Measuring ex-combatant reintegration as a peace dividend through the Sustainable Development Goals (SDG)*

Medir la reintegración de excombatientes como dividendo de la paz a través de los Objetivos de Desarrollo Sostenible (ODS)

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Abstract:

Among peace-dividends, ex-combatants expect better living conditions than during war. However, do ex-combatants that return to civilian life have similar living conditions than average population? This case study on Colombia analyses the living conditions of ex-combatants compared to the country's average population by using a mixed methods approach. This research combines data from 2018 to 2020 of the reintegration programs, the national household survey and police data to compare ex-combatants and average citizens using as reference, the Sustainable Development Goals (SDGs). The findings show to what extent can reintegration outcomes be a positive peace dividend that contributes to development in post-conflict transitions.
Keywords: DDR, SDGs, Peace, Development, Peacebuilding.

Resumen:

Entre los dividendos de la paz, los excombatientes esperan mejores condiciones de vida que durante la guerra. Sin embargo, ¿los excombatientes que regresan a la vida civil tienen condiciones de vida similares a la población promedio? Este estudio de caso sobre Colombia analiza las condiciones de vida de los excombatientes en comparación con la población promedio del país mediante un enfoque de métodos mixtos. Esta investigación combina datos del programa de reintegración, la encuesta nacional de hogares y datos policiales de 2018 a 2020 para comparar a los excombatientes con los ciudadanos promedio, utilizando como referencia los Objetivos de Desarrollo Sostenible (ODS). Los hallazgos muestran en qué medida los resultados de la reintegración pueden ser un dividendo de paz positivo que contribuye al desarrollo en las transiciones hacia el posconflicto.
Palabras clave: DDR, ODS, paz, desarrollo, construcción de paz.

Introduction

It is logical to expect that peace and development are aligned towards the same objectives, for example the Sustainable Development Goals (SDGs). Unfortunately, the overlapping of these agendas is not often measured in post-conflict scenarios. This research aims to highlight how outcomes in ex-combatant reintegration can be measured as contributions towards the SDGs. Reintegration outcomes are often assessed on a negative peace perspective, for example, no-return to armed hostilities or absence of ex-combatant's recidivism. Although reintegration does measure some outcomes with Galtung's positive peace like access to education, health, etc., the program indicators are tailor-made and do not compare their outcomes (reintegrated individuals) with the rest of the population.

If the main objective of reintegration is that ex-combatants become regular citizens with equal conditions and equal access to state services, there is a need to measure it. The SDGs offer that possibility. This research acknowledges that average population does not receive the same support as ex-combatants do, after all, only

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ex-combatants undergo reintegration programs. But as said before, reintegration seeks to put ex-combatants at the same level as average citizens, so it makes sense to compare them. Afterall, in a successful long-term peacebuilding, the living conditions and access to services of ex-combatants and regular citizens are expected to be similar. Using Colombia as a case study, this research aims to answer the question: do average ex-combatants who return to civilian life have similar living conditions as the average population?

The Colombian case study allows to highlight the importance of the peace and development discussion for conflict-affected countries. Such countries face particular development challenges (Milante & Oxhorn, 2009, p. 20) which makes the development and peace nexus fundamental for post-conflict recovery and avoid renewed armed confrontation. Conflict brings adverse trade-offs that negatively affect human capital, social capital, education, and security, all of which foster development. This combination of negative trade-offs implies that conflict-affected countries start the race towards development several meters behind other states. With the launch of the SDGs and the lessons learned from the implementation of the Millennium Development Goals (MDGs) (Solberg, 2015), the development and peace agendas have a unique opportunity for joint and complementary efforts, especially for post-conflict medium term programs such as ex-combatant reintegration.

This research presents Colombia as a case study in a mixed methods approach that combines statistical analysis of program surveys and household visits to ex-combatants, as well as the national household survey (GEIH) and police data. It compares ex-combatants and average citizens using the SDGs data by municipality to provide a better understanding of the connections between peace and development through SDGs and reintegration indicators. Using the municipality as a reference allows also to avoid the gap between cities and provides a common ground to analyse populations that are surrounded by the same territorial conditions regarding development, violence, institutional presence, etc.

If one of the dividends of peace is the improvement of living conditions and if reintegration is understood as a process for ex-combatants to return to civilian life as average citizens, this research enhances peacebuilding metrics with an innovative SDG perspective. After all, no one gives up their weapons to live in worse conditions than before. This paper establishes that for most SDG indicators, ex-combatants in the reintegration process and those who culminated the reintegration program are below the citizen average in their municipalities. That is the case for access to health or access to basic utilities, and the gender-gap regarding unemployment where demobilized women have still to overcome many job-market barriers. However, there are some variables where ex-combatants show better performance than average citizens in their municipality, as for example having less over-crowding than average citizens in their municipalities. Culminated ex-combatants have more schooling years and less percentage of unemployment than average population. Unfortunately, ex-combatants who culminate reintegration are also the most affected regarding homicide both for men and women.

The structure of the paper is as follows: First it summarizes the state of the art on how reintegration is measured and identifies the determinants of its success. Secondly, it explains the data and methods employed for the research. Thirdly, it analyses common grounds that the SDGs share with Disarmament, Demobilization and Reintegration (DDR) and how their indicators converge mainly for ex-combatant reintegration. Both the DDR program and the development and peace policies have increased their scope to a point where their convergence is worth analysing. Finally, this paper analyses three years (2018-2020) of performance on SDG indicators of ex-combatants undergoing the reintegration process, ex-combatants that already culminated their reintegration program and regular citizens of the main Colombian cities.

State of the art on reintegration evaluation and the potential contribution to the SDGs

This chapter reviews briefly how reintegration is measured and some of the missing pieces for a more comprehensive approach of reintegration outcomes as contributors to positive peace dividends and development.

Evaluating reintegration outcomes

Starting the early 2000s there was growing interest in both defining DDR and establishing its role within peacekeeping. This is seen in United Nations Security Council (2000) and the creation of the Integrated DDR standards (IDDRS) in 2006 by the Inter Agency Working Group on DDR (IAWG on DDR). In the 2006 IDDRS document, reintegration is defined as

> the process by which ex-combatants acquire civilian status and gain sustainable employment and income. Reintegration is essentially a social and economic process with an open time frame, primarily taking place in communities at the local level. It is part of the general development of a country and a national responsibility and often necessitates long-term external assistance. (IAWG on DDR, 2006, p. 2)

DDR mission reports and evaluations in the end of the 90s and early 2000s were focused on measuring the outcomes (efficiency) of the program but not their effectiveness in contributing to liberal peace. For example, vocational training was measured as the number of persons who attended the training but not if such skills were useful for the ex-combatant's engagement in the workforce. The scope of reintegration has been growing since its beginnings, to the point that many of the measurable aspects are also part of broader agendas. As Torjesen (2013) mentions, in order to assess reintegration, there is a need to start with ex-combatant themselves and their socio-economic and political challenges. This shift of focus from program evaluation to individual subjects can lead to significant changes in implementation and assuming ambitious goals like the Colombian reintegration program did. That program conceived reintegration as a path from social vulnerability to autonomous citizenship (development approach); the aim was for ex-combatants to become regular citizens instead of just dissuading them of recidivism (criminology approach).

Changing the evaluation focus from the program's provision of services to focus on individuals was a significant advance, but it did not resolve yet which variables should be taken into count to determine when reintegration was successful. Humphreys and Weinstein (2005) used independent variables such as age, sex, abusiveness, education, poverty, and violence within the armed unit to which the combatant belonged. Researchers like Spear (2006) aimed to identify the catalysing role that comprehensive DDR could have in the establishment of conditions of physical security and also political and economic security. Unfortunately, neither study advances the formulation of indicators outside DDR that could connect with DDR-related variables. Nonetheless, they did pave the way for adjustments in DDR and the need for detailed evaluations. More important, Humphreys and Weinstein (2005) opened the door to consider poverty as one of the outcomes to be analysed. Although poverty is not 100% a DDR-related variable, the living conditions after leaving the combatant life is fundamental to analyse; nobody hands in their weapon to step into worse living conditions than before.

These contributions from academia fostered, on the policy side, a significant shift in UN's short-term approach as can be seen in a report by UN Secretary General (2011) regarding reintegration:

> In most countries, economic aspects, while central, are not sufficient for the sustainable reintegration of ex-combatants. Serious consideration of the social and political aspects of reintegration, tailored to the specific country context, is crucial for the sustainability and success of reintegration programmes. (UN Secretary General, 2011, p. 10)

In the years following the launch of the IDDRS (2006) and during the Cartagena DDR Congress in 2009, voices from both practitioners and academia converged in the fact that not measuring the impact of DDR was one of its Achilles's heals. As Kingma and Muggah state, "appropriate metrics of success, the indicators, impacts and outcomes of DDR - together with analysis of what and why it does or does not work – are all urgently required" (Kingma & Muggah, 2009, p. 5)

Several DDR evaluations were conducted after the launch of the IDDRS. These include Conoir (2011), Lamb (2013), Molloy (2008) and The World Bank (2010), and academic articles such as Edloe (2007), Bowd and Özerdem (2013), Seethaler (2016) and Banholzer (2014), which focused on program outcomes and policy recommendations but left undetermined the metrics of success and measurable contribution to peace and development. Before 2012 there were no references of evaluations or even monitoring of post-DDR outcomes for ex-combatants. Post-DDR monitoring is a fundamental step pending for DDR evaluations because although the IDDRS do talk about ex-post evaluation to evaluate the long-term effectiveness of the programs, currently (year 2022) only El Salvador has done a quantitative evaluation 20 years after their DDR program and only Colombia has created a post-DDR active monitoring system.

Opposite to the macro-approach and more policy focused balance of 20 years of DDR made by Lamb (2013), 20 years after the Chapultepec Agreements, the Government of El Salvador made a survey on the living conditions of FMLN combatants, of which only 13% lived above the poverty line. Additionally, also in 2012, the Colombian reintegration program created their post-reintegration monitoring system to make a the short-term follow up of the later years after ex-combatants finished their reintegration phase. This provided data to compare ex-combatants during and after the reintegration process, nonetheless both countries were stilling lacking a bridge to compare that data with data on the territories where reintegration takes place. That is where the SDGs can contribute to a new level of reintegration assessment.

Connecting reintegration with the SDGs

The relation between peace and development has been addressed in numerous works such as Hettne (1983, 2010), Collier et al. (2003); Sen (2008); Milante and Oxhorn (2009), and Wolff et al. (2020). Why then, do evaluations of peace and development program outputs not evidence such relation at the indicator level?

With the formulation of the SDGs in 2015, the development agenda assumed a much more ambitious set of goals for 2030. Learning the lessons of its predecessor, the SDGs included indicators that involve individuals but also aimed to measure improvement in contexts where individuals live, connecting development even more with peacebuilding and subsequently, DDR.

Disarmament, for example, has gained more importance within the SDG agenda as shown by Under-Secretary-General and High Representative for Disarmament Affairs Nakamitsu (2018):

> Excessive arms accumulation diverts needed resources from development and fuels armed conflict and violence, leading to unnecessary death and suffering, social inequality and environmental degradation. Hence, the failure to establish effective disarmament and arms control systems is devastating to socioeconomic development, peace and security, and human well-being. (Nakamitsu, 2018)

Just as the disarmament phase can have effects on several SDGs as shown by Nakamitsu (2018), in reintegration we can see the largest convergence with SDG indicators. But why is it relevant to analyse that convergence of DDR and SDGs? On the one hand, such analysis can allow DDR impact evaluations to include causal factors that are not program-related and that could help understand why reintegration unfolded in specific ways to different groups of ex-combatants (Torjesen, 2013). On the other hand, in conflict-affected scenarios where peace agreements are still not possible, minor advances in development and living conditions could serve to gain trust and advance on de-escalation. In other words, using development tools with a perspective of reintegration to foster disarmament and demobilization. This commutative

property of DDR allows to propose models where the R of reintegration comes before the two Ds (disarmament and demobilization), in what has been called RDD by Dudouet (2011), and Munive and Finn (2015).

It is important to highlight that although reintegration depends significantly on the individual that goes through the program, the context where reintegration takes place, as well as the living conditions, have a key role on the outcome. Additionally, the efforts to improve living conditions of ex-combatants and their families contributes to the achievement of SDGs. Being able to measure such conditions will allow to calculate peace dividends with positive peace indicators (focused on wellbeing) and assess reintegrated ex-combatants as average citizens, which is the ultimate outcome of a successful reintegration within a post-conflict transition (Figure 1).

FIGURE 1.
SDG-DDR indicator convergence
Source: Authors with SDG and ARN data.

Data and Methods for convergence of the SDGs and reintegration

As said before, the scope of reintegration has been extending to numerous components of what Galtung (1967) labelled as positive peace. For the Colombian case study, variables from their program interventions, baseline, living survey and post-DDR monitoring converged with 12 of the 17 goals from the SDGs.

As figure 1 shows, a reintegration assessment allows us to analyse several variables that are related to ex-combatants and where the reintegration program could have incidence, for example, access to health (SDG 3) or access to education (SDG 4). There has been a growing interest on the role of female combatants and their specific challenges to reintegration. Given the particularities of the Colombian conflict and violence towards women (reproductive rights, homicide, exclusion), we focus on the number of children, the gender gap in the workforce and homicide for SDG 5. Access to decent work for both ex-combatant men and women is addressed in SDG 8.

Comparing that data at the municipality level gave us context perspective and allowed comparison between average citizens and ex-combatants. It is important to highlight that within average citizens there can be found also other types of population affected directly by conflict (such as victims or displaced) who undergo other rehabilitation programs or none. However, regardless of their differences, development policies target all the population and selecting SDGs as the common measurement allows an assessment of all individuals with the same set of indicators.

SDG Data

The 17 goals are divided into 169 targets and a total of 232 indicators. 12 SDGs have indicators that share variables with reintegration programs, for this research we focused on eight. The following SDGs were not considered since they address issues not directly related to or affected by reintegration (12: Responsible consumption and Production, 14: Life below water, 15: Life on land). For SDG 2: Zero Hunger and SDG 10: Reduced Inequalities, their targets were very general, and the current metrics of reintegration programs did not specifically focus on those variables. The ex-combatant Habitat survey provided data for SDGs 7, 9, 13 and 17 which were discarded because the associated variables had already been covered in other goals and were related to housing and access to public services. Others were not as relevant for the study but are still relevant for social inclusion, for example, access to internet.

Indicators for each SDG were selected after a document review of the Colombian policy on the SDGs called CONPES 3918 which was launched in 2018. Additionally, the SDG data was paired with the indicators and information collected by Colombian National Agency for Reincorporation and Normalization (ARN) through the Program database, Family survey, and Habitat survey. Due to COVID restrictions during 2020, the State was unable to gather most of the information it normally acquires through in situ surveys. This implies that for variables at the household level, when applying the expansion factor, the yearly results for 2020 maybe appear slightly different since the year calculations were done based only on the months that the National Administrative Department of Statistics (DANE) was able to capture information.

SDG monitoring has been more robust in the main cities than in rural areas of Colombia, the compared data analysis was done for 23 main cities and in some cases including surrounding smaller municipalities (their metropolitan area, AM for their Spanish acronym). Since the reintegration of the paramilitary forces and the individual reintegration program have taken place mostly in cities, 48% of the whole population in the dataset resides in these 23 metropolitan areas, which validates our selection not only because of data availability but also because of concentration of ex-combatants.

For the purpose of this research the SDG indicators have been grouped in three main categories which are more connected to reintegration: 1) Living conditions (encompasses indicators from SDGs 3, 6, 7 and 11), 2) generation of income (encompasses indicators from SDGs 4, 5, and 8), and 3) security (encompasses indicators from SDGs 16 and 5). This division reinforces the premise that there is a clear fit between reintegration and development components and subsequently in their indicators too. Assessing individual performance in wider entourage (municipality) also recalls what was said before that despite the outcome of reintegration depends significantly on the individual, the context where reintegration takes place (with its challenges and opportunities), as well as the living conditions, have a key role in the outcome.

The reintegration numbers

Colombia has demobilized ex-combatants for many years and has undergone three DDR initiatives in the last two decades. Two collective programs, the first one resulted from agreements between the government and the paramilitary forces between 2003 and 2006 and the second one, the peace agreement with FARC-

EP in 2016. Thirdly, an individual DDR program created for combatants who defected illegal armed groups without any peace agreements.

For this research we excluded the FARC-EP reincorporation process and focused on reintegration data. This includes the collective process of the paramilitary forces and minor collective demobilization of FARC-EP and ELN, as well as the individual reintegration program for combatants who defected active illegal armed groups. By December 31st, 2020, there was an accumulate of 54,174 former combatants accredited for reintegration (79.46% of the total universe of ex-combatants in ARN) registered in the ARN's database. Since demobilization continues within the Colombian armed conflict, the accumulated numbers continue to increase with time. 48% of the 54,174 lived in the main 23 cities and metropolitan areas.

As table 1 shows, 2.12% never entered the reintegration process, therefore, were not included in this research. Between 4% and 5% are absent from the process (which means they have not shown up in at least 3 months). Those ex-combatants were included if there was information from them in the system within the time frame analysed (during that period they would have appeared as in process).

The same inclusion criteria apply for the ex-combatants who are out of the process (which ranges from 35% to almost 38%), ex-combatants were out of the process in cases of recidivism, other faults within the reintegration process or prolonged absence). In all those cases we kept the information gathered within the timeframe regardless of the fact they might not have data for all the years of the study. Culminated ex-combatants are those who finished the reintegration program successfully, and In process is the status for the population still attending activities of the reintegration process.

The information for the population assisting to the reintegration process, those who have culminated the process, and the average population in prioritized cities, was estimated using the data from the information systems in ARN, the Great Integrated Survey of Homes (GEIH for its Spanish acronym) collected by DANE, and the data from the Statistical, Delinquent, Misdemeanour, and Operational Information System of the National Police - SIEDCO.

TABLE 1:
Status of accredited ex-combatants within the reintegration process

Year	Total	Absent of process	Culminated	In process	Out of the process	Did not enter
2018	26,104	5.23%	45.94%	10.79%	35.91%	2.13%
2019	26,169	4.71%	47.17%	8.71%	37.29%	2.12%
2020	26,143	4.90%	48.56%	6.72%	37.70%	2.12%

Source: ARN. Yearly data cut was December 31st of each year.

It is important to highlight that the expected duration of the reintegration program for an ex-combatant who came with no levels of literacy was of 6.5 years. However, this was not always the case, the duration of the reintegration program proposed in 2003 was from 12 to 18 months. This was changed due to the need of further assistance. Until 2012, there was not a clear timeline for culmination of the reintegration program (this partially explains why some people had more time in the program) and currently persons with special needs have reintegration routes that could last longer than 6.5 years.

Some of the figures in this research divide the population according to their time spent in the program. This is important because the first years of reintegration are critical specially for combatants who desert armed groups; they were usually sentenced for treason and could not go back to their homes or place or origin. Also, during the first years, factors like weak social networks, lack of vocational skills, among others can make them suitable for re-recruitment and recidivism. However, surviving with legality the first years of the reintegration

program is not a guarantee of avoiding risk, despite advances in the socio-economic reintegration. To assess the advances along the reintegration program, this research divides the population spectrum in 0-1 years, 2-4 years, 5-6 years, and more than 7 years.

Comparing ex-combatants and the general population

This research measures some of the SDG monitoring indicators for: 1) ex-combatants in the process of reintegration, 2) ex-combatants who completed the process, and 3) general population of the main 23 cities and metropolitan areas (AM).

Having the average citizen as a point of reference for reintegration must be analysed with certain considerations. Firstly, this research compares the results at the municipality level for 23 main cities that despite being regional capitals, have a significant gap among them. This has a direct effect in the cost of life, possibilities to access basic utilities, health coverage and public order conditions. The average results in some of the most lagging cities might not be even considerable as suitable conditions neither for average population nor for ex-combatants.

Another point that is important to consider is that no DDR or peacebuilding strategy intends to replace the State functions and therefore, the program relies almost entirely on public institutions to provide services on education, vocational training, health among others (which are also used by average citizens). The reintegration program also has a limitation regarding the expected outcomes, for example, although much effort is focused on providing vocational skills and create agreements with the private and public sector to foster job market inclusion, a reintegration program is not a job agency, nor the obligation of finding jobs for ex-combatants.

Finally, the selection of the population could also have effects in the research since most of the ex-combatants come from low-education and poverty backgrounds, often from rural areas. Nonetheless, due to the armed conflict, similar population has been migrating to the main cities for decades, which validates the research's objective of comparing ex-combatants with average citizens.

The Colombian case study

The Colombian armed conflict has been one of the longest standing armed confrontations in the world. It started in the 1940s during a phase called La Violencia as was reported by Guzmán et al. (2016), some authors like Pardo (2013) have stated that Colombia has been in conflict since its independence in 1819. During that time, the country has gone through several peace processes, cease-fires and amnesties that have facilitated the return of combatants back to civilian life.

Colombia started implementing DDR components with the collective demobilization of guerrilla armed groups in the 1990s (see Turriago and Bustamante [2003]), and later, with the collective demobilization of the paramilitary groups between 2003-2006. Additionally, there has been an individual process of demobilization which was created as a legal and socio-economic pathway back to civilian life for combatants who want to desert armed groups that are actively fighting.

Colombia was chosen as a case study for several reasons: 1) It has an on-going conflict that allows to see the difficulties but also positive outcomes of setting the bases for peace and development in midst of the confrontation 2) it has one of the most robust reintegration monitoring systems and is the only program that does post-reintegration monitoring 3) nearly half of the population reintegrated in cities, which allowed an easier access to municipality data when comparing with average citizens.

Opposite to most DDR processes which have been led by UN and other international actors like the World Bank, with limited national ownership, the Colombian State has had an institution leading the reintegration

of ex-combatants. With each peace negotiation the reintegration programs have had improvements regarding access to health, education, vocational training and more recently, political reintegration (Herrera & González, 2013).

The following part of this section, the results of the performance according to SDG indicators are presented within the three main categories described in section 2.1:

1. Living conditions: encompasses indicators from SDGs 3, 6, 7 and 11.
2. Generation of income: encompasses indicators from SDGs 4, 5, and 8.
3. Security: encompasses indicators from SDGs 16 and 5.

Living conditions

Access to health, clean water and sanitation, and having vital space are fundamental elements of adequate living conditions. Changes in the living conditions are also part of the biggest differences regarding quality of life of war times and the passage to civilian life. As has been said before, no combatant would willingly give up their weapon and accept to go back and life in poorer conditions than before or than their time in the armed group. It would be expected that ex-combatants are still below average population regarding their living conditions, however it is not clear how could it be perceived if ex-combatant would have a higher mean that average population in certain components. Could that even become detrimental for their social reintegration? After all, having an aftermath where former perpetrators have better quality of living than average population could be problematic with other war-affected populations like victims, who could feel relegated.

Health Coverage (SDG 3)

> **Reintegration variable:** Number of people affiliated to the SGSSS (General System of Social Security in Health) as a proportion of total inhabitants.
>
> **SDG:** 3.8 Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality, and affordable essential medicines and vaccines for all.

Figure 2 presents the average health coverage in the 23 cities for ex-combatants and the rest of population for the years 2018-2020. As suggested by the figure, there is a greater access for those who culminated the program (over 90%), compared to those who are in the process, however lower on average than the one exhibited by average citizens per municipality (over 92%). For those who are in the process, SGSSS coverage was reduced, from an average of 63% in 2018 to 45.3% in 2020, while those who have completed the program maintain coverage over time.
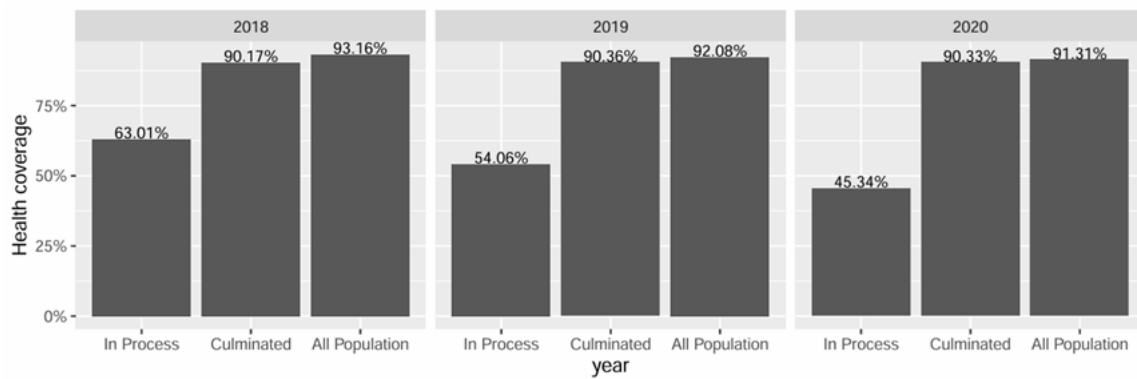
FIGURE 2.
Average of Health coverage for ex-combatants in the process, culminated and average citizens
Source: Authors with ARN and GEIH-DANE data.

At country level, average population has a higher coverage but, in some cities, culminated population exhibit higher coverage than average citizens. This evidences that ex-combatants who reintegrated effectively acknowledge the importance of accessing health. In many cases they are no longer in the subsidiary regime (for those who cannot afford paying) but in the contribution regime (for those who work or can afford paying).

Figure 3 depicts the health coverage in the 23 cities for ex-combatants between 2018-2020, filtered by the number of years they have been in the process. In general, those who have been in the reintegration process between 5 and 6 years exhibited greater health coverage than those with 0 to 1 and 2 to 4 years, or even those with 7 or more years. The 'X' in the graph indicates the average of all cities.

FIGURE 3.
Health coverage for ex-combatants in the process
Source: Authors with ARN and GEIH-DANE data.

Basic utilities (SDGs 6 & 7)

> **Reintegration variable:** Proportion of households that have electricity, aqueduct, and sewage services.
>
> **SDG:** 6.1. By 2030, achieve universal and equitable access to safe and affordable drinking water for all.
>
> 6.2. By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations.
>
> 7.1. By 2030, ensure universal access to affordable, reliable, and modern energy services.

As figure 4 shows, on average, there is greater access to basic utilities by those who are in process (around 72%), compared to those who have completed the program (around 66%), however this is lower on average than the rate of coverage exhibited by the citizens in each municipality (90%). As for the trend, basic utilities coverage has timidly increased in time for those who have completed the program, while it has decreased in greater proportion for those who are in process.
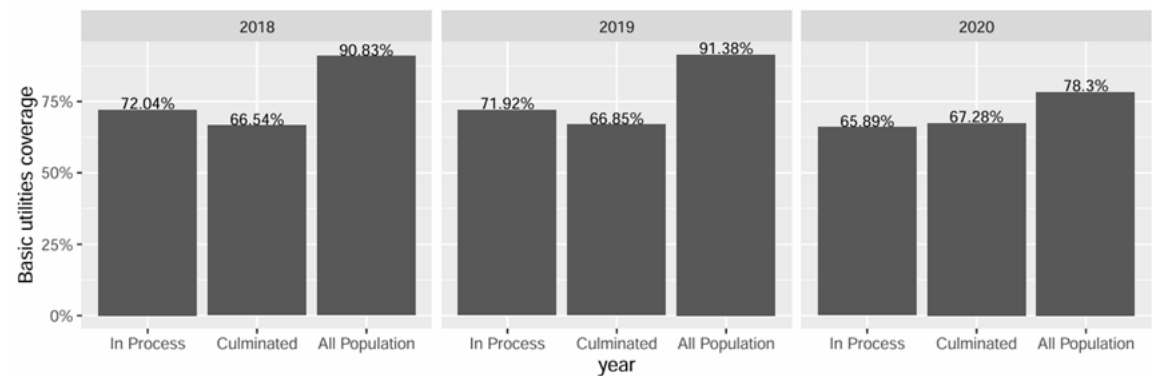

FIGURE 4.
Average of basic utilities coverage for ex-combatants in the process, culminated and average citizens
Source: Authors with ARN and GEIH-DANE data.

When analysing the population in process of reintegration and the time they have been in the process, on average, the more years in the program, the greater the probability of having access to basic public services, however this probability is greater in those who have between 4 and 6 years in the process compared to those who have 7 years or more (Figure 5).
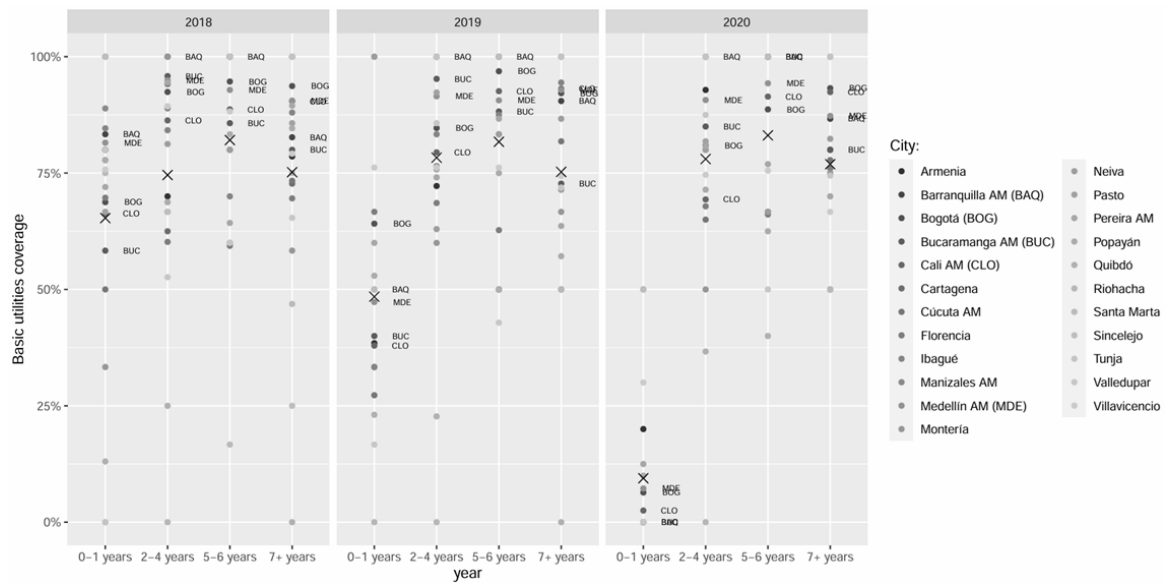
FIGURE 5.
Basic utilities coverage for ex-combatants in the process
Source: Authors with ARN and GEIH-DANE data.

Overcrowding index (SDG 11)

> **Reintegration variable:** Average of Number of people living in the house divided by the number of bedrooms.
>
> **SDG**: 11.1. By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums.

Figure 6 presents the average overcrowding index of the 23 municipalities for the reintegrated population, the population in process, and average population. At a general level, the overcrowding indices for the ex-combatants in process or those who have completed the program were better (lower) on average than those of the rest of the population over the years. As shown in the figure, overcrowding indices tend to remain almost similar throughout the period.
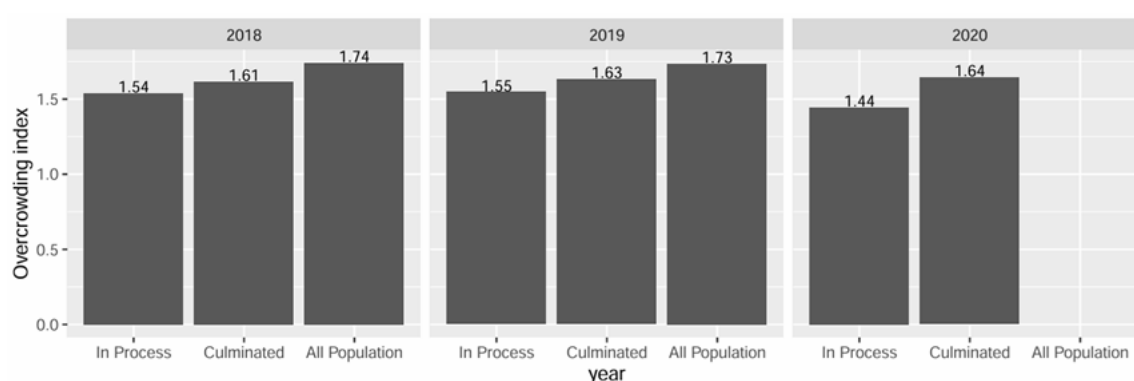
FIGURE 6.
Average of Overcrowding index for people in the reintegration process and average population
Source: Own calculations with ARN and GEIH-DANE data.

As depicted in figure 7, in line with the previous results, in which those who have completed the program show higher rates of overcrowding than those who are in the process, those who have been in the program for more years have higher rates of overcrowding.
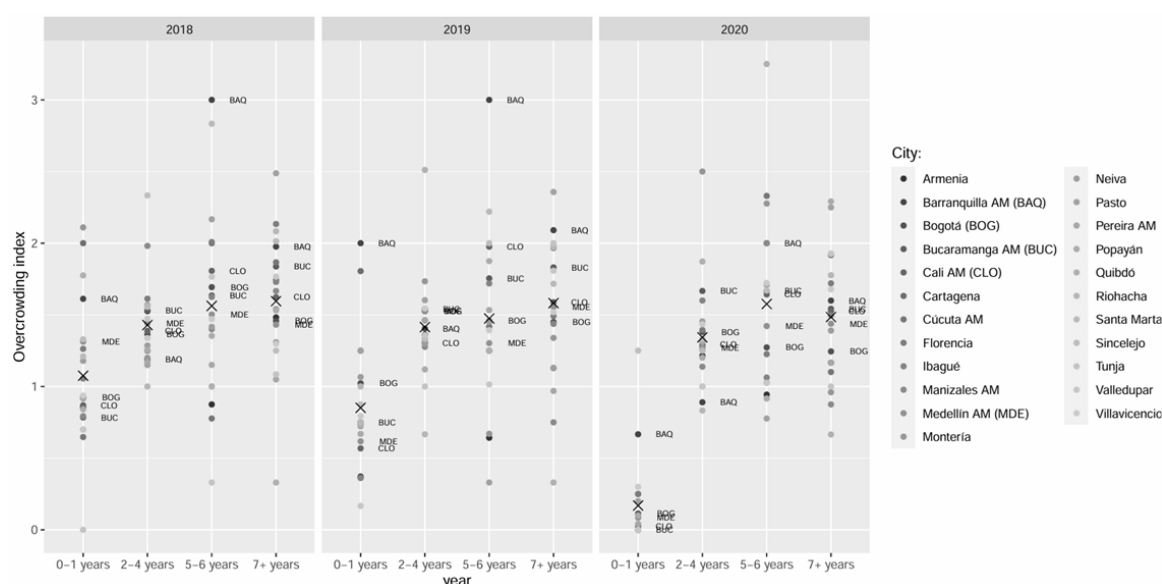

FIGURE 7.
Overcrowding index for ex-combatants in the reintegration process
Source: Own calculations with ARN and GEIH-DANE data.

Analysis of the living conditions category

In conflicts like that in Colombia, improving living conditions in the conflict aftermath becomes even more relevant since part of the armed struggle has been fuelled by the social gap and inequality. It is important to highlight that the reintegration program's actions do quite little in this component in a direct manner, but it those seek to work jointly with other institutions and individual guidance with the ex-combatant to foster the access to health or reside in a place with basic conditions for them and their families.

Health

For starters, health coverage is one of the early reintegration stages, for both the ex-combatants as well as their families. An early reintegration action is to register the ex-combatants and their families to the General System of Social Security and Health (SGSSS) where they can go either by the contribution regime or the subsidiary regime. Despite the existence of multiple regimes to have access to health, not all Colombians have health coverage (8% do not). Further on, having access (being in the system) does not necessarily imply access to required services (not all cities have hospitals for specialized procedures), or that the person uses at all health services. Therefore, despite having an average of 90% coverage among culminated ex-combatants, that does not indicate that the access to quality health services is guaranteed in their municipality. What is important to highlight is the ex-combatants are usually outside of the SGSSS during their time as fighters, so having 90% within the health system at the end of their process is a significant advance, even to the point where culminated ex-combatants have higher percentage coverage than average population in some of the 23 main cities and metropolitan areas.

As seen in figure 3, the lowest coverage is for the ex-combatants still in the process who are in early stages of reintegration (1 to 2 years). During COVID (2020) there was a reduction in health coverage also for ex-combatants that have been longer in the process (2 to 4 years). Many of those ex-combatants were among those who lost their jobs and sources of income during COVID and that affected the payment of expenses, including access to health.

Clean water and sanitation

Since the population for this research was in the 23 main cities, it was expected to have higher percentage of ex-combatants with basic utilities covered than in rural areas. In these areas the average coverage for ex-combatants within the process was around 72% for years 2018 and 2019 but had a considerable drop of 6.11 percentage points (p. p.) in 2020, evidencing the impact of COVID on basic living conditions for them. For the culminated population, the coverage is slightly lower than ex-combatants in the process (5.3 p. p. under) and far below the city average (24.4 p. p. under). This can be explained for the recently culminated population because they stop having economic benefits from the program after culminating. Nonetheless, it is relevant to highlight that culminated population was not affected on basic utilities coverage during the first year of COVID (2020), on the contrary it increased the coverage in 0.43 p. p.

In general, the percentage of coverage varies significantly between cities, the main five cities (Bogotá, Medellín, Cali, Barranquilla, and Bucaramanga) have more coverage than other. The same applies for the ex-combatant population living in those places. The results feature the increase of coverage of basic utilities along the reintegration process, where there is an evident increase in most of the cities along the quantiles (0-1 years, 2-4 years, 5-6 years, 7+ years). There is a slight decrease for the quantile of 7+ years. This is partially explained because the 7+ population is usually constituted by ex-combatants with special needs (due to physical or mental illnesses, over 65 years, among others) and who have difficulties covering their additional expenses.

Overcrowding

Having access to decent living conditions is fundamental for human dignity, risk prevention and has a role in reintegration. The reintegration program in Colombia addresses many components of habitat and relation with space, individuals, and surroundings (not only access to housing), but this research focuses on the overcrowding index. This is a delicate aspect within reintegration in the Colombian model because although

there is much addressed on the importance of good living means and ensuring adequate space for the ex-combatant and their family, there is no direct housing benefit in the reintegration model.

Despite not having direct housing benefits, the program does make a yearly follow up on living conditions of ex-combatants and measures the overcrowding index. For 2018 and 2019, ex-combatants in the process and culminated have lower indexes (better conditions) regarding overcrowding, 0.19 and 0.11 p. p. respectively. When analysing the data for the 23 cities for ex-combatants and average citizens, the higher indexes are for the same cities, showing that exogenous variables such as price by square meters and smaller housing facilities due to limited city expansion can have an effect in this for everyone living in the municipality. Also, families increase in members along the reintegration route without necessarily changing lodging, that implies more people in the same space.

As a wrap up of this the living conditions category it can be stated that despite the significant advances for ex-combatants in their access to health and the improvement through time of conditions regarding overcrowding despite elements like family growth during reintegration, there is still an important gap in access to public services and facilities such as clean water, sewage and electricity. Evidently, most of these living conditions are connected closely to the next main category, which is capacity of generating income, in order to afford access to some of the facilities, and all of this falls beyond the reach of the reintegration program but can be empowered during the program through vocational training, academic formation and partnerships and advice for job searching and for entrepreneurship.

Generation of income

One of the main focus areas of the Colombian reintegration process in economic reintegration, which can be understood as providing the skills, formation to enter the job market or become entrepreneurs and be able to generate income within legality. Economic reintegration can be one of the most challenging components of reintegration and whose failure is commonly related to a general failure of reintegration and even as a cause of recidivism. In the Colombian reintegration program, besides the guidance for people who want to pursue entrepreneurship or look for a job, there is a particular emphasis on accessing both formal education and vocational training.

Schooling years (SDG 4)

Reintegration variable: Average number of years of study reached by the population with its highest educational level.

SDG: 4.1 By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes.

One of the key components of the reintegration program is education. The program offers the possibility for ex-combatants to become literate and level up at least in the basic and secondary education system. Figure 8 shows the comparison of the average schooling years of ex-combatants in the process, those who have already completed the process, and the average population of the analysed cities. For the years of analysis, people who successfully completed the program achieved, on average, more years of study (approximately 9.2 years) compared to the rest of the population (approximately 8.5 years). Among other things, it is normal that those who are in the process have fewer years of schooling than those who completed it.
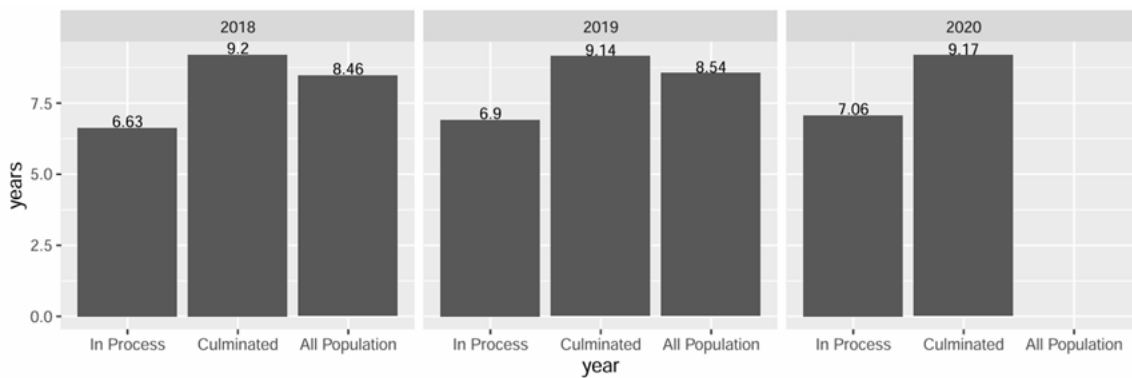
FIGURE 8.
Average schooling years for ex-combatants in the process, culminated and average citizens
Source: Authors with ARN and GEIH-DANE data.

For those that are in process, the 5 main cities exhibit better conditions than the average of all cities and that reflects in more years of study. When making an approach to the population that is in process, it can be noticed that as there are more years of involvement in the program, more years of schooling are obtained on average, however, when reaching 7 years or more in the program, the average number of years of schooling is reduced. This makes sense to the extent that those who have spent the most years in the program are the ones with the greatest lags, or those who face the greatest problems in finishing the program (Figure 9).
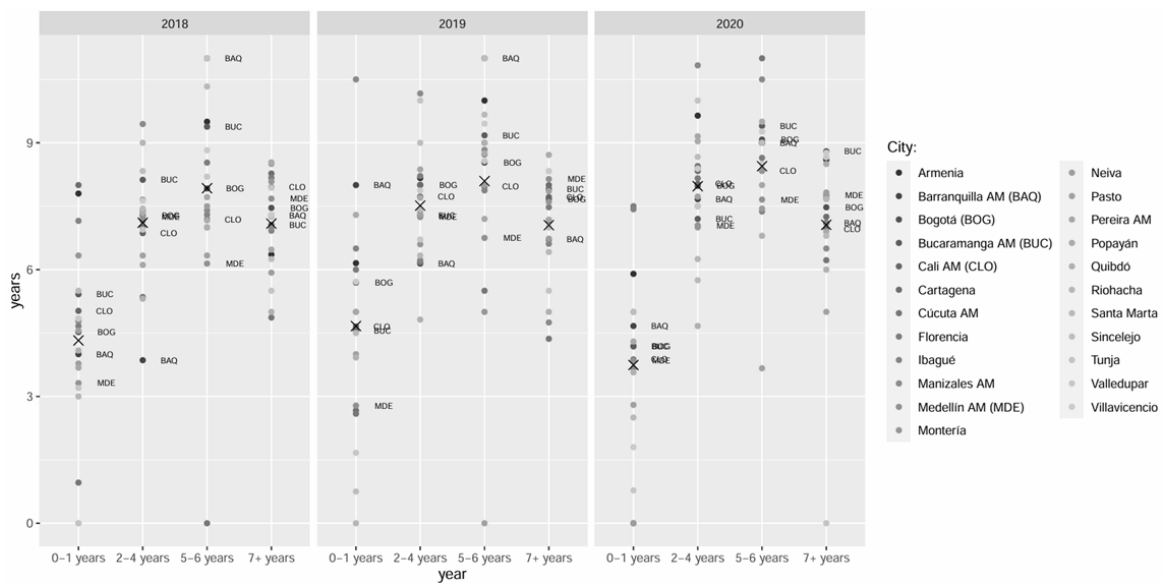

FIGURE 9.
Average schooling years for ex-combatants in the process
Source: Authors with ARN and GEIH-DANE data.

Unemployment rate (SDG 8)

> **Reintegration variable:** Number of unemployed people as a percentage of the labour force.
>
> **SDG:** 8.5. By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value.

Figure 10 presents the average unemployment rate of the 23 cities for the ex-combatants and average population between 2018 and 2020. The culminated ex-combatants show better unemployment rates (around 8%) compared to those still in process (over 24%). In addition, those who have completed the program exhibit, on average, better conditions than the rest of the population too.

It is noteworthy that over time the unemployment rate has tended to increase throughout the three groups of analysis, however the increase has been more acute in those who are in the process of reintegration. Between 2018 and 2020, the unemployment rate has increased 2.6 p. p. for the first group, while it has increased 11.7 p. p. for the second one. The high unemployment rates in 2020 across all groups are likely the result of the effects of the pandemic, which apparently hit those in the process to a greater extent than those who completed the program.
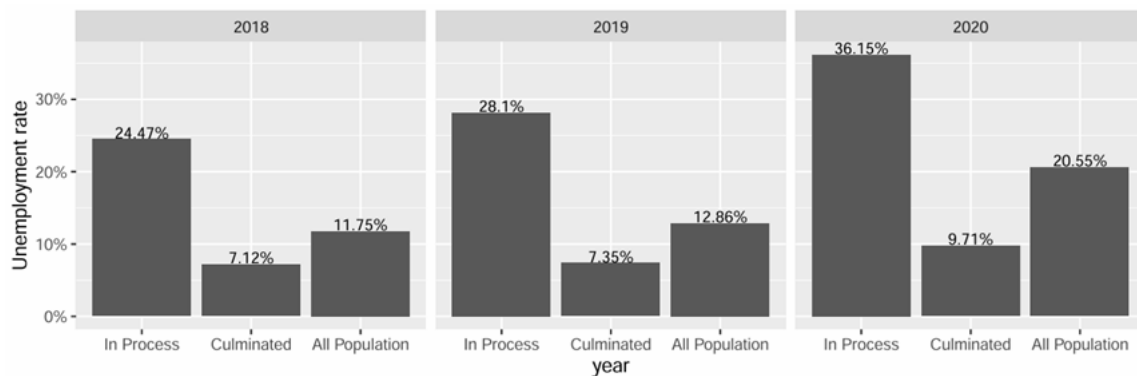

FIGURE 10.
Average of unemployment rate for ex-combatants in the process, culminated and average citizens
Source: Authors with ARN and GEIH-DANE data.

On average, for those that have a greater number of years in the program (in process), unemployment rates tend to be lower, however, in line with the increase in unemployment rates throughout the period, unemployment rates also tended to increase for each age group, but the rate of increase was lower as more years of seniority in the program. Figure 11 shows the unemployment rate of the population in the process of reintegration according to the years in the process.
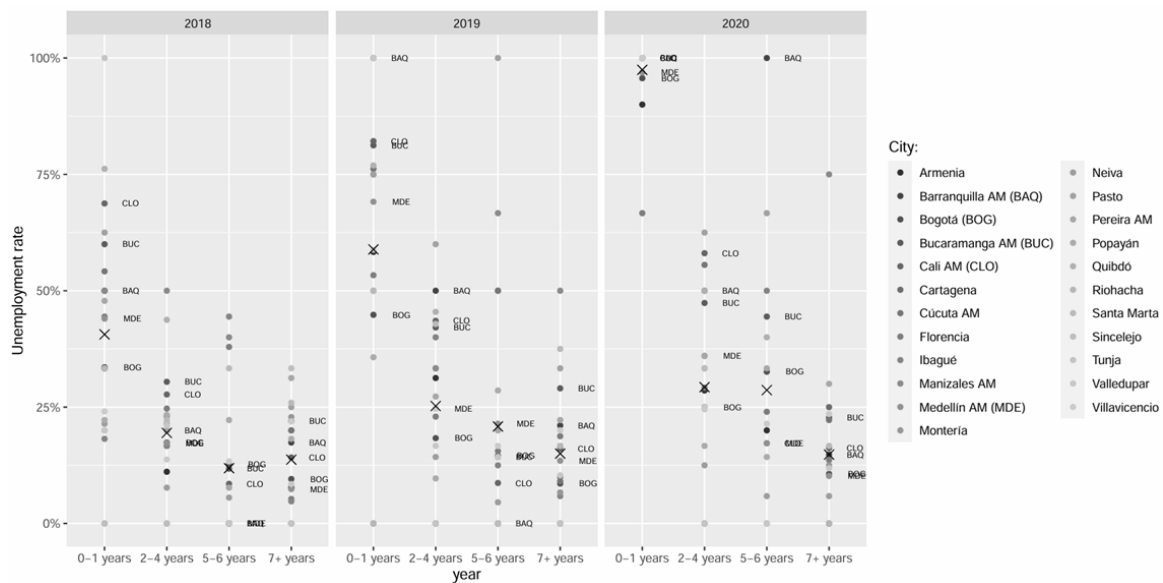
FIGURE 11.
Unemployment rate for ex-combatants in the process
Source: Authors with ARN and GEIH-DANE data.

Informality rate (SDG 8)

> **Reintegration variable:** Percentage of persons with informal employment
>
> **SDG:** 8.3. Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity, and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services

Figure 12 presents the average labour informality rate of all the 23 cities per culminated ex-combatants, ex-combatants in process of reintegration and average population. According to DANE, a person can be considered as informal worker if they are: a) Private employees and workers who work in businesses that employ up to five people in all branches, including the employer and / or partner; b) unpaid family workers; c) unpaid workers in companies or businesses of other households; d) domestic employees; e) day labourers; f) self-employed workers who work in establishments up to five people, except professional free-lancers, or; g) employers or employers in companies with five workers or less.

On average, the population in process of reintegration (83%-85%) exhibits a higher labour informality rate than those who have culminated the program (around 68%), and even higher than the informality exhibited by the population in general (around 55%) during 2018 and 2019. During COVID the gap between ex-combatants and average population increases.
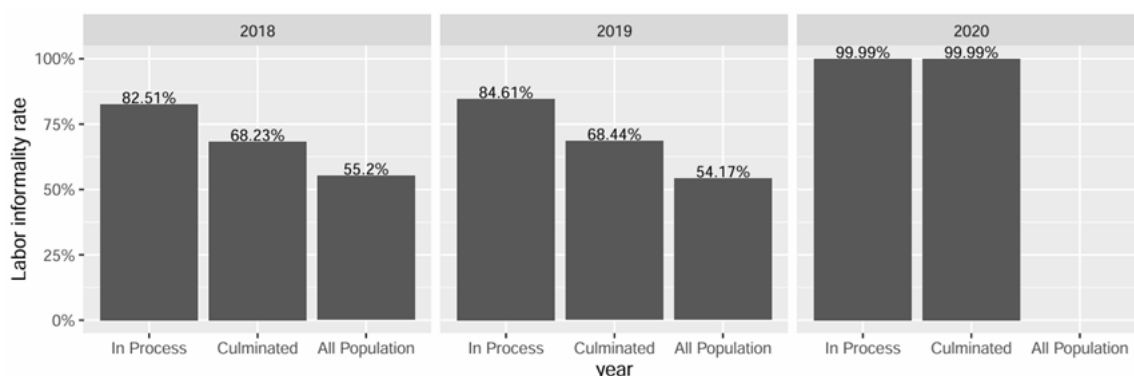
FIGURE 12.
Average of Labour informality rate for ex-combatants and average citizens
Source: Author with ARN and GEIH-DANE data.

For almost all cities the labour informality rate is higher for the population in process of reintegration than in the group of reintegrated people, except for 2 cities. Figure 13 shows the labour informality rate for the people in process of reintegration according to their time in the program, this indicator tends to decrease on average with more years in the program, nevertheless, those with more than 7 years have on average more probability to be informal that those with 4-6 years.
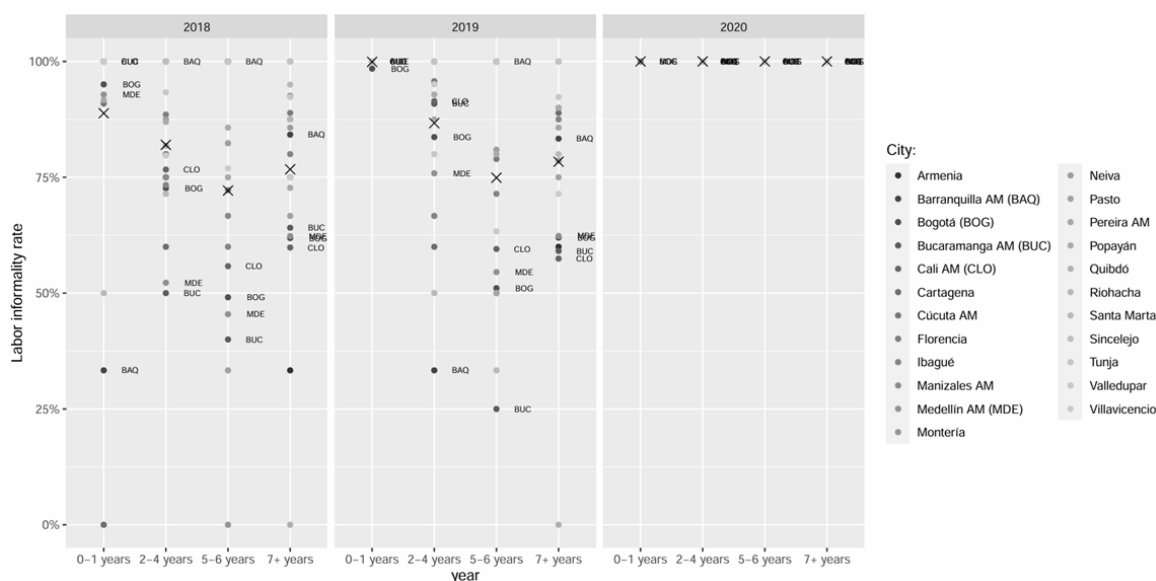

FIGURE 13.
Labour informality rate for ex-combatants in the process
Source: Author with ARN and GEIH-DANE data.

Gender gap in unemployment rate (SDG 5)

Reintegration variable: Difference in percentage points between the unemployment rate for women and the unemployment rate for men.

SDG: 5.1 End all forms of discrimination against all women and girls everywhere.

5.5 Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision making in political, economic, and public life.

5.C Adopt and strengthen sound policies and enforceable legislation for the promotion of gender equality and the empowerment of all women and girls at all levels.

As the reader can see in previous sections, the population in process of reintegration exhibits a higher unemployment rate than those who culminated the program, and the culminated ex-combatants show a lower unemployment rate than all the population in the cities (Figure 11). In addition to the high unemployment rates faced not only by the reintegrated population and the general population, there also is a wide gender gap in the labour market. Particularly, in the unemployment rate the gender gap is an issue of concern; the female unemployment rate of the population in process is 16 p. p. higher than the male unemployment rate in 2018, and this gap increases over the years, reaching 18.7 p. p. in 2020. The female unemployment rate for those who culminated the program was on average 11.5 p. p. higher than that of men. Lastly as shown in Figure 8, it should be noted that this gap is wider in the population in the process of reintegration and those who completed the program than for average citizens; the difference in the gaps compared to the total population reaches 11 p. p. and the 7 p. p. on average, respectively (Figure 14).
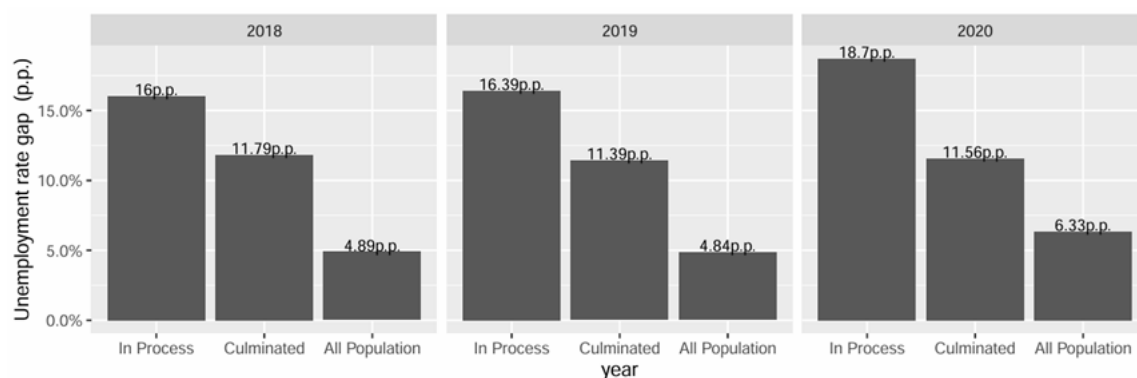

FIGURE 14.
Average gender gap in the unemployment rate for ex-combatants in the process, culminated and average citizens
Source: Authors with ARN and GEIH-DANE data.

The gender gap in the unemployment rate indicator for ex-combatants seems to exhibit greater variability for those that are in process throughout the 23 cities, in some cases reaching almost 80 p. p. of gap and -63 p. p. throughout the 2018-2020 period. Figure 9 presents the gender gap in the unemployment rate for population in the reintegration process. In it, it can be seen how, in a certain way, for people that have been in the program for more years, the gender gap in unemployment is reduced. It can be noted that for the years 2018 and 2020, the gender gaps for those with between 0 and less than 2 years in the program are relatively low (Figure 15).
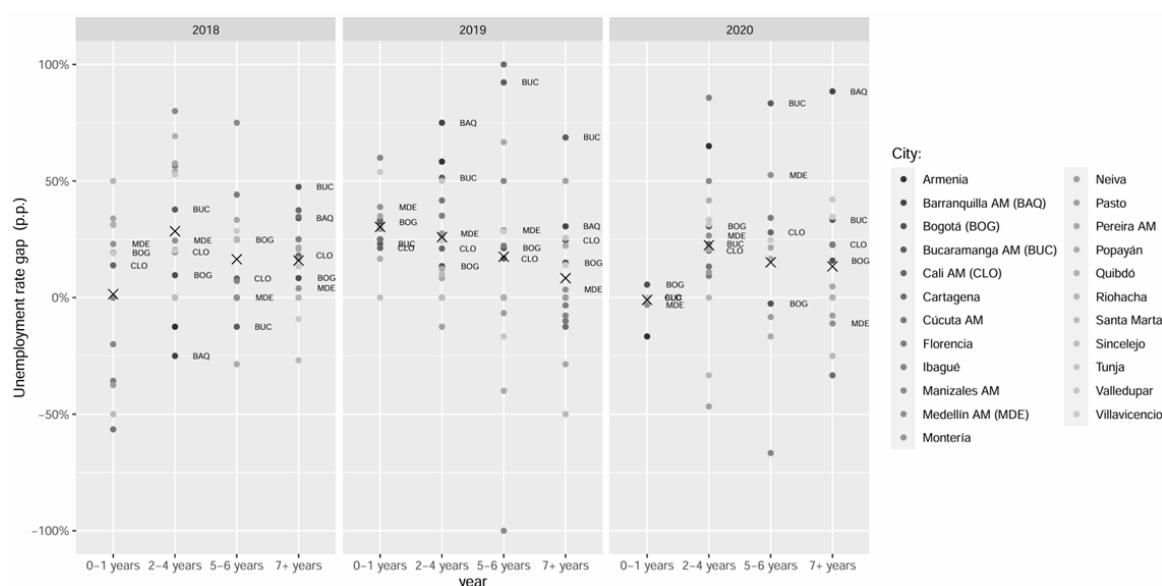
FIGURE 15.
Gender gap in the unemployment for ex-combatants in the process
Source: Authors with ARN and GEIH-DANE data.

Analysis of the generation of income category

Just as with the previous category, it is commonly expected for ex-combatants to be under the average population regarding the generation of income, since they have been absent of the job market due to their life in the armed group and lack or have incomplete educational and vocational skills to insert themselves into the job market right away after they disarm and demobilize. That is the main reason that so much emphasis is given to the economic reintegration with the Colombian process in order to reduce the gap the fastest way possible.

Years of education

One of the strongest components of reintegration is the access to education. For most of the courses of vocational training with the public institution (SENA) there is a requirement of having at least the equivalent of elementary school. In the reintegration process this can be done in 3 years, although all ex-combatants are encouraged to finish up to the equivalent of high school. Unfortunately, the reintegration program does not cover university or technical formation for ex-combatants. What is particularly interesting is the increase of schooling years for culminated population, which is higher than the average for regular citizens. In numerous cases ex-combatants continue accessing education after the reintegration process.

There are two additional elements to highlight regarding education. Firstly, that there is decrease in the years of education in comparison with the years in the system for the ex-combatants that were 7 or more years in the program. This can partially be explained by two factors. The first one, people who stayed longer were usually population that along the process needed special routes of attention (over 65, addiction to psychoactive substances, mental health problems, among others). Usually some of those conditions affected their academic performance; they stayed longer in the reintegration route but did not necessarily advance more, perhaps even took more time in specific phases of the reintegration program.

Secondly, based on the vulnerability approach, there was a slightly higher economic benefits for those in the first years of education since it was assumed that after gaining those basic literacy skills people could start looking for jobs and be more self-sufficient in the daily life activities. This created a temporary perverse incentive where people would not want to advance further than elementary school to maintain a higher economic benefit (not understood as a salary but an economic payment for the time dedicated to reintegration activities) instead of realizing that with more education they could apply for more skilled jobs and vocational training.

Unemployment rate

Within DDR, having the means to earn income is a base of economic reintegration. SDG 8 talks about productive employment and decent work for all and equal pay for work of equal value. Given the challenges that ex-combatants have for accessing jobs (discrimination due to criminal record, lack of experience or skills, for example) this research focuses unemployment. There are higher unemployment rates among the population within the reintegration process in comparison to ex-combatants who have already culminated or average citizens. Reintegration programs imply dedicating time to psycho-social activities, education, transitional justice activities (for some) and therefore makes difficult for a person to have a full-time job, especially in the first stages of reintegration. As shown previously, unemployment has risen between 2018 and 2020, but it has affected much less the culminated population, even less than average citizens.

Additionally, the gap between cities is also smaller for culminated population than for ex-combatants in the reintegration process, which also highlights the outcomes of the program's focus on economic reintegration (vocational training, agreements with private sector for jobs and training, and project assessment for ex-combatant who want to make their own businesses). This can be seen in-depth when analysing the gap-reduction between cities as population advances in the reintegration process.

Informal labour participation is high in Colombia. The program focuses on economic reintegration and does make agreements to connect ex-combatants with the formal labour market. But reality on the ground is different and this has an effect in the type of job with which the ex-combatant can join as workforce. In the two years before COVID struck in Colombia (2018-2019) informality rose slightly for ex-combatants while it decreased for the average population in those cities. It is important to point out that the informality rate is much lower in culminated population than in ex-combatants in the process (15 p. p.), which could lead us to think that with more free time and acquired skills, ex-combatants can access more formal jobs. On the other hand, COVID provided a hit to the Colombian economy in 2020 which also had repercussions in ex-combatants, 99.99% of ex-combatants in the sample (culminated and in process) who were working were at informal jobs.

Gender gap in the unemployment rate

Regarding unemployment rates, both women within the reintegration process and those who have culminated the program have higher rates than average female population in Colombia with an average difference of 11.68 and 6.23 p. p. respectively for the 2018-2020 period. Female unemployment is higher than male unemployment both during and after the reintegration process. But additionally, the unemployment gender gap (female unemployment rate to male unemployment rate) is more than three times higher between average population and in ex-combatants in the reintegration process and 2 times bigger between the later and the culminated population. This means that female ex-combatants are far less included in the workforce than average women. Additionally, it is important to point out the effect of COVID in the gender unemployment gap. Women were severely affected in countries like Colombia regarding the loss of jobs, nonetheless in the

studied sample, there was only a 0.17 p. p. increase of the gap for culminated women, in contrast with the 2.31 p. p. increase of the gap for population in process and 1.49 p. p. for the average population.

One finding that should be emphasized is how the gender gap significantly reduces once people finish their reintegration process. Although the gap is much higher than with average population, the reduction of the gap is still a relevant post-reintegration outcome.

As a wrap up of this second main category, the priority approach given within reintegration to the economical reintegration shows positive results for culminated ex-combatants, both in higher amount of schooling years than average population and lower levels of unemployment than average population. However, there are higher percentage of ex-combatants working within informality, therefore without the social benefits of a regular job and this applies both for ex-combatants still in the process and those who have culminated it. There is an important number of ex-combatants who pursue entrepreneurship and have not completely formalized their companies, due to the costs that it implies, at least in their early stages.

Just as in the first main category (living conditions, this second main category the question remains unanswered how to deal with scenarios where former perpetrators have better income generation elements than other war-affected population or average population? How to deal with this in a way it contributed to general welfare instead of creating post-conflict frictions, for example with victims and other people that live in the communities where reintegration takes place? It is important to highlight thought that those apparent conditions can be relative, and sometimes that status of better condition could vary. For example, regarding labour informality, the vulnerability of this condition was evidenced during COVID where informality rose significantly, and unemployment rose also but in a lower percentage for culminated than for the average population in most of the cities.

Security

In post-conflict transitions, when it comes to security, the focus is given to the risk of criminal recidivism or the return to armed confrontation. However as seen in Zapata (2017) highlights ex-combatants identify many threats to their safety after they demobilize. In Colombia, since DDR is done in the midst of armed confrontation, rogue armed groups, other rebel groups and organized crime structures see ex-combatants as potential recruits or threats. This increases their risk of victimisation, especially in the first years after demobilizing but the risk remains through time just with less intensity.

More specifically, the homicide rate in ex-combatants is particularly higher than the rate for average population, as said before, especially in the first years but also beyond the reintegration program. As the program advances the concentration of homicides is bigger in the culminated population rather than in the one still in the process.

Homicide rate

> **Reintegration variable:** Total number of intentional homicides per 100,000
>
> **SDG:** 16.1. Significantly reduce all forms of violence and related death rates everywhere.

Figure 16 shows the average homicide rate of the 23 cities over the three groups of analysis. Compared to the rest of the population, and to those who are in process, people who have completed the program have higher risk of suffering a homicide; the average homicide rate for the reintegrated population was 90.86 in

2018, 44.56 in 2019, and 92.05 in 2020, while the average homicide rate of all the cities has remained almost constant during the period around 23.
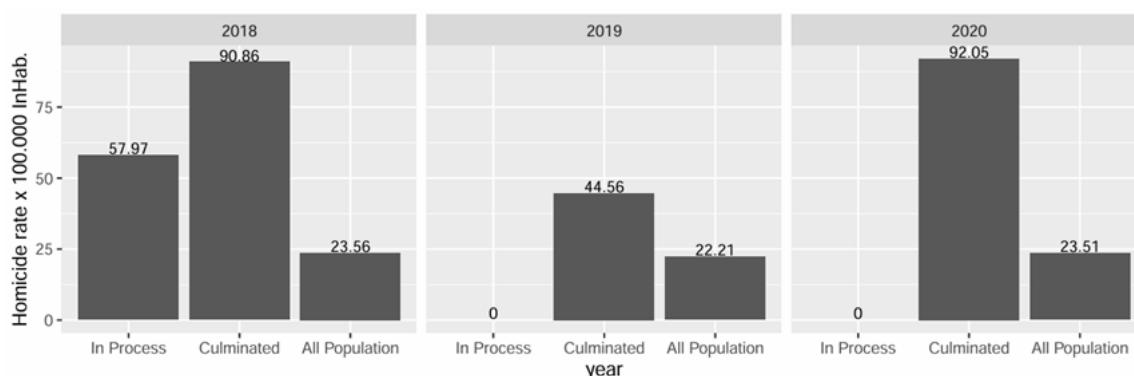

FIGURE 16.
Average of Homicide rate for ex-combatants in the process, culminated and average citizens
Source: Own calculations with ARN, SIEDCO-PONAL and DANE data.

Through time, homicide rates decrease for the two groups of analysis ("In Process" and "culminated"), nevertheless this type of crime tend to affect more to the group who completed the program, that is, people in process are less likely to suffer a homicide. Figure 17 shows how there is a gradual reduction of deaths as individuals who through their reintegration program, both for deserters who are mainly former guerrilla fighters as well as for individuals from collective demobilizations as was the case of the AUC paramilitary forces. There is significant rise in the deaths for AUC after the second year because initially their program was only 18 to 24 months and by that time, they were still vulnerable to recruitment, with weak social networks, etc. As they went back to a longer program, they frequency decreases with time. For the deserters, the highest peaks are in the first two years, when they are usually being persecuted by the armed group and they are trying to relocate, etc.; nonetheless just as the case for AUC, homicides decrease in frequency as they advance in their reintegration process.
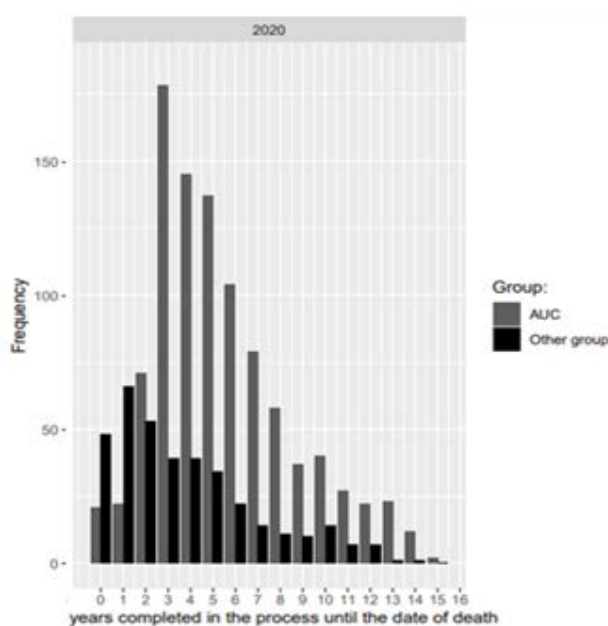

FIGURE 17.
Years completed in the process until the date of death
Source: Own calculations with ARN, SIEDCO-PONAL and DANE data.

Female homicide rate

> **Reintegration variable:** Total number of intentional homicides committed in women per 100,000 inhabitants
>
> **SDG:** 5.2 Eliminate all forms of violence against all women and girls in the public and private spheres, including trafficking and sexual and other types of exploitation.
>
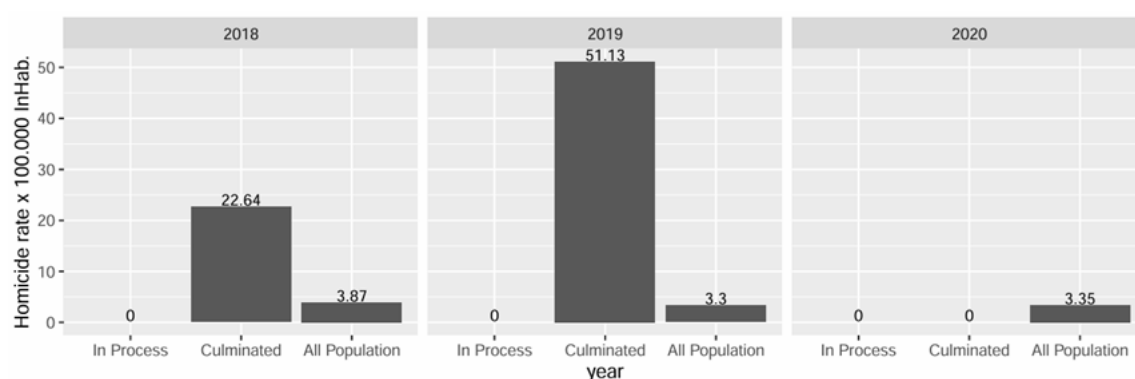> 16.1 Significantly reduce all forms of violence and related death rates everywhere.

FIGURE 18.
Average female homicide rate for the ex-combatants and average population
Source: Authors with ARN, SIEDCO-PONAL and DANE data.

Analysis of homicide and female homicide

One of the main benefits of the reintegration process and reconciliation initiatives is to contribute to reduce the deaths related to armed confrontation and unsolved matters connected to the armed conflict. As table 2 shows for guerrillas and paramilitary forces, by December 2020, in the 23 main cities, there was a smaller percentage of homicides for those who entered the reintegration process. Another finding was that culminated population represents only 5.58% of the total homicides, although this proportion will continue to change as more people culminate the process every year.

TABLE 2.
Homicides of demobilized individuals per armed group

Armed Group	Total Homicides	% of total demobilized assassinated	Homicides of those who entered reintegration	% Homicides of the total population who entered reintegration	Homicides of those who did not enter reintegration	% Homicides of the total population who did not enter reintegration
AUC	1248	8.39%	1074	7.46%	174	35.44%
ELN	87	3.95%	84	3.83%	3	33.33%
EPL	5	7.25%	4	5.88%	1	100.00%
ERG	3	4.55%	3	4.55%	0	0.00%
FARC	413	4.69%	404	4.61%	9	17.31%

Source: Own calculations with ARN and SIEDCO-PONAL.

Regarding female homicide, it interesting to point out that it is more common on culminated persons than of persons in the reintegration process. This can be attributed to the possibility of occurrence (like in a Cox Survival Model) where, as time advances, there is a bigger possibility, in this case, of becoming a victim. This goes against most of DDR literature, where ex-combatants are more exposed to risk of being re-recruited and involved in violent activities in their first years of reintegration see: Kaplan and Nussio (2018); Fundación Ideas para la Paz (2014). But also, to understand the higher rate of female homicide in culminated ex-combatants, as more people culminate the reintegration process, the more will the deaths concentrate in that population. This is something that happens in more mature processes which are usually not subject of academic analysis, most of the DDR literature is focused on the post-conflict transition and very few in the stabilisation part, the medium and long term after demobilisation, where homicide patterns start changing significantly compared to the first years of DDR.

Conclusion: DDR challenges, peace, and the SDGs until 2030

This research showed the convergence of outcomes between DDR and the SDGs through an analysis of reintegration indicators and their connections with SDG specific goals. For years, DDR has been addressed as a niche topic, frequently isolated from main discussions of peace and development in post-conflict transitions, despite having some many connections with both agendas. It is important to state that although DDR is not a magic tool that on its own could guarantee a stable post-conflict, nor guarantee the SDGs' achievement, its contribution to improve living standards is relevant to highlight.

Firstly, it evidences that reintegration is not only done to avoid recidivism of ex-combatants (negative peace perspective). It recognizes that these programs contribute to provide better conditions for ex-combatants. Since it is very unlikely that people would go into a war expecting to live in worse conditions in the aftermath, post-conflict expectations regarding quality of life are fundamental to address, to avoid dissidents and the effects of spoilers. Additionally, the materialization of such expectations during reintegration is a positive peace dividend.

Opposite to other peace dividend concepts that have non-measurable outcomes, through the SDG connection, this dividend is completely possible to measure and analyse within DDR and post DDR processes. By measuring reintegration achievements beyond the notion of recidivist behaviour or absence of it (negative peace), this research compares the outcomes with average citizens, which is uncommon in DDR evaluations. Although the aim of reintegration is to return ex-combatants to civilian life, DDR research focuses on ex-combatants or the DDR programs. Also, enabling comparisons with average population, would be ideal even if that sets a high bar for DDR expected outcomes.

The world is entering the second half of the SDGs' implementation period, and with a huge setback due to COVID-19. Measuring the impacts of COVID related measures in ex-combatants is fundamental; it has shown that COVID significantly affected their economic reintegration but also their psycho-social reintegration and access to public offer and reintegration-related activities. Not all SDG related goals were affected equally for ex-combatants and average citizens during COVID, for example unemployment or access to the health system, which can evidence strong and weak points of the reintegration program. The monitoring of recovery in coming years could also be an important contribution to the 2030 agenda and its successor.

Secondly, when emphasizing on the connection of SDGs and reintegration, it is important to recognize the limitations that these agendas have. Despite having the same access to the program and public offer in each of the cities, there are personal and context variables that influence the reintegration success of an individual. Just passing through a reintegration program is not a warranty of success or failure in civilian life. The findings in this research can prove helpful in most conflict and post-conflict scenarios.

Thirdly, since very limited DDR literature focuses on the medium- and long-term processes, little is spoken about the challenges of a successful reintegration program. How to deal and present to a post-conflict society or like in the case of Colombia, a society still in the midst of civil war, that perpetrators have in some cases better living conditions or generations of income that are higher than the average population? How to approach it in a way that it doesn't foster rivalry with other war affected populations such as victims, and instead be used to foster development in those communities where reintegration takes place? For some, having perpetrators live better in the aftermath of war could even be seen as unethical within peacebuilding, but it is still plausible. As McMullin (2013) concludes in his book, although reintegration programs aim to make ex-combatants "as everyone else" which usually means reintegrating into adversity, they can never be "like everyone else". That implies that they keep the burden of being tagged as menace, threat, unequal, and that tag that becomes even heavier when ex-combatants start to perform better regarding socio-economic development than other populations in the municipality.

Lastly, this programmatic triad of peace, development, and DDR has started to be seriously challenged in the field with the appearance of combatants for whom the traditional offer of better living conditions and vocational training is not adequate to abandon armed groups and violence. Since some fighters are not necessarily being recruited because of failures that could be tackled by the SDGs or positive peace, joint efforts with other peacebuilding tools such as CVR and CVE are also a necessity. The triad of peace, development, and DDR; is not a one size fits all.

References

Banholzer, L. (2014). *When do Disarmament, Demobilisation and Reintegration Programmes Succeed?* Dt. Inst. für Entwicklungspolitik.

Bowd, R. & Özerdem, A. (2013). How to Assess Social Reintegration of Ex-Combatants. *Journal of Intervention and Statebuilding, 7*(4), 453-475. http://doi.org/10.1080/17502977.2012.727537

Collier, P. , Elliott, L., Hegre, H., Hoeffler, A., Reynal-Querol, M. & Sambanis, N. (2003). *Breaking the Conflict Trap: Civil War and Development Policy*. World Bank; Oxford University Press.

Conoir, Y. (2011). *Evaluation du Programme National de Désarmement, Démobilisation et Réintégration en RDC (PNDDR)*. Unité D' Execution du Programme National de Desarmement, Demobilisation et Reinsertion (UEPN-DDR).

Dudouet, V. (2011). *Sociologie des politiques de DDR: Analyse des processus de coproduction*. Université Paris 1.

Edloe, L. L. (2007). *Best Practices for Successful Disarmament, Demobilization, and Reintegration (DDR)*. Spring.

Guzmán, Fals Borda, O. & Umaña Luna, E. (2016). *La violencia en Colombia*. Taurus.

Herrera, D. & González, P. (2013). Estado del arte del DDR en Colombia frente a los estándares internacionales en DDR (IDDRS). *Colombia Internacional*, (77), 273-302. http://doi.org/10.7440/colombiaint77.2013.10

Hettne, B. (1983). Peace and Development Contradictions and Compatibilies. *Journal of Peace Research, 20*(4), 329-342. https://doi.org/10.1177/002234338302000404

Hettne, B. (2010). Development and Security: Origins and Future. *Security Dialogue, 41*(1), 31-52. http://doi.org/10.1177/0967010609357040

Humphreys, M. & Weinstein, J. M. (2005). *Disentangling the Determinants of Successful Disarmament, Demobilization, and Reintegration*. Center for Global Development. https://www.cgdev.org/sites/default/files/4155_file_WP_69_0.pdf

IAWG on DDR. (2006). *Integrated Disarmament, Demobilization and Reintegration Standards (IDDRS)*. United Nations (UN).

Kingma, K. & Muggah, R. (2009). Critical Issues in DDR: Context, Indicators, Targeting, and Challenges. In *Background paper for the International Congress on Disarmament, Demobilization and Reintegration*. Alta Consejería para la Reintegración.

Lamb, G. (2013). *DDR 20 Years Later#: Historical REview of the Long-term Impact of Post-independence DDR in Southern Africa*. Trans-Divisional Research Program (TDRP); World Bank.

McMullin, J. R. (2013). *Ex-Combatants and the Post-Conflict State*. Palgrave Macmillan. http://link.springer.com/10.1057/9781137312938

Milante, G. & Oxhorn, P. (2009). No Development without Peace. *Development Outreach, 11*(2), 20-22. https://hdl.handle.net/10986/4582

Molloy, D. (2008). *Evaluation Report UNDP DDR Program in Somalia*. https://erc.undp.org/evaluation/documents/download/2051

Munive, J. & Finn, S. (2015). Rethinking Disarmament, Demobilization and Reintegration Programs. *Stability: International Journal of Security & Development, 4*(1), 1-13.

Nakamitsu, I. (2018). *Advancing Disarmament within the 2030 Agenda for Sustainable Development*. United Nations (UN). https://www.un.org/en/chronicle/article/advancing-disarmament-within-2030-agenda-sustainable-development

Pardo, R. (2013). *La historia de las guerras*. Penguin Random House.

Seethaler, F. (2016). *Assessing the Impact of DDR Programmes: Possibilities and Challenges*. United Nations University. https://collections.unu.edu/eserv/UNU:5546/Assessing_Impact_of_DDR_Programmes_160322.pdf

Sen, A. (2008). Violence, Identity and Poverty. *Journal of Peace Research, 45*(1), 5-15. http://doi.org/10.1177/0022343307084920

Solberg, E. (2015). From MDGs to SDGs: The Political Value of Common Global Goals. *Harvard International Review, 37*(1), 58-61.

Spear, J. (2006). From Political Economies of War to Political Economies of Peace: The Contribution of DDR after Wars of Predation. *Contemporary Security Policy, 27*(1), 168-189. http://doi.org/10.1080/13523260600603402

The World Bank. (2010). *MDRP Final Report: Overview of Program Achievements*. Author.

Torjesen, S. (2013). Towards a Theory of Ex-Combatant Reintegration. *Stability: International Journal of Security & Development, 2*(3), 1-13. https://doi.org/10.5334/sta.cx

Turriago, G. & Bustamante, J. M. (2003). *Estudios de los procesos de reinserción en Colombia, 1991-1998*. Alfaomega.

UN Secretary General. (2011). *Third Report of the Secretary General on Disarmament Demobilizatio and Reintegration*. United Nations General Assembly. https://digitallibrary.un.org/record/700920/files/A_65_741-EN.pdf

Wolff, J., Witt, A., Stappenbeck, J., Schnabel, S., Peez, A., Junk, J., Coni-Zimmer, M., Christian, B., Birchinger, S. & Bethke, F. (2020). The Development-Peace Nexus: Experiences and Findings. In *Peace and Development 2020: An Analysis of Recent Experiences and Findings* (pp. 28-41). Peace Research Institute Frankfurt. https://www.jstor.org/stable/resrep24494.6

Zapata, M. N. (2017). Enfoques cualitativos en políticas públicas. Uso del diagnóstico rápido participativo (DRP) para el análisis de la reincidencia de personas en proceso de reintegración. In *Anuario de Reintegración 2017. Third Edition* (pp. 124-149). Agencia Colombiana para la Reintegración. https://www.reincorporacion.gov.co/es/la-reintegracion/centro-de-documentacion/Documentos/Anuario%20ARN%202017.pdf.

Notes

*	Artículo de investigación / Research paper