Automation Processes Training

THE INTERVENTION, AT A GLANCE

This intervention seeks to contribute to the strengthening of the labor training system in Paraguay by analyzing the effectiveness of the use of virtual reality in training processes. In addition, it will implement a pilot training program in mechatronics, complementary to the dual program of the Ministry of Labor, Employment and Social Security (MTESS), aiming to promote process automation skills for small companies.

WHAT IS THE CONTEXT?

Paraguay has major challenges regarding access to quality jobs. In 2018, labor informality was 59%, 64% of workers earned a labor income equal to or below the minimum wage, and on average, the employed population has less than 10 years of education. One of the main causes of problems in the access to quality jobs is the skills gap in the labor force. Twenty-nine percent of employers in Paraguay say that the lack of skilled labor poses a barrier to the growth of their companies. The skills and technicians that are most in demand are related to mechanical, electrical, welding, and electromechanical areas, with a special emphasis on automation processes. With companies increasingly using more advanced machines and equipment, there is a need to train the workforce in specific skills related to those specific areas.

WHAT DOES THE INTERVENTION CONSIST OF?

The intervention will design and implement two job training actions. The first focuses on the use of virtual reality for training processes and the second on a content scheme definition for specific mechatronics skills. In both actions, a minimum percentage of women will be established, since they are currently underrepresented. In addition, the proposed skills are associated with labor insertion options that offer higher salary levels.
WHO DOES WHAT?

- The IDB will be responsible for project execution, due to its experience in this type of projects.
- The beneficiary entity will be the Government of Paraguay through MTESS and the project will be implemented with the support of the Paraguayan Industrial Union (UIP), which will contribute to the definition of contents and skills needed by employers, coordinate with associated companies so that they propose candidates for the training of workers and job seekers, engage companies where the practical part of the training can be generated, and coordinate the certification of the training companies.

WHAT ARE THE EXPECTED RESULTS?

- Design and implementation of training with virtual reality and the content scheme in mechatronics.
- Design of the evaluation on the effectiveness of virtual reality in the acquisition of skills of trained people.
- First cohort of trained people.
- Findings of the effectiveness of virtual reality in training on skills acquisition.
- Expected higher employability due to demand-driven skills acquisition.

WHY IS THIS INTERVENTION RELEVANT?

This intervention will improve the skills of job seekers by developing an additional job training curriculum, ensuring that the contents are aligned with the needs of the private sector and evaluating the possibility of using virtual reality as an alternative to the purchase of equipment and supplies for job training. This is in response to the problems of updating equipment and the cost of inputs in training that includes a practical part. The information on the feasibility of using virtual reality and the design of an impact evaluation, as well as the process of designing curriculum together with the private sector, are also inputs for the subsequent expansion of training capacities of the Ministry of Labor, Employment and Social Security of Paraguay, which can be used to inform other countries and contexts.

SCHEDULE

- **September 2020**
  - Project approval.
- **Mid 2023**
  - First cohort of trained people.
- **December 2022**
  - Design and implementation of training with virtual reality and the content scheme in mechatronics.
  - Design of the evaluation on the effectiveness of virtual reality in the acquisition of skills of trained people.
- **End 2023**
  - Findings of the effectiveness of virtual reality in training on skills acquisition.
  - Expected higher employability due to demand-driven skills acquisition.

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