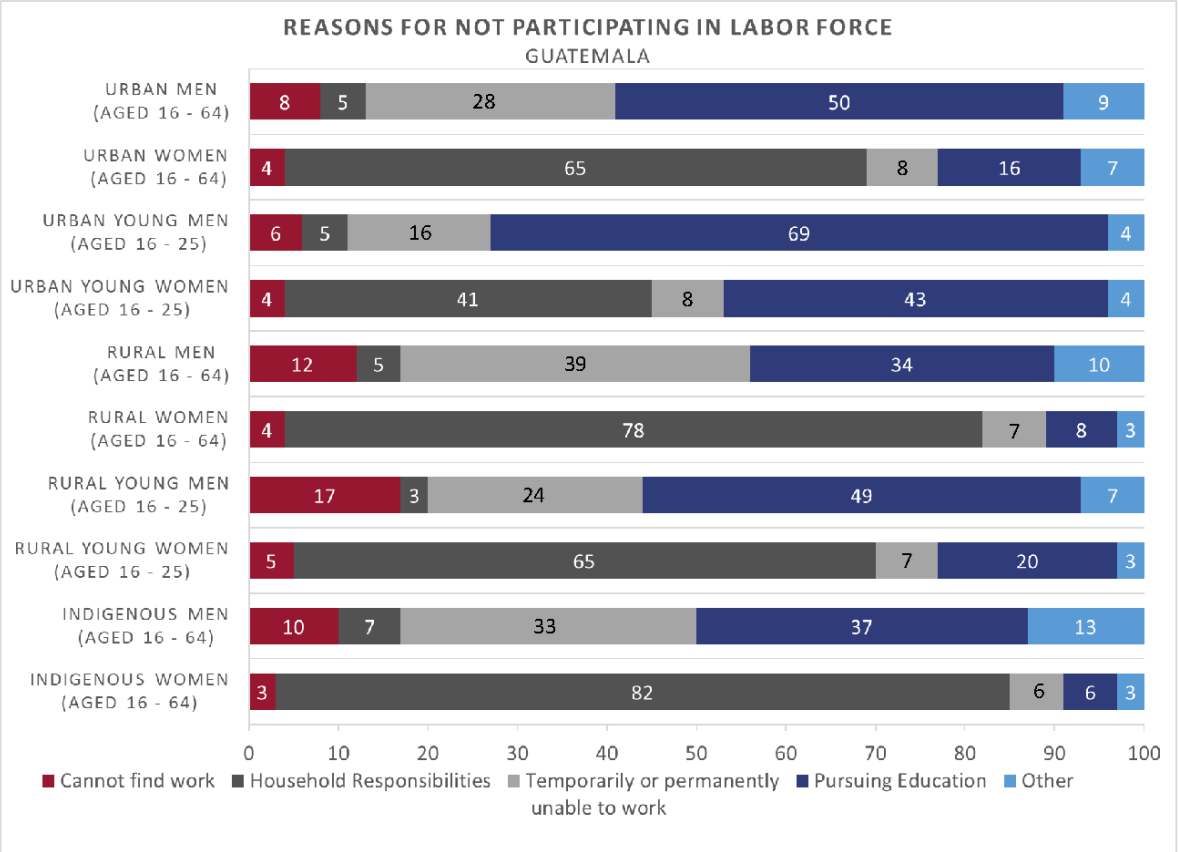
### 1.2. BARRIERS TO LABOR FORCE PARTICIPATION

For those who are not working and not looking for work, we identify the main reasons for not participating in the labor force. Results are presented for key sub-groups, allowing us to compare barriers to labor force participation across different populations.

Overall, the main barriers to labor force participation for Guatemalans include being unable to find work; household responsibilities (including housework, family responsibilities, or having no one else to care for young children); education; and being temporarily or permanently unable to work (e.g., due to sickness, accident, disability, pregnancy, or age). With the exception of urban young women, at all ages and in both rural and urban areas, the main

reason women did not look for work was due to household responsibilities, corresponding to between approximately 65 and 80 percent of women outside the labor force. The percentage is notably higher for rural and indigenous women than for urban women, perhaps suggesting a lack of childcare options or stricter, more traditional gender roles. For young urban women, household responsibilities (41 percent) follow behind education (43 percent) as the top reason for not participating in the labor force.

*Figure A3.2: Key Labor Force Participation Barriers in Guatemala, October 2021*




Source: October 2021 ENEI

### 1.3. LABOR MARKET SECTORS WITH GREATEST WAGE AND JOB GROWTH

By combining data from the October 2010 and 2021 ENEI surveys, we are able to calculate wage and job growth by economic sector. The first panel of Table A3.1 shows the top three industries for job and wage growth among those with formal employment, defined as in Figure A3.1. The top industry for wage growth was public administration, defense, teaching, healthcare, and social services, where wages grew by 59.6 percent over the period. This sector is dominated by public sector employment, though also includes private sector teachers and healthcare workers[76]. The top industry for job formal employment growth was agriculture and related activities, with growth of nearly 200 percent between 2010 and 2021. The next two panels in the table show the top industries for job and wage growth among those with informal employment, for urban and rural areas, respectively. In urban areas, professional, scientific, technical, and administrative services represented the top industry for both wage growth (60.4

[76] Guatemala's ENEI survey includes these activities in a single economic category, regardless of whether the employer is public or private.

percent) and job growth (68.6 percent) among those with informal employment. In rural areas, the top industry in the informal sector for wage growth was public administration, defense, teaching, healthcare, and social services (94.5 percent), while construction (203.3 percent) saw the highest job growth. Though it may appear odd that an industry dominated by public sector employment had the highest wage growth in the *informal* economy in rural areas, the available data suggests this growth was mainly driven by teachers in private schools without employment contracts.

The remaining panels of Table A3.1 show the top three sectors for wage and job growth, for all of Guatemala and by level of education, including both formal and informal employment together. We define secondary education as having completed *diversificado*, the Guatemalan equivalent of senior high school, typically completed at age 18. The data show that approximately 90 percent of the rural population has less than a secondary education, compared to approximately 60 percent of the urban population. Including both formal and informal employment together, the industries with the highest wage growth between 2010 and 2021 are public administration, defense, teaching, healthcare, and social services (55.4 percent), other services [77] (48.1 percent), and professional, scientific, technical, and administrative services (37.1 percent). The industries with the highest job growth between 2010 and 2021 are professional, scientific, technical, and administrative services (117 percent), construction (105 percent), and wholesale and retail commerce, storage and transport, and hotel and food services (55.8 percent).

The results are further broken down by education level. In terms of wage growth, public administration, defense, teaching, healthcare, and social services is the top sector for Guatemalans of all education levels, with the exception of urban Guatemalans with less than secondary education (where it is the industry with the third highest wage growth). The results suggest wage growth in this industry was relatively even, regardless of education level, at between 45-60 percent.

Construction saw the highest job growth over the period for Guatemalans of all education levels, with the exception of those with tertiary education. Construction jobs grew by 22.8 percent for urban Guatemalans with less than secondary education, 173 percent for rural Guatemalans with less than secondary education, and by 256 percent for Guatemalans with a secondary education. Further analysis shows that while construction was consistently among the top sectors contributing to the employment of both rural and urban men of all education levels, the industry was not represented among the top five employing sectors for rural or urban women of any education level.

[77] For Guatemala, the "other services" category includes artistic activities and entertainment; libraries, museums, and cultural activities; gambling and betting; sports and recreation; repair of electronics and household goods; domestic services; and other personal services.

*Table A3.1: Guatemalan Labor Market Sectors with Greatest Wage and Job Growth (2010-2021), by Education Level*

| Top Economic Sectors with Highest *Wage* Growth Between 2010 and 2021 | | | | Top Economic Sectors with Highest *Job* Growth Between 2010 and 2021 | | | |
|---|---|---|---|---|---|---|---|
| Sector | Average Wage 2010, Quetzales (USD) | Average Wage 2021, Quetzales (USD) | Average Nominal Wage Growth | Sector | Number Employed in 2010 | Number Employed in 2021 | Average Job Growth |
| Respondents with Formal Employment | | | | | | | |
| Public administration, defense, teaching, healthcare, and social services | Q3,002 (US$373) | Q4,792 (US$620) | 59.6% | Agriculture, livestock, hunting, and related activities | 50,849 | 151,076 | 197.1% |
| Financial and insurance activities | Q2,602 (US$323) | Q3,667 (US$474) | 40.9% | Professional, scientific, technical, and administrative services | 53,656 | 139,172 | 159.4% |
| Manufacturing, mining, and quarrying | Q3,096 (US$384) | Q4,209 (US$544) | 35.9% | Other services (excluding financial, hotel, and food services) | 21,328 | 48,655 | 128.1% |
| Respondents with Informal Employment - Urban | | | | | | | |
| Professional, scientific, technical, and administrative services | Q2,045 (US$254) | Q3,280 (US$424) | 60.4% | Professional, scientific, technical, and administrative services | 40,905 | 68,952 | 68.6% |
| Other services (excluding financial, hotel, and food services) | Q888 (US$110) | Q1,348 (US$171) | 51.8% | Construction | 132,448 | 185,765 | 40.3% |
| Information and communication | Q1,951 (US$242) | Q2,926 (US$378) | 50.0% | Wholesale and retail commerce, storage and transport, hotel and food service | 737,464 | 852,184 | 15.6% |
| Respondents with Informal Employment - Rural | | | | | | | |
| Public administration, defense, teaching, healthcare, | Q1,412 (US$175) | Q2,746 (US$355) | 94.5% | Construction | 110,910 | 336,405 | 203.3% |

| Top Economic Sectors with Highest *Wage* Growth Between 2010 and 2021 | | | | Top Economic Sectors with Highest *Job* Growth Between 2010 and 2021 | | | |
|---|---|---|---|---|---|---|---|
| Sector | Average Wage 2010, Quetzales (USD) | Average Wage 2021, Quetzales (USD) | Average Nominal Wage Growth | Sector | Number Employed in 2010 | Number Employed in 2021 | Average Job Growth |
| and social services | | | | | | | |
| Real Estate | Q1,500 (US$186) | Q2,400 (US$310) | 60.0% | Other services (excluding financial, hotel, and food services) | 144,875 | 252,915 | 74.6% |
| Other services (excluding financial, hotel, and food services) | Q789 (US$98) | Q1,110 (US$144) | 40.7% | Wholesale and retail commerce, storage and transport, hotel and food service | 389,791 | 859,830 | 120.6% |
| All Respondents (including formal and informal employment) | | | | | | | |
| Public administration, defense, teaching, healthcare, and social services | Q2,809 (US$349) | Q4,365 (US$564) | 55.4% | Professional, scientific, technical, and administrative services | 112,294 | 244,239 | 117% |
| Other services (excluding financial, hotel, and food services) | Q964 (US$120) | Q1,427 (US$184) | 48.1% | Construction | 289,936 | 594,079 | 105% |
| Professional, scientific, technical, and administrative services | Q2,650 (US$329) | Q3,633 (US$470) | 37.1% | Wholesale and retail commerce, storage and transport, hotel and food service | 1,373,181 | 2,139,901 | 55.8% |
| Respondents with PhD, Masters, and Other Advanced Degrees (including formal and informal employment) | | | | | | | |
| Public administration, defense, teaching, healthcare, and social services | Q3,583 (US$445) | Q5,398 (US$697) | 50.6% | Professional, scientific, technical, and administrative services | 25,378 | 78,977 | 211% |
| Other services (excluding financial, hotel, and food services) | Q3,385 (US$420) | Q4,429 (US$572) | 30.8% | Other services (excluding financial, hotel, and food services) | 11,049 | 29,216 | 164% |

| Top Economic Sectors with Highest *Wage* Growth Between 2010 and 2021 | | | | Top Economic Sectors with Highest *Job* Growth Between 2010 and 2021 | | | |
|---|---|---|---|---|---|---|---|
| Sector | Average Wage 2010, Quetzales (USD) | Average Wage 2021, Quetzales (USD) | Average Nominal Wage Growth | Sector | Number Employed in 2010 | Number Employed in 2021 | Average Job Growth |
| Financial and insurance activities | Q4,413 (US$548) | Q4,871 (US$630) | 10.4% | Agriculture, livestock, hunting, and related activities | 8,529 | 20,552 | 141% |
| Respondents with Secondary Education (including formal and informal employment) | | | | | | | |
| Public administration, defense, teaching, healthcare, and social services | Q2,580 (US$320) | Q4,016 (US$519) | 55.7% | Construction | 22,886 | 81,545 | 256% |
| Professional, scientific, technical, and administrative services | Q2,293 (US$285) | Q3,561 (US$460) | 55.4% | Wholesale and retail trade, transport and storage, accommodation, and food service activities | 278,949 | 637,652 | 128% |
| Financial and insurance activities | Q2,850 (US$354) | Q3,620 (US$468) | 27.0% | Professional, scientific, technical, and administrative services | 41,225 | 87,210 | 112% |
| Respondents with Less than Secondary Education (Urban - including formal and informal employment) | | | | | | | |
| Manufacturing, mining, and quarrying | Q1,524 (US$189) | Q2,271 (US$294) | 49.0% | Construction | 139,907 | 171,923 | 22.8% |
| Other services (excluding financial, hotel, and food services) | Q858 (US$106) | Q1,263 (US$163) | 47.1% | Professional, scientific, technical, and administrative services | 30,207 | 34,440 | 14% |
| Public administration, defense, teaching, healthcare, and social services | Q2,139 (US$265) | Q3,139 (US$405) | 46.7% | Wholesale and retail trade, transport and storage, accommodation, and food service activities | 627,090 | 640,289 | 2% |

| Top Economic Sectors with Highest *Wage* Growth Between 2010 and 2021 | | | | Top Economic Sectors with Highest *Job* Growth Between 2010 and 2021 | | | |
|---|---|---|---|---|---|---|---|
| Sector | Average Wage 2010, Quetzales (USD) | Average Wage 2021, Quetzales (USD) | Average Nominal Wage Growth | Sector | Number Employed in 2010 | Number Employed in 2021 | Average Job Growth |
| Respondents with Less than Secondary Education (Rural - including formal and informal employment) | | | | | | | |
| Public administration, defense, teaching, healthcare, and social services | Q1,526 (US$189) | Q2,428 (US$314) | 59.1% | Construction | 119,410 | 326,399 | 173% |
| Other services (excluding financial, hotel, and food services) | Q786 (US$98) | Q1,120 (US$145) | 42.5% | Wholesale and retail trade, transport and storage, accommodation, and food service activities | 389,367 | 737,592 | 89.4% |
| Agriculture, livestock, hunting, and related activities | Q892 (US$111) | Q1,267 (US$164) | 42.0% | Other services (excluding financial, hotel, and food services) | 145,901 | 233,900 | 60.3% |

Source: October 2010 and October 2021 ENEI

Note: Exchange rates come from the International Monetary Fund. Average exchange rate for 2010 = 8.06 Quetzales per US Dollar. Average exchange rate for 2021 = 7.73 Quetzales per US Dollar.

### 1.4. KEY LABOR MARKET SECTORS

For each population sub-group, we calculate the top economic sectors employing the greatest share of the population, along with the average monthly salary. Figure A3.3 shows the results, with sub-groups for men shown in the left panel, and sub-groups for women shown in the right.

Among employed men in 2021, the main economic activity for all sub-groups was activities related to agriculture, livestock, and hunting[78]. The sole exception is urban young men, whose top sector was retail trade (18 percent). The main economic activity for women sub-groups was retail trade, with the exception of indigenous women, whose main economic activity was agriculture (24 percent). Those living in urban areas earned higher salaries compared to Guatemalans in rural areas working within the same industry. Similarly, young urban men earned higher average salaries compared to their female counterparts in the retail trade industry, while indigenous men earned higher average salaries than their female counterparts in agriculture.

[78] While it may be surprising that agriculture is a top employer in urban areas, the data shows this comes almost entirely from urban areas outside of the department of Guatemala. These towns and smaller cities, while technically urban, still have a large agricultural economy, particularly in the surrounding countryside.

*Figure A3.3: Top Employing Labor Market Sectors in Guatemala and Associated Average Salaries, by Sub-group*

| MEN | | | | WOMEN | | | |
|---|---|---|---|---|---|---|---|
| GROUP | TOP EMPLOYING INDUSTRY | Percent Employed in Industry | Average salary (USD) | GROUP | TOP EMPLOYING INDUSTRY | Percent Employed in Industry | Average salary (USD) |
| Urban | Agriculture, livestock, hunting, and related activities | 16% | $190 | Urban | Retail trade, excluding cars and motorcycles | 26% | $301 |
| Urban Youth* | Retail trade, excluding cars and motorcycles | 18% | $274 | Urban Youth* | Retail trade, excluding cars and motorcycles | 28% | $227 |
| Rural | Agriculture, livestock, hunting, and related activities | 53% | $173 | Rural | Retail trade, excluding cars and motorcycles | 23% | $183 |
| Rural Youth* | Agriculture, livestock, hunting, and related activities | 50% | $172 | Rural Youth* | Retail trade, excluding cars and motorcycles | 26% | $170 |
| Indigenous | Agriculture, livestock, hunting, and related activities | 52% | $144 | Indigenous | Agriculture, livestock, hunting, and related activities | 24% | $116 |

*Aged 16-25

Source: October 2021 ENEI.
Note: Exchange rates come from the International Monetary Fund. Average exchange rate for 2021 = 7.73 Quetzales per US Dollar.

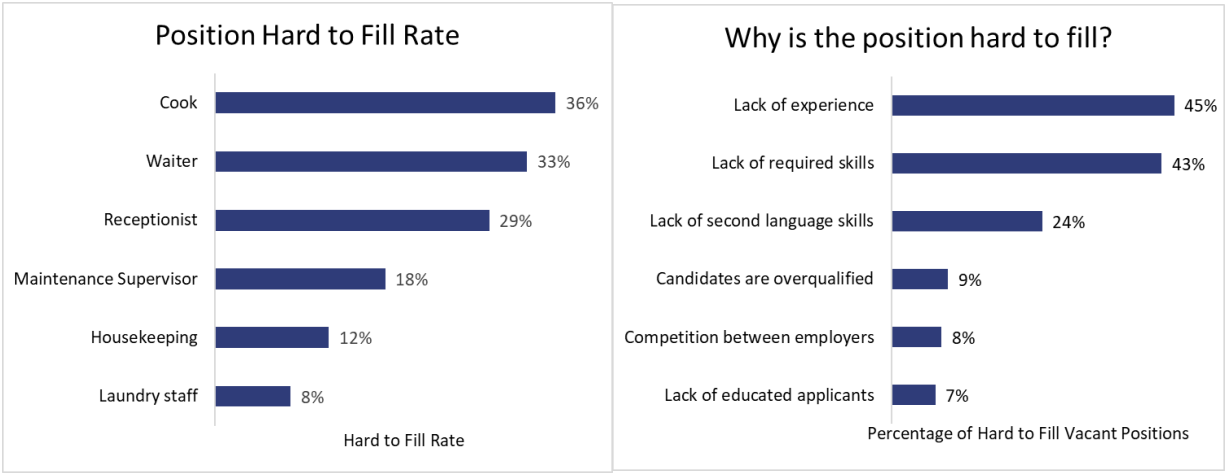
### 1.5. EMPLOYER NEEDS AND BARRIERS TO FINDING TALENT

We use the Hospitality Sector Pilot Establishment Survey conducted by AIR to identify the positions in the hospitality industry that are hardest to fill, along with the reasons these positions are difficult to fill, as identified by managers.

Among the 682 businesses responding to the survey, the most common positions among respondents to the Hospitality Sector Pilot Establishment Survey in Guatemala were: housekeeping (*n*=984 total positions), receptionist (*n*=551), cook (*n*=191), waiter (*n*=119), laundry staff (*n*=74), and maintenance supervisor (*n*=61). For each position, we calculate a hard to fill rate, defined as the sum of employees in the position among employers that consider the position "hard to fill", divided by the sum of employees in the position among all employers in the survey. Figure A3.4 shows that the positions that are the hardest to fill are cooks (36 percent), waiters (33 percent), and receptionists (29 percent).

Employers were also asked why positions were hard to fill. Among all hard to fill positions, the most common reasons given were a lack of candidates with experience in the position (45 percent), applicants that lack the required skills for the position (43 percent), and a lack of candidates with second language skills (43 percent).

*Figure A3.4: Employer Needs and Barriers to Finding Talent in the Guatemala Hospitality Sector*




Source: 2019 Guatemala Hospitality Sector Pilot Establishment Survey (AIR).

## 2. EL SALVADOR

Labor statistics for El Salvador are calculated from the 2020 and 2015 Multipurpose Household Survey (EHPM)[79]. Data collection for the second quarter of 2020 was impacted by the COVID-19 pandemic; as a result, all calculations include data from quarters one, three, and four only, to ensure data is comparable across the two years.

### 2.1. LABOR FORCE PARTICIPATION

The labor force participation rate is calculated for different sub-populations of interest for survey respondents in El Salvador between the ages of 16 and 64.[80] Labor force participation is defined as the percentage of the population who were either working or looking for work during the week before the survey.

With the data available in the 2020 EHPM, we attempt to distinguish between formal and informal employment among the Salvadoran labor force. We define formal employment as those who are either formal business owners or private or public sector employees with contracts. Our proxy for informal employment is a category that includes public and private sector employees without contracts, unpaid workers, and independent workers.

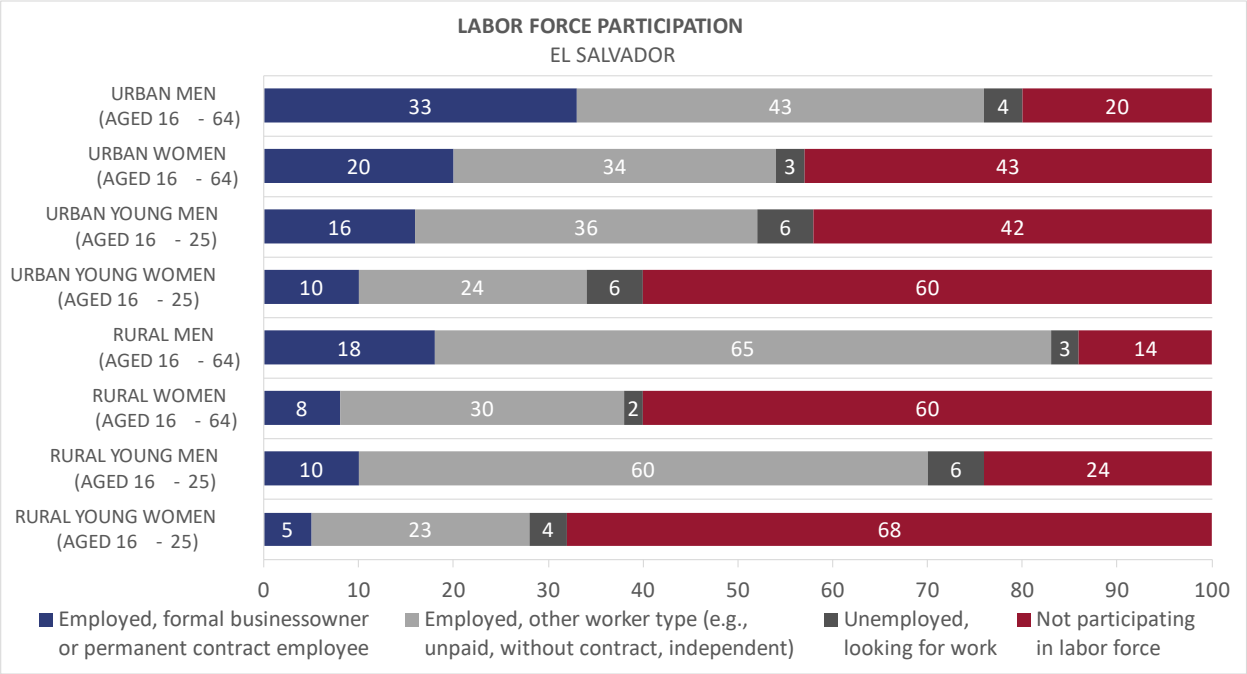
Figure A3.5 shows rates of labor force participation among selected groups. Among respondents aged 16 to 64, rural men had the highest labor force participation rate, at 86 percent either employed or unemployed and looking for work. Like other sub-populations, this high labor force participation rate is characterized by a low level of unemployment and high levels of informal employment: just 18 percent of working age rural men are formally employed. As in Guatemala, levels of formal employment in El Salvador are low for all sub-groups, and urban men have the highest levels of formal employment at 33 percent, while rural young women have the lowest levels at only 5 percent. Unlike in Guatemala, El Salvador's EHPM does not allow data to be disaggregated by ethnic minority groups.

[79] EPHPM data is available before 2015 but has a very different format and database structure from what is used in later years, making it difficult to compare against the 2020 data and calculate growth rates.

[80] Unlike Guatemala's national labor force survey, El Salvador's EHPM does not ask respondents for their racial or ethnic identification. Thus, results are not presented for ethnic minority groups.

The data show women in El Salvador experience lower levels of labor force participation compared to their male counterparts. As in Guatemala, urban women in El Salvador had the highest labor force participation rate among women, with formal and informal employment rates of 20 percent and 34 percent, respectively, and three percent unemployed and looking for work, for a total labor force participation rate of 57 percent. Rural young women had the lowest rates of labor force participation, at just 32 percent.

*Figure A3.5: Salvadoran Labor Force Participation Rates, 2020*



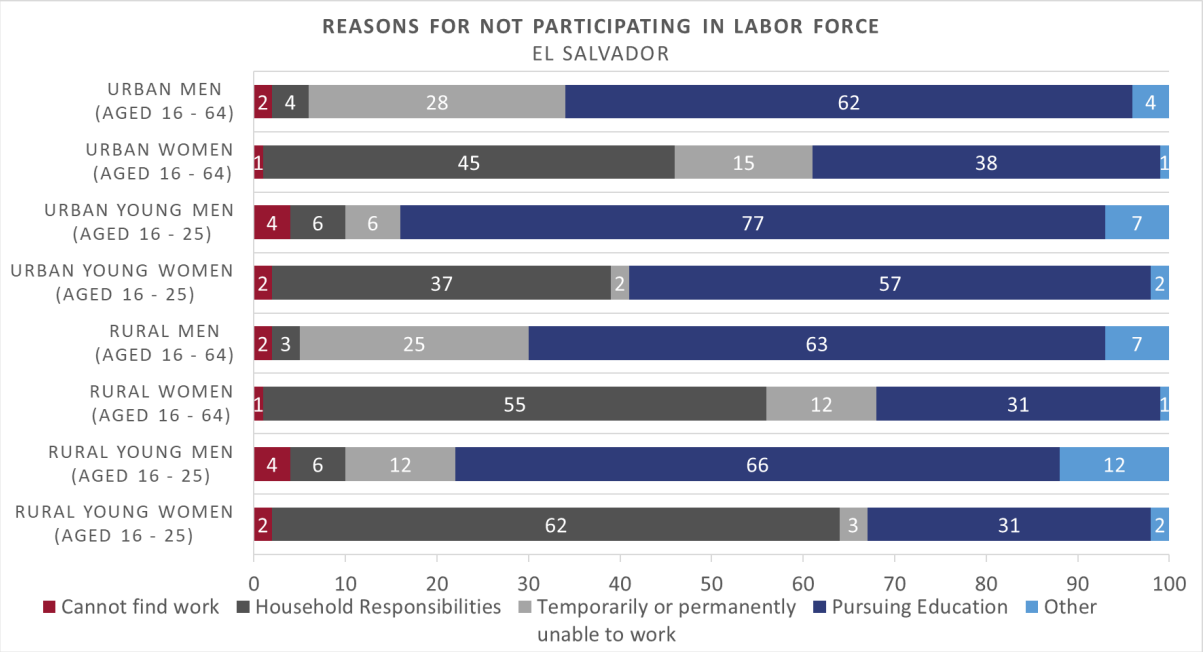

Source: 2020 EHPM, Quarters 1, 3, and 4.

### 2.2. BARRIERS TO LABOR FORCE PARTICIPATION

For those who are not working and not looking for work, we identify the main reasons for not participating in the labor force. Results are presented for key sub-groups, allowing us to compare barriers to labor force participation across different populations.

Overall, the main reasons for not participating in the labor force for respondents in El Salvador include household responsibilities (including household chores, care for dependents, and family and personal obligations); pursuing education; and temporarily or permanently unable to work due to reasons such as accident, advanced age, or disability. Differences by gender are also informative: while the primary reason for not participating in the labor force for all groups of men was the pursuit of educational opportunities, suggesting they will enter the labor force eventually, the main reason for Salvadoran women was household responsibilities, with the sole exception of urban young women, for whom household responsibilities (37 percent) follows behind education (57 percent).

*Figure A3.6: Key Labor Force Participation Barriers in El Salvador, 2020*




Source: 2020 EHPM, Quarters 1,3, and 4.

## 2.3. LABOR MARKET SECTORS WITH GREATEST WAGE AND JOB GROWTH

By combining data from the 2015 and 2020 EHPM surveys, we are able to calculate wage and job growth by economic sector. The first panel of Table A3.2 shows the top three industries for job and wage growth among those with formal employment, defined as in Figure A3.4. The top industry for formal employment wage growth was transportation, storage, and communications, where wages grew by 58.6 percent. The top industry for formal job growth was construction, with growth of 61 percent between 2015 and 2020. The next two panels in the table show the top industries for job and wage growth among those with informal employment, for urban and rural areas, respectively. In urban areas, manufacturing represented the top industry for informal employment wage growth (30.6 percent), while the top industry for informal job growth was construction (57.5 percent). In rural areas, the top informal sector for wage growth was commerce, hotels, and restaurants (31.8 percent), while construction (89.9 percent) saw the highest job growth.

The remaining panels of Table A3.2 show the top three sectors for wage and job growth, for all respondents and by level of education, including both formal and informal sectors of the economy together. We define secondary education as having reached *media*, the Salvadoran equivalent of senior high school. The data show that approximately 80 percent of the rural population has less than a secondary education, compared to approximately 58 percent of the urban population. About 80 percent of rural women have less than a secondary education, compared to 59 percent of urban women. Similarly, about 79 percent of rural men have less than a secondary education, compared to about 54 percent of urban men.

The economic sectors with the highest job growth between 2015 and 2020 are construction (68.5 percent), domestic services (50.3 percent), and finance and real estate (44.1 percent). Construction represents one of the top three sectors for job growth for Salvadorans of all education levels, ranging from 40.4 percent among urban Salvadorans with less than secondary education, to 122.5 percent among all Salvadorans with a secondary education. Although it does not appear as one of the top three sectors among all respondents in El

Salvador, the commerce, hotels, and restaurants sector is notable in that it appears as one of the top three sectors for wage growth among Guatemalans of all education levels, with the exception of those with a secondary education.

*Table A3.2: El Salvador Labor Market Sectors with Greatest Wage and Job Growth (2015-2020), by Education Level*

| Top Economic Sectors with Highest *Wage* Growth Between 2015 and 2020 | | | | Top Economic Sectors with Highest *Job* Growth Between 2015 and 2020 | | | |
|---|---|---|---|---|---|---|---|
| Sector | Average Wage 2015, USD | Average Wage 2020, USD | Average Nominal Wage Growth | Sector | Number Employed in 2015 | Number Employed in 2020 | Average Job Growth |
| Respondents with Formal Employment | | | | | | | |
| Transportation, storage, and communications | $412 | $653 | 58.6% | Construction | 18,243 | 29,366 | 61.0% |
| Commerce, hotels, and restaurants | $299 | $418 | 40.1% | Transportation, storage, and communications | 29,034 | 45,391 | 56.3% |
| Education | $558 | $726 | 30.2% | Education | 45,516 | 70,733 | 55.4% |
| Respondents with Informal Employment - Urban | | | | | | | |
| Manufacturing | $209 | $273 | 30.6% | Construction | 53,795 | 84,723 | 57.5% |
| Education | $270 | $350 | 29.6% | Domestic Services | 59,042 | 86,886 | 47.2% |
| Domestic Services | $148 | $190 | 28.2% | Finance and Real Estate | 36,647 | 48,986 | 33.7% |
| Respondents with Informal Employment - Rural | | | | | | | |
| Commerce, hotels, and restaurants | $177 | $234 | 31.8% | Construction | 34,222 | 64,973 | 89.9% |
| Finance and Real Estate | $250 | $329 | 31.7% | Manufacturing | 57,689 | 90,648 | 57.1% |
| Domestic Services | $146 | $175 | 19.3% | Transportation, storage, and communications | 16,118 | 25,216 | 56.4% |

| Top Economic Sectors with Highest *Wage* Growth Between 2015 and 2020 | | | | Top Economic Sectors with Highest *Job* Growth Between 2015 and 2020 | | | |
|---|---|---|---|---|---|---|---|
| Sector | Average Wage 2015, USD | Average Wage 2020, USD | Average Nominal Wage Growth | Sector | Number Employed in 2015 | Number Employed in 2020 | Average Job Growth |
| All Respondents (including formal and informal employment) | | | | | | | |
| Transportation, storage, and communications | $337 | $475 | 41.1% | Construction | 106,299 | 179,061 | 68.5% |
| Education | $499 | $686 | 37.5% | Domestic Services | 98,698 | 148,330 | 50.3% |
| Domestic Services | $149 | $194 | 30.4% | Finance and Real Estate | 113,978 | 164,230 | 44.1% |
| Respondents with PhD, Masters, and Other Advanced Degrees (including formal and informal employment) | | | | | | | |
| Transportation, storage, and communications | $509 | $850 | 66.9% | Agriculture, livestock, hunting, and related activities | 4,475 | 7,946 | 77.6% |
| Commerce, hotels, and restaurants | $397 | $439 | 10.7% | Transportation, storage, and communications | 14,789 | 25,671 | 73.6% |
| Manufacturing | $478 | $527 | 10.2% | Construction | 8,261 | 13,695 | 65.8% |
| Respondents with Secondary Education (including formal and informal employment) | | | | | | | |
| Education | $311 | $457 | 47.1% | Construction | 19,443 | 43,265 | 122.5% |
| Domestic Services | $151 | $214 | 41.7% | Domestic services | 16,873 | 31,566 | 87.1% |
| Finance and Real Estate | $293 | $392 | 34.1% | Commerce, hotels, and restaurants | 186,485 | 315,624 | 69.2% |
| Respondents with Less than Secondary Education (Urban - including formal and informal employment) | | | | | | | |
| Commerce, hotels, and restaurants | $187 | $254 | 35.8% | Construction | 47,378 | 66,535 | 40.4% |
| Transportation, storage, and communications | $306 | $407 | 33.2% | Domestic services | 47,908 | 65,532 | 36.8% |
| Health and Social Services | $237 | $312 | 31.6% | Transportation, storage, and communications | 35,028 | 45,124 | 28.8% |

| Top Economic Sectors with Highest *Wage* Growth Between 2015 and 2020 | | | | Top Economic Sectors with Highest *Job* Growth Between 2015 and 2020 | | | |
|---|---|---|---|---|---|---|---|
| Sector | Average Wage 2015, USD | Average Wage 2020, USD | Average Nominal Wage Growth | Sector | Number Employed in 2015 | Number Employed in 2020 | Average Job Growth |
| Respondents with Less than Secondary Education (Rural - including formal and informal employment) | | | | | | | |
| Commerce, hotels, and restaurants | $159 | $232 | 45.7% | Transportation, storage, and communications | 12,337 | 22,270 | 80.5% |
| Finance and Real Estate | $240 | $318 | 32.3% | Construction | 31,217 | 55,567 | 78.0% |
| Manufacturing | $199 | $251 | 26.3% | Finance and Real Estate | 13,213 | 20,035 | 51.6% |

Source: 2015 and 2020 EHPM, Quarters 1, 3, and 4
Note: Since 2001, El Salvador has used the US dollar as its local currency.

### 2.4. KEY LABOR MARKET SECTORS

For each population sub-group, we calculate the top economic sectors employing the greatest share of the population, along with the average monthly salary.

In El Salvador, the main economic activity among rural men of any age group was agriculture, livestock, hunting and fishing. The industry employed 46.5 percent of rural men and 44.4 percent of rural young men, with an average monthly salary of $174 and $171 USD, respectively. For rural women and rural young women, the main employment sector was commerce, hotels, and restaurants. The industry employed 42.6 percent of rural women and 48.5 percent of rural young women, with average monthly salaries of $228 and $229, respectively. Commerce, hotels, and restaurants also represents the main sector of employment for all urban sub-populations, with salaries that are higher, on average, than their rural counterparts.

*Figure A3.7: Highest Employing Labor Market Sectors Per Group in El Salvador and Associated Average Salaries (USD)*

| MEN | | | |
|---|---|---|---|
| GROUP | TOP EMPLOYING INDUSTRY | Percent Employed in Industry | Average salary (USD) |
| Urban | Commerce, hotels, and restaurants | 28% | $349 |
| Urban Youth* | Commerce, hotels, and restaurants | 38% | $288 |
| Rural | Agriculture, livestock, hunting, and forestry | 47% | $174 |
| Rural Youth* | Agriculture, livestock, hunting, and forestry | 44% | $171 |

| WOMEN | | | |
|---|---|---|---|
| GROUP | TOP EMPLOYING INDUSTRY | Percent Employed in Industry | Average salary (USD) |
| Urban | Commerce, hotels, and restaurants | 46% | $281 |
| Urban Youth* | Commerce, hotels, and restaurants | 49% | $255 |
| Rural | Commerce, hotels, and restaurants | 43% | $228 |
| Rural Youth* | Commerce, hotels, and restaurants | 49% | $229 |

*Aged 16-25

Source: 2020 EHPM, Quarters 1, 3, and 4.

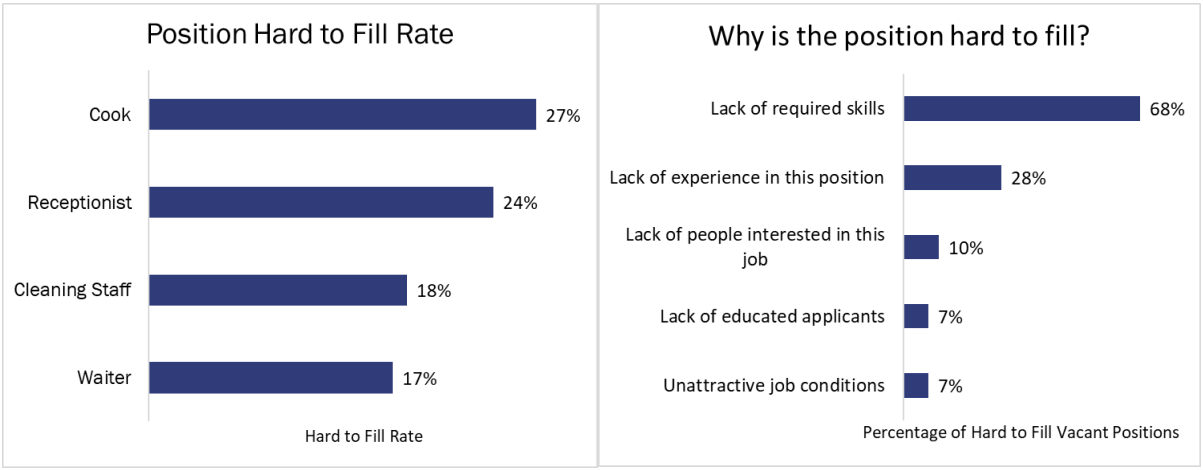
### 2.5. EMPLOYER NEEDS AND BARRIERS TO FINDING TALENT

We use the Hospitality Sector Pilot Establishment Survey conducted by AIR to identify the positions in the hospitality industry that are hardest to fill, along with the reasons these positions are difficult to fill, as identified by managers.

Among the 233 businesses responding to the survey, the most common positions among respondents to the Hospitality Sector Pilot Establishment Survey in El Salvador were: housekeeping (*n*=58 total positions), cleaning staff (*n*=56), waiter (*n*=48), and cook *(n*=37). For each position, we calculate a hard to fill rate, defined as the sum of employees in the position among employers that consider the position "hard to fill", divided by the sum of employees in the position among all employers in the survey. Figure A3.8 shows that the positions that are the hardest to fill are cooks (27 percent), receptionists (24 percent), and cleaning staff (18 percent).

Employers were also asked why positions were hard to fill. Among all hard to fill positions, the most common reasons given were a lack of candidates with required skills for the position (68 percent), applicants that lack experience in the position (28 percent), and a lack of candidates interested in the job (10 percent).

*Figure A3.8: Employer Needs and Barriers to Finding Talent in the El Salvador Hospitality Sector*




Source: 2019 El Salvador Hospitality Sector Pilot Establishment Survey (AIR)

## 3. HONDURAS

Labor statistics for Honduras are calculated from the October 2019 and October 2018 Permanent Multipurpose Household Surveys (EPHPM).[81]

### 3.1. LABOR FORCE PARTICIPATION

The labor force participation rate is calculated for different sub-populations of interest for Hondurans between the ages of 16 and 64.[82] Labor force participation is defined as the

[81] As of the time of writing, downloadable EPHPM datasets were only publicly available for 2018 and 2019. NORC made attempts to obtain 2010 and 2015 data from Honduran officials, though the timing of the requests coincided with Honduran elections and a change in administration, and the requests were never fulfilled.

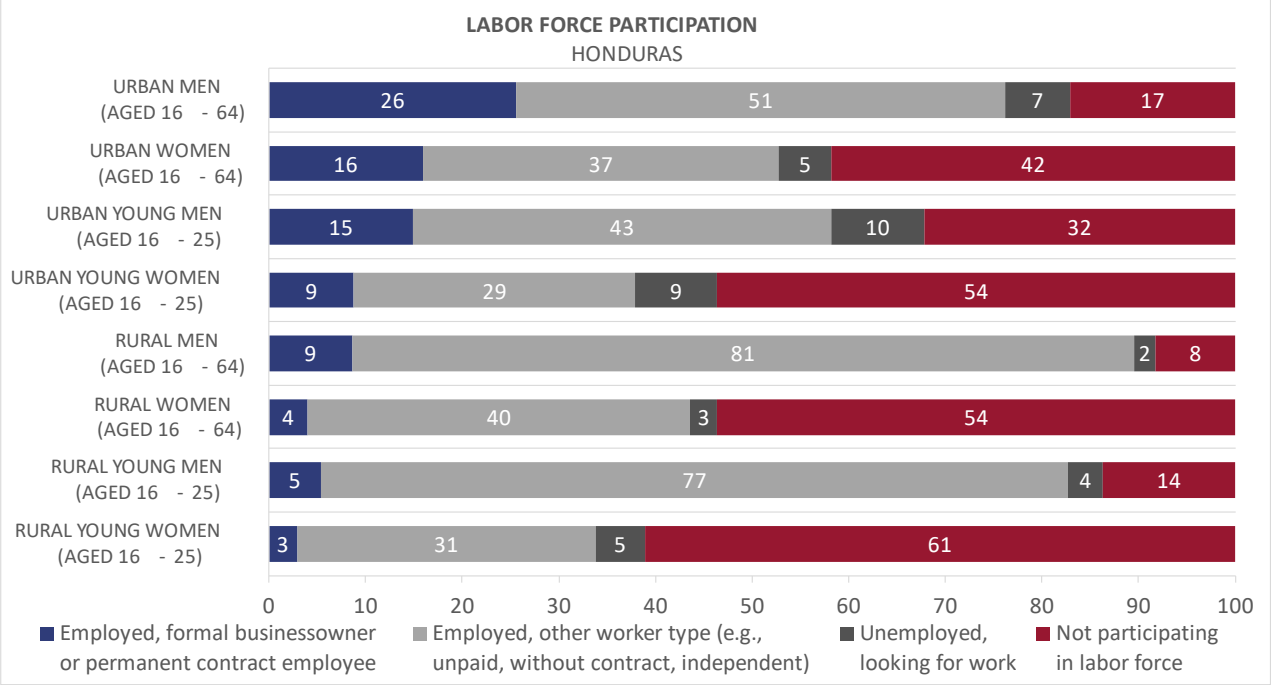
[82] Unlike Guatemala's national labor force survey, Honduras's EPHPM does not ask respondents for their racial or ethnic identification. Thus, results are not presented for ethnic minority groups.

percentage of the population who were either working or looking for work during the week before the survey.

With data available in the 2019 EPHPM, we distinguish between formal and informal employment in the Honduran labor force. We define formal employment as either formal business owners or private or public sector employees with contracts. Our proxy for informal employment is a category that includes public and private sector employees without contracts, unpaid workers, and independent workers.

Figure A3.9 shows rates of labor force participation in Honduras among selected groups. Rural men experienced the highest labor force participation rates, at 92 percent either employed or unemployed and looking for work. Like other sub-populations, this high labor force participation rate is characterized by a low level of unemployment and high levels of informal employment: just 9 percent of working age rural men are formally employed. Urban men have the highest levels of formal employment, still at only 26 percent, while rural young women aged 16-25 have the lowest formal employment levels, at just 3 percent.

*Figure A3.9: Honduran Labor Force Participation Rates, 2019*




Source: 2019 EPHPM.

The data show women in Honduras have lower labor force participation compared to their male counterparts. Urban women had the highest labor force participation rate among women, with formal and informal employment rates of 16 percent and 37 percent, respectively, and seven percent unemployed and looking for work, for a total participation rate of 58 percent. Rural young women had the lowest rates of participation, at just 39 percent.

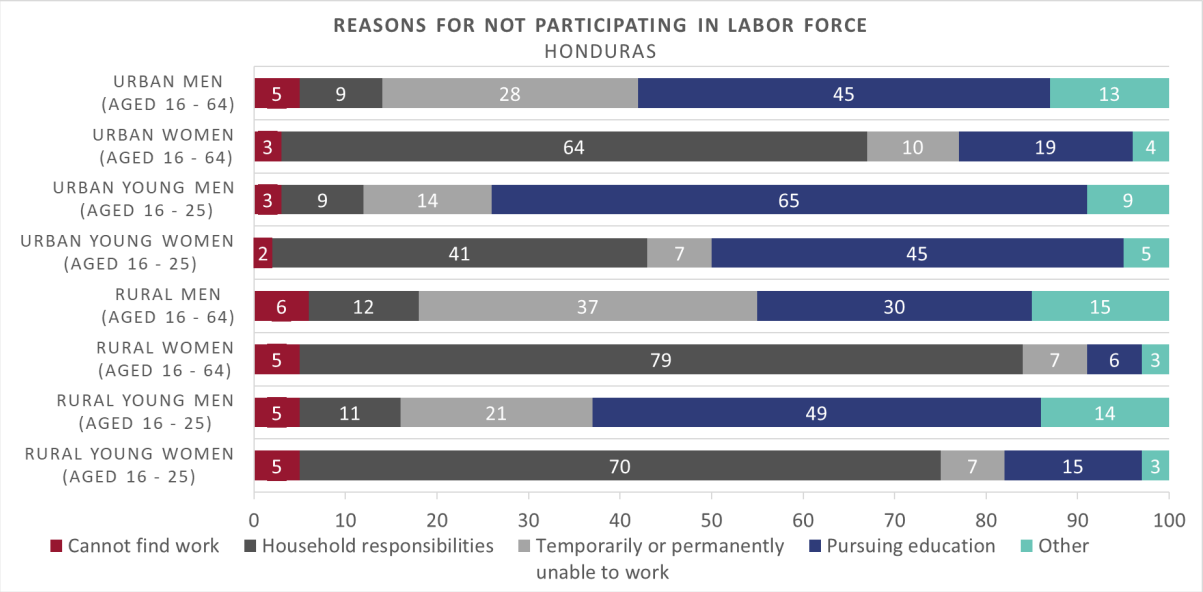
### 3.2. BARRIERS TO LABOR FORCE PARTICIPATION

For those who are not working and not looking for work, we identify the main reasons for not participating in the labor force. Results are presented for key sub-groups, allowing us to compare barriers to labor force participation across different populations.

Overall, the main barriers to labor force participation for respondents from Honduras include household responsibilities (including household chores, care for dependents, and family

responsibilities); education; and being temporarily or permanently unable to work due to reasons such as advanced age or disability. Differences by gender are also informative: while the primary reason for not participating in the labor force for most groups of men was education, suggesting they will enter the labor force eventually, the main reason for Honduran women was household responsibilities, with the sole exception of urban young women, for whom household responsibilities (41 percent) follows behind education (45 percent).

*Figure A3.10: Key Labor Force Participation Barriers in Honduras, 2019*




Source: 2019 EPHPM

### 3.3. LABOR MARKET SECTORS WITH GREATEST WAGE AND JOB GROWTH

By combining data from multiple EPHPM surveys, we are able to calculate wage and job growth by economic sector. Unfortunately, EPHPM data could only be obtained for 2018 and 2019, meaning the growth trend can only be calculated over a one-year period. Given the short time period, readers should exercise caution in the interpretation of the results, given that year-to-year variation can be noisy, and is not necessarily reflective of longer-term trends.

The first panel of Table A3.3 shows the top three industries for job and wage growth among those with formal employment, defined as in Figure A3.9. The top industry for formal employment wage growth was finance and insurance, where wages grew by 25.0 percent. The top industry for formal job growth was health care and social services, with growth of 36.6 percent. The next two panels in the table show the top industries for job and wage growth among those with informal employment, for urban and rural areas, respectively. In urban areas, water and sanitation represented the top industry for informal employment wage growth (30.6 percent), while the top sector for informal job growth was health care and social services (9.0 percent). In rural areas, the top informal sector for wage growth was transportation and storage (48.8 percent), while construction (10.3 percent) saw the highest job growth.

The remaining panels of Table A3.3 show the top three sectors for wage and job growth, for all respondents and by level of education, including both formal and informal sectors of the economy together. We define secondary education as having completed *secundaria*, the Honduran equivalent of senior high school, typically completed at age 18. The data show that approximately 85 percent of the rural population has less than a secondary education, compared to approximately 59 percent of the urban population.

Top economic sectors for wage growth vary by level of education, with education and wholesale or retail trade figuring among the top spots for more educated Hondurans, with either a secondary or tertiary education, and hotel and food service among the top spots for Hondurans with less than a secondary education in both urban and rural areas. Although the finance-and-insurance sector takes the top spot for overall wage growth, the results also suggest that employees in this industry are almost entirely Hondurans with tertiary levels of education, and it is this group that is driving the wage growth in the sector.

The economic sectors with the highest job growth between 2018 and 2019 are water and sanitation (30.5 percent), and health care and social services (16.9 percent). In fact, these are the only two sectors that showed job overall growth over the period in Honduras; the third best sector for job growth between 2018 and 2019, Administrative Services, maintained an approximately even number of jobs, with a small estimated loss of 0.6 percent.

*Table A3.3: Honduran Labor Market Sectors with Greatest Wage and Job Growth (2018-2019), by Education Level*

| Top Economic Sectors with Highest *Wage* Growth Between 2018 and 2019 | | | | | Top Economic Sectors with Highest *Job* Growth Between 2018 and 2019 | | | |
|---|---|---|---|---|---|---|---|---|
| Sector | Average Wage 2018, Lempira (USD) | Average Wage 2019, Lempira (USD) | Average Nominal Wage Growth | | Sector | Number Employed in 2018 | Number Employed in 2019 | Average Job Growth |
| Respondents with Formal Employment | | | | | | | | |
| Finance and Insurance | L11,395 (US$476) | L14,240 (US$581) | 25.0% | | Health Care and Social Services | 34,060 | 46,535 | 36.6% |
| Agriculture, livestock, forestry, and fishing | L8,720 (US$364) | L10,457 (US$427) | 20.0% | | Professional, scientific, and technical services | 9,602 | 13,082 | 36.2% |
| Information and Communications | L11,918 (US$498) | L13,991 (US$571) | 17.4% | | Construction | 18,128 | 24,029 | 32.6% |

| Top Economic Sectors with Highest *Wage* Growth Between 2018 and 2019 | | | | Top Economic Sectors with Highest *Job* Growth Between 2018 and 2019 | | | |
|---|---|---|---|---|---|---|---|
| Sector | Average Wage 2018, Lempira (USD) | Average Wage 2019, Lempira (USD) | Average Nominal Wage Growth | Sector | Number Employed in 2018 | Number Employed in 2019 | Average Job Growth |
| Respondents with Informal Employment - Urban | | | | | | | |
| Water and Sanitation | L2,843 (US$119) | L4,235 (US$173) | 49.0% | Health Care and Social Services | 25,332 | 27,606 | 9.0% |
| Agriculture, livestock, forestry, and fishing | L3,349 (US$140) | L4,788 (US$195) | 43.0% | Administrative Services | 32,242 | 34,946 | 8.4% |
| Information and Communications | L6,450 (US$270) | L8,232 (US$336) | 27.6% | Agriculture, livestock, forestry, and fishing | 126,909 | 133,674 | 5.3% |
| Respondents with Informal Employment - Rural | | | | | | | |
| Transportation and Storage | L4,643 (US$194) | L6,905 (US$282) | 48.8% | Construction | 65,081 | 71,765 | 10.3% |
| Manufacturing | L2,705 (US$113) | L3,346 (US$137) | 23.7% | Wholesale or retail trade, including vehicle and motorcycle repair | 184,682 | 190,473 | 3.1% |
| Agriculture, livestock, forestry, and fishing | L1,942 (US$81) | L2,333 (US$95) | 20.1% | Hotel and Food Service | 36,973 | 37,981 | 2.7% |
| All Respondents (including formal and informal employment) | | | | | | | |
| Finance and Insurance | L10,370 (US$434) | L13,806 (US$563) | 33.1% | Water and Sanitation | 17,205 | 22,455 | 30.5% |
| Information and Communications | L8,565 (US$358) | L11,123 (US$454) | 29.9% | Health Care and Social Services | 70,728 | 82,676 | 16.9% |
| Agriculture, livestock, forestry, and fishing | L2,559 (US$107) | L3,319 (US$135) | 29.7% | Administrative Services | 68,710 | 68,271 | -0.6% |

| Top Economic Sectors with Highest *Wage* Growth Between 2018 and 2019 | | | | Top Economic Sectors with Highest *Job* Growth Between 2018 and 2019 | | | |
|---|---|---|---|---|---|---|---|
| Sector | Average Wage 2018, Lempira (USD) | Average Wage 2019, Lempira (USD) | Average Nominal Wage Growth | Sector | Number Employed in 2018 | Number Employed in 2019 | Average Job Growth |
| Respondents with PhD, Masters, and Other Advanced Degrees (including formal and informal employment) | | | | | | | |
| Finance and Insurance | L11,604 (US$485) | L16,048 (US$655) | 38.3% | Health Care and Social Services | 22,405 | 27,647 | 23.4% |
| Wholesale or retail trade, including vehicle and motorcycle repair | L10,493 (US$439) | L13,339 (US$544) | 27.1% | Manufacturing | 36,092 | 37,987 | 5.3% |
| Education | L12,808 (US$536) | L14,056 (US$574) | 9.7% | Construction | 11,348 | 11,724 | 3.3% |
| Respondents with Secondary Education (including formal and informal employment) | | | | | | | |
| Agriculture, livestock, forestry, and fishing | L3,990 (US$167) | L5,491 (US$224) | 37.6% | Agriculture, livestock, forestry, and fishing | 104,182 | 124,535 | 19.5% |
| Education | L8,649 (US$361) | L11,158 (US$455) | 29.0% | Health Care and Social Services | 35,761 | 41,134 | 15.0% |
| Wholesale or retail trade, including vehicle and motorcycle repair | L6,310 (US$264) | L7,431 (US$303) | 17.8% | Transportation and Storage | 42,347 | 47,943 | 13.2% |
| Respondents with Less than Secondary Education (Urban - including formal and informal employment) | | | | | | | |
| Agriculture, livestock, forestry, and fishing | L3,381 (US$141) | L4,902 (US$200) | 44.9% | Public Administration, Defense, and Social Security | 11,003 | 15,746 | 43.1% |
| Hotel and Food Service | L5,262 (US$220) | L6,344 (US$259) | 20.6% | Administrative Services | 26,080 | 27,707 | 6.2% |
| Administrative Services | L6,237 (US$261) | L7,250 (US$296) | 16.2% | Water and Sanitation | 10,249 | 10,807 | 5.4% |

| Top Economic Sectors with Highest *Wage* Growth Between 2018 and 2019 | | | | Top Economic Sectors with Highest *Job* Growth Between 2018 and 2019 | | | |
|---|---|---|---|---|---|---|---|
| Sector | Average Wage 2018, Lempira (USD) | Average Wage 2019, Lempira (USD) | Average Nominal Wage Growth | Sector | Number Employed in 2018 | Number Employed in 2019 | Average Job Growth |
| Respondents with Less than Secondary Education (Rural - including formal and informal employment) | | | | | | | |
| Transportation and Storage | L4,523 (US$189) | L7,602 (US$310) | 68.1% | Wholesale or retail trade, including vehicle and motorcycle repair | 147,032 | 152,366 | 3.6% |
| Hotel and Food Service | L2,690 (US$113) | L3,273 (US$134) | 21.7% | Construction | 58,646 | 59,255 | 1.0% |
| Wholesale or retail trade, including vehicle and motorcycle repair | L3,684 (US$154) | L4,417 (US$180) | 19.9% | Manufacturing | 105,163 | 99,477 | -5.4% |

Source: 2018 and 2019 EPHPM
Note: Exchange rates come from the International Monetary Fund. Average exchange rate for 2018 = 23.9 Lempira per US Dollar. Average exchange rate for 2019 = 24.51 Lempira per US Dollar.

### 3.4. KEY ECONOMIC SECTORS

In Figure A3.11, we show the top economic sectors employing the greatest share of each population sub-group, along with the average monthly salary.

In 2019, the main economic activity among rural men and rural young men in Honduras was agriculture, livestock, forestry, and fishing. The industry employed 70.5 percent of rural men and 69.5 percent of rural young men, with average monthly salaries of US$114and US$105 lempira, respectively. For rural women and rural young women in Honduras, wholesale or retail trade constituted the most main sector for employment. The industry employed 27.7 percent of rural women and 21.4 percent of rural young women, with average monthly salaries of US$168 and US$153, respectively. The main economic activity for all urban sub-groups was wholesale or retail trade.

### 3.5. EMPLOYER NEEDS AND BARRIERS TO FINDING TALENT

We use the Hospitality Sector Pilot Establishment Survey conducted by AIR to identify the positions that are hardest to fill, along with the reasons these positions are difficult to fill, as identified by managers.

Among the 437 businesses responding to the survey, the most common positions among businesses responding to the Hospitality Sector Pilot Establishment Survey in Honduras were: Receptionist (*n*=253), housekeeping (*n*=204), cleaning staff (*n*=139), cook (*n*=88), waiter (*n*=67), and kitchen assistant (n=39). For each position, we calculate a hard to fill rate, defined as the sum of employees in the position among employers that consider the position “hard to fill”, divided by the sum of employees in the position among all employers in the survey. Figure

A3.12 shows that the positions that are the hardest to fill are cooks (53 percent), receptionists (46 percent), and waiters (46 percent).

*Figure A3.11: Highest Employing Labor Market Sectors in Honduras and Associated Average Salaries*

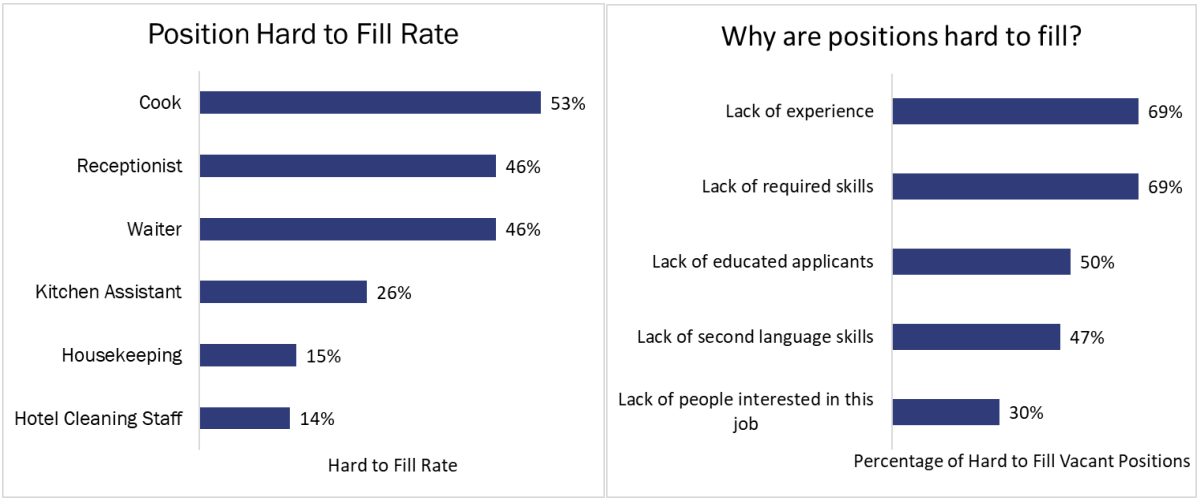
| MEN | | | | WOMEN | | | |
|---|---|---|---|---|---|---|---|
| GROUP | TOP EMPLOYING INDUSTRY | Percent Employed in Industry | Average salary (USD) | GROUP | TOP EMPLOYING INDUSTRY | Percent Employed in Industry | Average salary (USD) |
| Urban | Wholesale or retail trade, including vehicle and motorcycle repair | 21% | $348 | Urban | Wholesale or retail trade, including vehicle and motorcycle repair | 25% | $275 |
| Urban Youth* | Wholesale or retail trade, including vehicle and motorcycle repair | 22% | $277 | Urban Youth* | Wholesale or retail trade, including vehicle and motorcycle repair | 23% | $280 |
| Rural | Agriculture, livestock, forestry, and fishing | 71% | $112 | Rural | Wholesale or retail trade, including vehicle and motorcycle repair | 28% | $164 |
| Rural Youth* | Agriculture, livestock, forestry, and fishing | 70% | $102 | Rural Youth* | Wholesale or retail trade, including vehicle and motorcycle repair | 21% | $149 |

*Aged 16-25

Source: 2019 EPHPM.
Note: Exchange rates come from the International Monetary Fund. Average exchange rate for 2019 = 24.51 Lempira per US. Dollar.

Employers were also asked why positions were hard to fill. Among all hard to fill positions, the most common reasons given were a lack of candidates with experience in the position (69 percent), applicants that lack the required skills for the position (69 percent), and a lack of educated applicants (50 percent), followed by a lack of applicants with second language skills (47 percent).

*Figure A3.12: Employer Needs and Barriers to Finding Talent in the Honduras Hospitality Sector*




Source: 2019 Honduras Hospitality Sector Pilot Establishment Survey (AIR).