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METHODOLOGY FOR THE ORIENTATION OF LABOR, PRODUCTIVE AND ENTREPRENEURIAL INCLUSION OF THE "PIMPINERA" POPULATION OF IPIALES, PUPIALES AND GUALMATÁN

METODOLOGÍA PARA LA ORIENTACIÓN DE INCLUSIÓN LABORAL, PRODUCTIVA Y DE EMPRENDIMIENTO DE LA POBLACIÓN "PIMPINERA" DE IPIALES, PUPIALES Y GUALMATÁN

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### **Abstract**

The International Labor Organization ILO in agreement with the Mariana University presents the methodology to guide the line of La-

bor Inclusion and Business Productivity of 140 people as a sample of the population of "Pimpineros" in the municipalities of the Border with Ecuador and Colombia, Andean zone, Ipiales, Gualmatán and Pupiales.

In this way, the project focused on the diagnosis and formulation of actions to promote the transition from the informal to the formal economy of people who are dedicated to fuel distribution without the full legal requirements. The characterized population showed interest in the investigative process with the expectation of job reconversion, community work with the support of institutions that facilitate participation in policies aimed at achieving equity and inclusion.

The foregoing through the development of activities aimed at carrying out research on the "Pimpinera" population based on, among other exercises, the articulation with territorial entities and the agreeing and targeting of the population that is dedicated to the distribution of liquid fuels without observing legal regulations.

**Key words:** labor reconversion, opportunities, liquid fuel, labor inclusion, entrepreneurship.

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### Resumen

La organización Internacional del Trabajo OIT en convenio con la Universidad Mariana presenta la metodología para orientar la línea de Inclusión laboral y Productiva empresarial de 140 personas como muestra de la población de "Pimpineros" en los municipios de la Frontera con el Ecuador y Colombia, zona andina, Ipiales, Gualmatán y Pupiales.

De esta manera, el proyecto se centró en el diagnóstico y formulación de las acciones para promover la transición de la economía informal a la formal de aquellas personas que se dedican a la distribución de combustible sin los requisitos legales. La población caracterizada mostró interés en el proceso investigativo con expectativa de reconversión laboral, trabajo en comunidad con apoyo de instituciones que faciliten la participación en políticas que estén orientadas al logro de la equidad y la inclusión. Lo anterior, a través del desarrollo de actividades orientadas a la realización de una investigación sobre la población "Pimpinera" a partir de, entre otros ejercicios, la articulación con entidades territoriales y la convocatoria para la focalización en la población que se dedica a la distribución de combustibles líquidos sin observancia de las normas legales.

**Palabras clave:** reconversión laboral, oportunidades, combustible líquidos, Inclusión laboral, emprendimiento.

### INTRODUCCIÓN

Within the framework of the project "Diagnosis and formulation of an intervention proposal for the population that distributes fuel without complying with legal requirements" carried out by the Ministry of Mines and Energy -Minenergía- with the technical assistance of the International Labor Organization -ILO - The phase of articulation with key and strategic actors is executed in eleven prioritized territories, of which three are located in the Department of Nariño, these are Ipiales, Pupiales and Gualmatán.

The ILO has signed with the Mariana University -operating entity- the service contract No. 40322971 / 0 with the objective of developing an investigation on the population that is dedicated to the distribution of liquid fuels without observing the legal norms in the municipalities of Ipiales, Pupiales and Gualmatán of the Department of Nariño, based on, among other exercises, the articulation with territorial entities and the calling and targeting of people to conclude in the preparation of their initial portfolios for a future intervention.

The aforementioned service contract commits two major activities: the first is related to accompanying the ILO in the processes of targeting and convening "Pimpineros" in the municipalities of Ipiales, Pupiales and Gualmatán, with the support and reference of local actors and the ILO external collaboration; and the second has to do with the establishment, design and implementation of methodologies, tools and information capture instruments with their respective tests that allow the construction of initial portfolios of the "Pimpineros" identified for the development of profiling and preparation of portfolios.

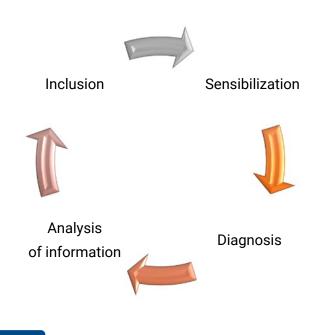
#### **METHODOLOGY**

To design the methodology, the object of the investigation and the systematic analysis of the information collection processes and subsequent characterization of the population through portfolios were considered, for which four phases were outlined.

In this way, it was developed through four phases: awareness, diagnosis, information analysis and Inclusion (See Figure 1).

### Figure 1.

Methodological route by phases for labor, productive and entrepreneurial inclusion.

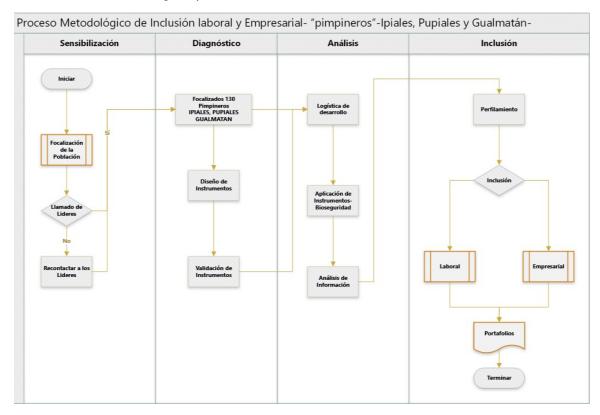


Source: ILO-UMARIANA Team (2020).

To develop the research on the population that is dedicated to the distribution of liquid fuels without observance of the legal norms in the municipalities of Ipiales, Pupiales and Gualmatán of the department of Nariño, 140 people were focused and the four methodological phases will be developed (See figure two.)

### Figure 2.

Flow chart research methodological phases.



Source: ILO-UMARIANA Team (2020).

### **SENSITIZATION PHASE:**

Considering the current situation due to the CO-VID-19 pandemic, there are different challenges to locate and interact with people to carry out studies in situ. In this way, the total reported population that distributes liquid fuels without observing the legal norms is 430 "pimpineros", in the activity focused on the municipalities of lpiales, Pupiales and Gualmatán.

Convening difficulties arise, for the reason stated above and because, unlike other contexts, the population is dispersed and tries to maintain anonymity due to the situation that its activity represents, in this sense through the leaders of These communities have offered to serve as intermediaries to be able to provide information and re-contact people who want to participate in the investigative exercise.

Likewise, it was possible to provide the logistics for the application of the instruments in the different targeted municipalities.

### **Diagnosis Phase**

### Logistics for intervention to the "pimpinera" population and application of methodological tools for the collection of primary information

Within the framework of the research for the labor and productive inclusion of the "Pimpinera" population in the municipalities of Ipiales, Pupiales and Gualmatán - Department of Nariño, which is being carried out by the Mariana University, it is necessary to develop the activities proposed to fulfill the objective of characterizing the population immersed in the problem, based on the targeting and identification for the application of methodological tools, for this it is necessary to prepare the following enlistment plan in the territory:

**Population targeting:** the process of targeting and identifying the population of people who are dedicated to the distribution and marketing of fuel without complying with legal requirements, started from scratch, therefore, the development of "active search" strategies was used, through references and direct survey by geographical location in the municipalities under investigation.

**Identified Population:** 448 people identified and whose economic activity is the distribution of fuel without complying with legal requirements in the municipalities of Ipiales, Pupiales and Gualmatán in the Department of Nariño.

**Sample size:** 140 people whose economic activity is the distribution of fuel without complying with legal requirements in the municipalities of lpiales, Pupiales and Gualmatán in the Department of Nariño.

In the design and validation of Instruments, the situation of individual isolation and the biosafety protocols for their implementation were considered, the virtualization of the instruments adapted to Google forms and their application, person to person, were considered, person in print.

In this phase, the validation process of the instruments is presented: 1. Socioeconomic characterization; 2. Labor and productive profiling and identification of individual barriers; and 3. Generic skills.

**Socioeconomic:** socioeconomic studies are an indispensable tool within the employee selection process in companies or for the development of state programs, in them, those responsible for Human Resources are interested in hiring people committed to the organization and with orientation to results and consider this information for decision-making regarding the development of the company or programs.

One of the main aspects on which the research focuses is knowing the experience. The companies in which you have worked and, in this way, confirm the information you have provided in your resume. Among the points that the socioe-conomic study must consider are:

- Identification data: specific information such as name, gender, age, marital status, among others.
- Geographical area: punctuality is key at work, knowing where you live will give recruiters an idea of how much time we spend moving you to the office.
- Housing conditions: this indicator helps to measure the economic stability of the candidate, which is related to job rotation.
- Academic training: it is important to check information such as certificates obtained, years studied or any change of institution, this

to corroborate your skills and assess whether your profile is suitable for the position.

• Employment references: this information helps to evaluate your performance in previous jobs, which allows to measure your compatibility with the company and predict your performance in the position to which you aspire. o.

Considering the previous information, the first instrument was designed with the pertinent data and adapted the instrument provided by the ILO and the Free University, to which adaptations were made according to the characteristics and the context of the *Nariñense* region, as well as to the validity criteria for its application in situ.

### Table 1.

Description socioeconomic instrument.

Sessions	Items	Description		
I. General Information and Living Conditions.	1-23	Through these items, the identification of the subject of study and characteristics of their way of life is achieved.		
II. job training	24-29	This information collects experience, activities and work needs.		
III. Guidance and prospects for entrepreneurship.	30-35	These Items present information about the experiences, activities and needs of Entrepreneurship.		
IV. Financial and commercial access.	36-39	The Items Inquire about the purchasing power of the subjects to be investigated and their economic possibilities.		
V. Analysis of the environment and institutional supply.	40-50	These items allow to inquire about the experience of the sale of liquid fuel and some programs in which the study subjects have participated.		
SAW. Life Proyect	51-55	These items allow us to investigate the life prospects of the study subjects in relation to their human development.		

To validate the Instrument, the items were compared with the databases of the studies and instruments of the National Administrative Department of Statistics (DANE) and the Ministry of Labor. Likewise, expert judgment groups were held to see if the items were in accordance with the needs and objectives proposed for the research.

### Source: ILO-UMARIANA Team (2020).

Link: 1. Socioeconomic characterization / https://forms.gle/d1uvVsYNZjzBBvne7

# Labor and productive profile and identification of individual barriers

This is a characterization that contains three variables, the first identifies individual individual characteristics against the lines of labor and entrepreneurship; For this, psychometric tests are applied that allow perceiving interpersonal intelligence (relationships with the other); Conflict resolution; Stress management and self-esteem: which is based on self-concept, self-efficacy, self-control. The second variable is the work profile and entrepreneurship, in this it can be perceived towards which of the two options there is an attitude towards the needs and ex-

pectations of the subject of study. Finally, the third variable is the individual barriers, which are the internal and external agents to the expectations of the individual under study: internally, disabilities, and lack of attitudes towards work and entrepreneurship, externally they are perceived as barriers. the financial part, the educational level and the ability to acquire technology or materials for work.

# The second instrument of labor and productive profiling and identification of individual barriers

has 36 items distributed in 6 sessions (See table 2).

### Table 2.

Labor and productive profiling and identification of individual barriers.

Sessions	Items	Description
Family dynamics and background	1, 2 and 3	Relational information that allows identifying and looking at which inclusion offer option the study subject would like to follow.
2. If you want to be employed	4-7	Perception items on the need to be employed.
3. If you want to start a business	8-11	Perception items on the need to undertake
4. Personal Characteristics Test	12-26	Items that are aimed at the evaluation of the being from different dimensions that are intertwined with each other, they evaluate: Interpersonal intelligence (relationships with the other); Conflict resolution; Stress management and self-esteem: which is based on self-concept, self-efficacy, self-control.
5. Identification of individual barriers	27-35	Items to identify barriers to study, economic and financial possibilities, as well as skills and physical or health problems.
6. Vocational Information	36.	Informational coaching on socio-occupational and vocational orientation of the Ministry of National Education-MEN.

This instrument is validated through the Shavelson, Hubner, Stanton and Rosenberg tests, taken from (Vispoel, 1995) that allow determining personal characteristics and guiding their vocational and work developments, as well as entrepreneurial skills, as well as the information of the Ministry of National Education -MEN on socio-occupational and vocational guidance.

### Source: ILO-UMARIANA Team (2020).

Link: 2. Labor and productive profiling and identification of individual barriers / https://forms.gle/yvzvxMpsXY1GMppU9

Generic skills: are those that help to effectively develop a job in general, as opposed to specific skills, which are related to the specific tasks of a profession. The Ministry of National Education of Colombia has undertaken as part of its strategies to establish common references that guarantee the quality of training in our country, as well as the articulation of the different levels of education: initial, basic, middle and higher.

As part of this work, in 2008 the Ministry convened renowned members of the academic community to encourage reflection on the set of generic skills that are adjusted to the characteristics and needs of our social and cultural context, but also to the broader framework of the international scene. As a result of these reflections, the convened academic group identified four generic competences for higher education: communication in the mother tongue and another international language; Mathematical Thinking; citizenship; and science, technology and information management.

With the formulation of these four generic competences, it is sought to respond to the needs of the globalized world, in which distances have been shortened by means of communication and transportation, economic and labor frontiers tend to blur, and education increasingly seeks the internationalization of knowledge, professions, qualifications and labor markets becomes stronger. Without neglecting, of course, the relevance to the local context, for which these competencies also constitute a source of development, so that their implementation will contribute to improving the quality of training and its international projection.

Third instrument of generic competences, it consists of 27 items that evaluate the competences in Social Sciences, Citizenship Competences, Spanish Language, Mathematics, English and Technology competences (See table 3).

### Table 3.

Generic competences.

Social Sciences					
Competencies	Questions (8)	Description			
Argumentation	7 and 3	These two questions seek to assess knowledge and the ability			
Knowledge	2 and 6	to argue against social relations and geographic and normative knowledge.			

## Citizen Competencies

Competencies	Questions	Description
Multiperspectivism	8 and 5	These items evaluate the component of the vision of the human
Systemic thinking	1 and 4	being in the face of the conflict, his position and the reading of the complexity of social problems.

### Math

Competencies	Component	Questions	Description
reasoning and argumentation	Numerical-variational	1	
Communication, representation and modeling	Numerical-variational	4	They assess mathematical knowledge in the n merical, variational and random systems by p sing problems, communicating and arguing tl
	Random	3	
Problem approach and resolution	Numerical-variational	2	answer.
and resolution	Random	5	

### Language

Competencies	Component	Questions	Description
	Semantic	3 and 4	The level of knowledge in reading communica-
Communicative-reader	Syntactic	1 and 5	tion is evaluated in the syntactic, semantic and pragmatic components.
	Pragmatic	2	

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Competencies	Questions	Description
Basic	1,2,3,4	Basic knowledge of English is assessed through greeting, orientation, and information questions with technical vocabulary.

Lachnolo	aical Lom	petencies
TECHNOLO	uicai cuili	DETELLIPIES

Competencies	Component	Questions	Description
Recognize artifacts created by Man	Nature and Evolution of Technology	1,2,5	Knowledge about technological artifacts and
I recognize characteristics of the operation of techno- logical artifacts	Ownership and use of technology	3 and 4	their basic use is evaluated.

Source: ILO-UMARIANA Team (2020).

Link:3. Generic Competencies / https://forms.gle/A43MFMkHzFRHtVXJ6

### **Analysis Phase**

# Targeted population distribution by municipality: Times and movements

To develop activities in the territories under investigation, a distribution system has been designed by targeted groups concentrated in a single physical space, in order to somehow avoid traveling to homes or places of residence and in response to biosecurity protocols due to the current pandemic caused by the presence of Covid 19.

Below is a list of the distribution of activities in the field, involving the municipalities where the sample was collected; the number of people targeted by each of the territories; the number of instruments (methodological tools) to apply on the suggested dates and times; and the duration of the interviews.

### **Aspects to consider:**

- The groups of people to be interviewed are organized in a number of 8 for each hour, with intervals of 20 minutes that will be taken at the end of the interviews, time in which the next one will be prepared.
- The people to whom the instruments will be applied will also be informed by telephone, the procedure is the same.
- The researchers and co-managers during days 1 and 2 will be in the municipality of Ipiales in its entirety, on day 3 4 researchers will travel to the municipalities of Pupiales and Gualmatán, which will be determined at the discretion of the project coordinator.
- The time that will be used for the application of the methodological instruments should not be more than 40 minutes per interview.

For the realization and application of the instruments, there must be at least one computer equipment for each researcher, data and cell phone available, in order to collect the information in a more agile and efficient way, since a number has been assigned. of 6 interviews by each researcher for each day.

After data collection. In this phase, an analysis of the socioeconomic aspect will be carried out with the variables to establish the identity, location, type of housing, economic stratum and their perceptions about their current employment situation and their expectations in the face of a change towards legality, for the analysis there are some items that are punctual for the characterization, others that guarantee the vertical reliability of the instrument and others that are correlational that will allow them to be related to the other two instruments, the second instrument will allow the profiling for inclusion in the labor and productive business in this part, a first part is made that is descriptive against the aptitudes in the two possibilities and a second part against psychological aptitudes (Besolan, 200) mentions that, in interpersonal intelligence (relationships with the other); conflict resolution; stress management and self-esteem is based on self-concept, self-efficacy, self-control.

Finally, the results in the evaluation of generic competences are articulated to the analysis, which was adapted from the booklets of the tests to know applied to the fifth grades of primary school, this according to the studies carried out on the border that point to 50% of illi-

teracy, this was corroborated in the competence maps, crossed with the levels of study and the control items in the three instruments.

In this sense, the socio-occupational orientation is necessary throughout life. Guidance needs change depending on the historical moment in the life of each person, the changes that occur and the decisions they face. Joaquim Casal and other researchers (2006) identify these moments as occupational transitions, about which there are three fundamental aspects to take into account: (i) The social context, that is, the set of existing socio-historical conditions, (ii) the structural determinations understood as the system of institutions that support the transition, (for example: the educational system, the productive system, the employment access system, the associative fabric, among others) and (iii) social insertion strategies, that is, the different mechanisms of action that individuals use to enter the world of training and work according to their aptitudes, attitudes and decisions.

From the above, the orientation routes that were presented in the socio-occupational-vocational informative coaching are complemented.

### **Business Information-Entrepreneurship**

Conditions that favor the formation of new businesses in Colombia.

### 1. Digital transformation

With the implementation of 4G Internet networks (and with a view to the 5G network) in almost

the entire national territory, Colombia has never been so connected before. For this reason, the digital transformation in the country is now a reality.

This has prompted a change in mentality (Varela et al. (2020) in entrepreneurs, who today are looking for ways to create an online ecosystem in their businesses to favor more efficient processes and offer added value to their increasingly digital customers.

### 2. Changes in the entrepreneurial culture

Entrepreneurship in Colombia is also related to the growing sociocultural acceptance of business creation.

According to the GEM 2020 report, Colombia has the highest rates of potential entrepreneurs (57.5%) and people with the intention of starting a business (50.2%) compared to the average. In Latin America alone, the country ranks second after Chile.

### 3. Consolidation of the entrepreneurial ecosystem

Of course, the Colombian entrepreneurial ecosystem has gone through a real revolution. After the foundation of the ICT Ministry in 2009, it has been followed by the creation of a wave of public and private institutions that stimulate entrepreneurship in the country.

In addition to the Chambers of Commerce of each city and the Innovation Hubs that operate in the main cities such as Connect Bogotá or Ruta N in Medellín, there are institutions that facilitate the registration and operation of new companies such as:

ANDI; iNNpulsa; Undertake Fund; Apps.co; Bancoldex; Endeavour.

### **Occupational Information**

#### Seek advice for:

- Express your doubts about job expectations and ways to open possibilities in the world of work.
- Evaluate your imaginaries of working life in comparison with the conditions and requirements of the world of work.
- Prepare for the selection processes.
- Answer questions about your labor rights and contractual conditions.

Look for information on:

- The labor market for your profession.
- Check the data from the Labor Observatory for Education - OLE, an information system on the employability of higher education graduates. http://www.graduatescolombia.edu. co/. Get to know the Colombian Labor and Occupational Observatory of SENA, which has updated information on the behavior of occupations and productive sectors at the national level. http://observatorio.sena.edu. co/. Job offers or support programs for entrepreneurship. Visit Redempleo http://www. redempleo.gov.co/.

- Types of labor contracts, forms of compensation, responsible for the payment of social security, place and hours of work, responsibilities to be assumed and the commitments of the contracting company.
   http://www.mintrabajo.gov.co/frequent-questions/work-contract.html
- In the case of company creation: type of company that is constituted, registration in the Chamber of Commerce, tax obligations, environmental obligations and compliance with special regulations.
- Labor rights such as: wages or salaries, vacations, service premiums, severance pay and workers' social security. This is of interest to those seeking employment and for those who want to be entrepreneurs and are going to need workers.
- Opportunities to continue preparing yourself and improve your occupational profile.

### **Inclusion Phase**

In this last phase, Lines of Inclusion in the labor and Business areas are built according to the results received, which will allow the profiles to be classified in portfolios in these two lines of development, this will allow in the future to design programs that allow strengthening the labor line and the productive business guaranteeing a diagnostic base line.

### **Products**

A. Labor inclusion line: 1. Labor profiling, which includes the identification and analysis of domain competencies, the socioeconomic characterization and the analysis of the participants' resumes with the databases with contact information, description of family composition, access to public services, access to social security, among others. And this must be supported with the registration forms of each person duly completed. 2. Vocational and socio-occupational orientation processes. 3. Results of the evaluation of key competencies and 4. Identification of conventional and non-conventional individual barriers to access to employment, which could be addressed in the future within the framework of the gap closing strategy.

**B. Productive inclusion line:** 1. Profiling that includes the identification and analysis of domain competencies associated with entrepreneurship, the socioeconomic characterization and the analysis of the resume of the productive units and 2. Identification of conventional and non-conventional individual barriers of access to entrepreneurship, which could be addressed in the future within the framework of the closing gaps strategy.

With the above, it was possible to specify the type of design, sampling, statistical techniques and instruments used for the collection of information. As well as the bioethical considerations for the study and the administrative act of the bioethical endorsement.

### Results

### **Results of the monitoring process**

- I.The actions of management and support provided by the Mariana University to the ILO allowed.
- II. The targeting and convening of one hundred and thirty "Pimpineros" in the municipalities of Ipiales, Pupiales and Gualmatán, within the framework of a focus on exercising social cohesion and trust with the sector.
- III. The targeting and call exercise was developed in effective coordination with public sector entities-IDES; UMATA Pupials; Secretary of Planning, Community Development and Agriculture, Municipal Council of Ipiales; municipal council of Pupiales; municipal council of Gualmatán-, the private sector -ILO-, and the community base -cooperative of footwear of Ipiales-; This allowed the first real and direct approach with people who work as "Pimpineros" in the study municipalities.
- IV. The advance actions provide technical guidelines to address the final stage basically related to the construction of methodologies, tools and instruments for capturing information to build the initial portfolios of people for a future intervention; Likewise, an operational and logistical route for the process of capturing primary information in each of the study municipalities.

### **Immediate actions**

- I. Carry out face-to-face workshops with the "Pimpinera" population to raise awareness among the population about the problem and motivate them to join the process of socioeconomic characterization, vocational and socio-occupational orientation, evaluation of initial key competencies, and the identification of conventional and unconventional individual barriers to access to employment.
- II. Support the ILO territorial team -External Collaborators- in community outreach scenarios and awareness days.
- III. Lead the primary information management sessions through the "Pimpineros" and the correct methodological application to achieve its characterization and profiling for future interventions.
- IV. Establish, in effective coordination with the External Collaboration of the ILO in Nariño, the methodology, the tools and instruments for capturing information and the tests that allow the construction of at least one hundred and thirty initial portfolios of the "Pimpineros" focused and summoned in the first phase of rapprochement in the municipalities of Ipiales, Pupiales and Gualmatán.
- V. Develop the logistics exercise with a social cohesion approach that allows the implementation of the primary information capture methodology, systematization, validation,

and construction of at least one hundred and thirty portfolios of identified and profiled people in the municipalities of Ipiales, Pupiales, and Gualmatán.

VI. Prepare a report with the respective conclusions and recommendations that relate, on the one hundred and thirty people identified and profiled, the possibilities of labor or productive inclusion.

### **Discussion**

# Systematization, validation, processing and emission of the output data of the primary information collected

We worked with three instruments: the first of socioeconomic characterization, the second of profiling labor, productive and vocational inclusion, and a third of basic level generic skills that were adapted to the context of the Nariño region.

140 pimpineros distributed in 118 people in Ipiales equivalent to 84.28% were surveyed; 8 people in Gualmatán, equivalent to 5.72%, and 14 people in Pupiales, equivalent to 10% of the total population surveyed.

To collect the primary information, semi-structured personal surveys were used "face to face" (Bover, Arellano & Bentolila, 2002), which consist of interviews conducted by duly trained interviewers who go to homes, work centers or specific locations, with the purpose of carrying

out a survey that implies the use of Items to collect quantitative information and open questions to delve into some variables or hypotheses, it allows determining the social context of the interviewee

In this way, 3 instruments were systematized through Google Forms, to ensure that the interviewers create a relaxed environment, inducing the respondent to answer the 119 Items distributed in the Socioeconomic form 55, the profiling instrument 36, and in the competencies 28 items, which required an average of 30 minutes to achieve the purpose of each of them.

Once the information is obtained, it is systematized into three Excel files that contain the information and the validation and indexing process is developed, which consists of alphabetically ordering the names of each pimpinero, unifying the names, verifying the duplication of interviewees, and that the items present quantitative data information in a discrete and continuous way, this to determine the statistics of the case, also in the qualitative information in nominal and ordinal (Pardo & Ruíz, 2002).

From this information, the directory of pimpineros is drawn up, as the first product of the information collected, organized in alphabetical order: Code, Full Name, Date of Birth, Country of Birth, Department of Birth, Municipality of Birth, Place of Residence, Address and Neighborhood and telephone / cell phone.

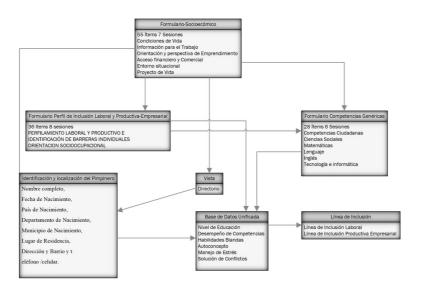
This research is part of a quantitative study of a descriptive nature with a social research methodology structured by its purpose of targeting pimpineros in the southern region of Nariño, from here it is required to validate the information through internal control items that show coherence of the statements in the proposed items. These constructions are based both on his subjective experience and on his own interpretation of his place in the social structure. These studies share the assumptions of the biographical method in which personal history - agency - is interwoven with the circumstances of the social environment (Denzin, 1989). The validation of the information is carried out internally through control questions and externally through the pilot tests that were

previously carried out with the interviewers before the application, which led to adaptations in some Items.

Once the validation has been carried out, it is applied for four days using the biosafety protocols in the established municipalities and the statistics are generated in a general way and the individual information of each pimpinero in the registration of each questionnaire. From the three instruments arises the directory database that allows the verification of location and duplicity of identity and the unified database that relates the Items for the elaboration of the file in the description of the pimpineros in the lines of labor inclusion and that of entrepreneurship (see Figure 5).

### Figure 2.

Flow chart research methodological phases.



Source: ILO-UMARIANA Team (2020).

# Characteristics of the information capture tools and instruments for the labor inclusion line.

The line of labor inclusion arises from the analysis of the relationship of the Items of the Socioeconomic Form of Labor Information with 6 Items with nominal data such as: 25. Indicate the training courses for the job you have completed, and the type of certification received. -(Course/Name of the Institution/Type of certification/Hours) If you have a certificate or learned empirically; 26. In which of the following sectors do you consider there are more job opportunities? ECONOMIC SECTOR; 28. Have you received and/or are you receiving training other than those mentioned above? In Other- Indicate the training area, the institution, and the hour intensity. and 29. If you are willing to train, as a tool that allows you a better employment option. Please indicate the area of training, the institution and the number of hours per week that you would be available to study? These items allow us to relate work experience, training in the labor field and expectations regarding the possibility of working in something other than work outside the legality of pimpinero.

In addition, there are ordinal data such as: 27. In which of the following sectors would you be interested in working? ECONOMIC SECTOR and 24. Since he began his working life; What occupations or trades have you held? Under what category and for how long? -Remember: it is important to point out and start by inquiring about the current occupation. (Name of the Company, Entity or Person (when it is independent) / Occu-

pation or Trades performed / Description / Occupational Position / Months).

The other instrument used is profiling with open questions that allows analysis of nominal data on items **4.** What would you like to work on? Why? **5.** Do you consider that you have the skills required to carry out this work? **6.** In the last year, have you applied for a job? To which? and **7.** What are the aspects that you give most importance to when looking for a job?

These items, with qualitative and quantitative information, allow us to profile the individual object of study in a particular way, with data that are recurrent against the possibilities of the context, this relating training levels, socioeconomic level, educational, financial barriers, soft psychotechnical skills and generic skills that, from a socio-occupational orientation, account for the real job possibilities of the individual to be able to opt for job inclusion at the micro-social level (Sautu, 2003:31), which could incorporate concepts related to willingness or need to work of these and the discriminatory behavior of the labor demand that incorporates them in certain occupations and not in others. These substantive perspectives would make it possible to define some key concepts in the research and the relationship between them, which would in turn make it possible to make clear the relationship between variables (TRAINING, ECONOMIC SITUATION, WORK EXPERIENCE, SKILLS AND COMPETENCIES) present in the analysis model of the three instruments.

# Characteristics of the tools and instruments for capturing information for productive business inclusion

The line of business productive inclusion also arises from the analysis of Socioeconomic Instrument 1 of session III. ORIENTATION AND PROSPECTIVE ENTREPRENEURSHIP with 5 items: **30.** In addition to the sale of gasoline, have you carried out another business initiative? 31. Does this business initiative currently persist? Closing reason; 32. Would you be interested in undertaking a business idea other than the sale of gasoline? / Why? / Other type of activity; 33. Have you executed actions to undertake that business idea? / Which? 34. Which of the following aspects do you consider necessary to resume and/or efficiently develop said initiative? and 35. How is your relationship with other gasoline/fuel sellers? (good/regular/ bad) / Why? These items are of a nominal nature and together with the questions of Instrument 2 of inclusion profiling if you wish to undertake with 4 Items: 8. Have you ever tried to start your own business? Which? Why? 9. What type of business would you like to start? Why? 10. What would you be willing to train for such work? 11. Do you have any resources to start your own business? intangibles).

These items allow us to understand what the perspectives are regarding entrepreneurship and what the experiences are if they have already ventured into this line, and like the labor

aspect, they are related to barriers, soft skills, generic skills, socioeconomic level and entrepreneurial skills. such as creativity, in the micro-social context, it must be understood that there is rootedness in the customs of the region due to commercialization as it is a border area and the undertakings are linked to this idiosyncrasy, so it is necessary to consider when our objective performs a micro social cut of reality (Chomsky, 2004). In this sense, the perceptions of the individual object of study, of wanting to be compared to what he does, is somehow subjective compared to what he can be. Focusing on the psychotechnical, in interactions, interpretations and subjective experiences, the items allow us to characterize the need of the Pimpinero to want to undertake.

# Validation of the methodology through the tests or activities of the research group

The validation of the instruments was carried out through three moments that we describe below:

### The 1. documentary and theoretical moment:

it consisted of checking if the proposed Items marked the elements of the purpose of each one of them, for example, the socioeconomic through the bibliographic review allowed to observe the Items, DANE and the Ministry of Labor, Items in common were found that already allow External validation (see Figure 6).

### Figure 6.

Sociodemographic analysis components of DANE- MINTRABAJO.



Source: DANE Y Ministry of labor (2017).

2. Practical moment: it is the role-playing exercise of the team to review and apply the instruments, simulating the survey process to determine if the items in the digitized instruments are legible and intelligible to the respondent, as in the role interviewer if they are practical at the time of application and measurement of time. This allowed us to provide feedback on the forms and determine some changes in form and structure in some Items. Likewise, it was possible to perceive a time of 30 minutes per respondent to be able to determine approximately how many respondents could be achieved to develop logistics and apply biosafety protocols that would allow low congestion of people in the place of application.

Finally, moment 3. Validation in the field: it was carried out now of application with the pimpineros in situ, verifying the possibilities of connectivity and monitoring the records of the forms in real time, the connectivity situations were previously foreseen for which a few forms were printed and digitized after application.

According to Hernández and Torres, (2018) the instruments are validated according to their nature and purpose, so that they are based on their purpose in coherence with the methodology and type of research, as well as in their application and usefulness of the research. information received, by documenting the development processes of the same in the proposed research.

In conclusion, three instruments were designed that contained a total of 119 items, which were adapted to be applied virtually and in person if required, to guarantee the collection of information for the purposes of socioeconomically identifying the pimpineros and characterizing the 140 pimpineros in the lines of labor inclusion and productive inclusion- Entrepreneurship.

### **Conclusions**

The identification and targeting of the population with special characteristics such as the "Pimpineros" presented access barriers, both due to their geographical location and their willingness to participate in these characterization processes; It is a population that is always highly prevented by its very situation of illegality, a situation that substantially hinders the processes as such.

In the Nariñense territory and especially in the municipalities of Ipiales, Pupiales and Gualmatán there is no database of the "Pimpinera" population, much less, characterization processes that would allow knowing their basic needs and their labor and entrepreneurship profiling, therefore, this progress in the project will allow obtaining and facilitating information on the target population for possible future interventions.

For the development of future actions, the methodological bases of approaching the population must be considered, which have allowed speed and effectiveness when making use of virtual instruments and possible "face-to-face" interviews with the biosafety protocols that merit the COVID-19 pandemic times.

The exercise of social cohesion carried out in the three municipalities will favor, in the long term, the management and implementation of policies that aspire to equalize opportunities for the "Pimpineros" through a "social contract" that gives them strength and continuity. A "contract" of this nature supposes the support of a wide range of actors, willing to negotiate and agree on broad agreements that mitigate or eradicate the problem of the "Pimpineo".

The population under study shows willingness to participate in processes of interaction with institutions or stakeholders and in spaces for providing information, demonstrating a sense of belonging to the "Pimpinera" community and its solidarity with this population group to facilitate the signing of "pacts" social services necessary to support policies aimed at achieving equity and inclusion.

To achieve progress in social cohesion through social policy instruments in the study municipalities, it can be inferred that it is not enough to determine their suitability, strengthen the capacity of certain local actors, increase the level of social spending and accentuate its efficiency, it is also essential to consolidate the institutions that are in charge of directly or indirectly addressing the problem of the "Pimpineo".

Finally, it is important to point out that the support process for the development of research and the management of results was carried out, in large part, during the social, economic, and ecological emergency caused by the COVID-19 pandemic. that, on the one hand, makes visible the situation of socioeconomic vulnerability of people who illegally deal in the sale of fuel, and on the other hand, the need to effectively implement strategic actions that allow access to mechanisms for the protection of rights and stability in their vital minimums (food, nutrition, education, health and work).

### References

- Besolan, Alecop & Mondragón Universitatea. (2000). Proyecto piloto de competencias de acción profesional en Alacop. Hoja formativa/Informativa, 1 y 2, Tema monográfico.
- Boshell, C. (2021). Estudio socioeconómico, ¿Qué es?, ¿Qué tener en cuenta para su diseño? Asosec. https://asosec.co/estudio-socioeconomico-que-es-que-tener-en-cuenta-para-su-diseno/
- Bover, O., Arellano, M. & Bentolila, S. (2002). Duración del desempleo, duración de las prestaciones y ciclo económico. *The Economic Journal*, 112(479), 223-265.
- Casal, J., García, M., Merino, R. & Quesada, M. (2006). Itinerarios y Trayectorias, Una perspectiva de la transición de la escuela al trabajo. *Trayectorias*, 8(22), 9-20.

- Chomsky, N. (2004). Los dilemas de la dominación. Consejo Latinoamericano de Ciencias Sociales-CLACSO.
- DANE. (2017). Lineamientos para el Proceso Estadístico en el SEN. http://www.dane.gov.co/files/sen/normatividad/Lineamientos\_Proceso\_Estadistico.pdf
- Denzin, N. (1989). Interpretative Biography. SAGE Publications.
- Forero, T. (2020). Conoce el escenario del emprendimiento en Colombia y sus oportunidades para el 2020. Rock Content. https://rockcontent.com/es/blog/emprendimiento-en-colombia/#:%7E:text=El%20emprendimiento%20en%20Colombia%20tambi%C3%A9n,en%20comparaci%-C3%B3n%20con%20el%20promedio
- GEM. (2020). GEM COLOMBIA: Actividad emprendedora en Colombia en tiempos del coronavirus 2020-2021. Universidad del Norte.
- González, L., Ortegón, A. & Díaz, C. (2013). Rutas de vida. Manual de Acompañamiento en Orientación Socio Ocupacional. Ministerio de Educación Nacional.
- Gutiérrez, M. (2011). *Diseño Macro Curricular*. Blogspot. https://mairaalejandra-gutierrezar-cila.blogspot.com/
- Hernández-Sampieri, R. & Torres, C. (2018). *Metodología de la investigación (Vol. 4)*. McGraw-Hill Interamericana.

- Pardo, A. & Ruíz, M. (2002). SPSS 11. Guía para el análisis de datos. McGraw Hill.
- Ministerio de Educación Nacional. (2011). Línea de base de la orientación vocacional y/o profesional en instituciones de Educación Superior. Informe Consultoría Contrato 490. MEN.
- Sautu, R. (2003). Todo es teoría. Objetivos y métodos de investigación. Lumiere.
- Sautu, R., Boniolo, P., Dalle, P. & Elbert, R. (2005).
  Manual de metodología: construcción del marco teórico, formulación de los objetivos y elección de la metodología.
- Vaca, I. (s.f.). Evolución de los mercados. Análisis Situacional.
- Varela, R., Moreno, J., Soler, J., Pereira, F., Osorio, F., Gómez, E., López, M., Parra, L., Martínez, P., Peñuela, J. & Gómez, L. (2020). *Dinámica de la Actividad Empresarial en Colombia*. Editorial Universidad Icesi.
- Vispoel, W. (1995). Self-concept in artistic domains: An extension of the Shavelson, Hubner, and Stanton (1976) model. *Journal of educational Psychology*, 87(1), 134.