Education in the values of a social and solidarity-based economy for improving the conditions and the capabilities of women miners in Colombia

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Abstract

The social and solidarity-based economy tries to build complex relations of production, consumption, distribution and financing based on justice, cooperation, reciprocity and mutual help. In this study, an ESS educational model for the development of Artisanal and Small Scale Mining (ASSM), which incorporates women in Colombia, is proposed. The ASSM is the mining subsector where the situation of women is more precarious. A subsistence economy and are in serious situations of inequality. Promoting and educating for a social and solidarity ASSM with a strong gender focus could break down obstacles, stereotypes and build more equitable gender relations. An intersectional and differential approach complements the necessary analysis to address this problem and proposes local built models that are flexible, participatory and liberating, where the economic, cultural and social causes of women’s labour are tackled.

Keywords: Social economy, solidarity economy, education in values, women mining.
1. Introduction

The social and solidarity-based economy (SSE)—tries to build complex relations of production, consumption, distribution and financing based on justice, cooperation, reciprocity and mutual help, starting from the understanding of socio-cultural dynamics at the local level. In this study, an ESS educational model for the development of Artisanal and Small Scale Mining (ASSM), which incorporates women in Colombia, is proposed.

The ASSM is the mining subsector in which the situation of women is more precarious. Studies developed by (Alliance for Responsible Mining) ARM (2018) indicate that the low participation of women in the mining sector, their precarious working conditions, and the overload of work that supposes to family care, makes that, where this type of mining is developed, there is a feminisation of poverty. In addition to this, and due to the dynamics derived from the sector and political violence, there is a high level of exploitation and sexual abuse. Another factor, which is highlighted in various studies, is that the isolation of women, cultural machismo and traditional patriarchal structures are necessarily relegating the participation and economic autonomy of women. It establishes, therefore, a sexual division of labour, which entails those women have, in many cases, a subsistence economy and are in serious situations of inequality.

The communication that we present, includes the review of various reports and studies on the situation of ASM in Colombia—with special reference to women miners—, and how education in values of Social and Solidary Economy can help prevention and the reduction of situations of inequality, providing, besides, the keys to an inclusive and equitable model of social and solidary economy.

Educating for a social and solidary ASSM—with a strong gender focus—could break down obstacles, stereotypes and, in the end, build more equitable gender relations. An intersectional and differential approach complements the necessary analysis to address this problem, and proposes local built models that are flexible, participatory and liberating, in which the economic, cultural and social causes of women’s labour are tackled.

2. The social and solidarity-based economy: values for local egalitarian development

A society of a neo-liberal character, such as the one we are living in, provokes worsening situations of inequality throughout the world, albeit at different speeds depending on the different policies (Chancel, 2018). So much so that the richest 1% of the global population possesses more wealth than the remaining 99% and 82% of the wealth produced at a global level has fallen into the hands of the richest 1% (OXFAM, 2016). Inequality with a twofold effect on women in all countries, due to their vulnerability and their difficulties accessing education and employment etc. Despite these disadvantages, there have been steps forward over the past few decades in terms of macroeconomic development and large masses of people have moved away from the threshold of absolute poverty. All in all, we are witnessing greater global dissatisfaction and protest movements are generated that call for a critical review of the current socio-economic system.

In fact, economic alternatives are proposed that seek to respond to the inequalities, both in the context of the developed countries and in countries with lower levels of socio-economic development, which the present system cannot or does not wish to subvert. The (SSE)—is one such example. It proposes refocusing economic action to give imaginative, solidarity-based and realist responses to current social needs. It operates under a certain set of values that help to avoid a loss of direction in daily praxis. The SSE constructs complex relations of production, distribution, consumption and funding based on justice, cooperation, reciprocity and mutual assistance, beginning with an understanding of sociocultural dynamics at a local level (Bonilla & Borge, 2015).

The SSE is, in addition, as an economic dimension of Local Human Development, a generator of human and collective capabilities (Guridi & Perez de Mendiguren, 2014). It generates amongst its
members, virtual flows of exchange at different economic, social and even emotional levels, which contribute new learning experiences and capabilities for people working in the context of SSE.

In the educational field, we find ourselves facing a multiplicity of entities that are incorporating the SSE as a constituent element of their educational curriculum. We can, for example, cite, the International Network for Education and a SSE [Red internacional de Educacion y Economia Social y Solidaria] (RESS) consisting of organisations and members from Argentina, Bolivia, Brazil, Chile, Colombia, Cuba, Ecuador, France, Mexico, Nicaragua, Paraguay, Peru, Spain, Uruguay and Venezuela, and with over 6,000 members who seek to contribute, share and debate scientific texts, awareness raising and training over the Internet (http://educacionyeconomiasocial.ning.com/). Initiatives of this type lend conceptual and theoretical-practical support to various experiences around the world.

Colombia is one of the countries where progress is taking place in investigation on the pertinence and application of the principles—‘the daily work’—of the SEE. In fact, it is of interest to name the conceptual work developed around the pertinence and the possibility of structuring socio-productive spaces at a local level of formal and informal initiatives that work in eco-systematic terms (Arcos Alonso, 2018a; 2018b). Lopera Garcia and Mora Rendon (2009) characterised the Solidarity-based Economic Circuits [Circuitos Economicos Solidarios] —as:

Various layers of society that are structured in the form of a network to permit flows of goods and services that dynamise the formation of solidarity-based economic circuits, which present a means of accumulation that is not only of capital, but also, principally, of wealth in the social relations that construct possibilities for human development, opportunities and the enlargement of individual and social capabilities. (p. 84)

This work has been broadened and developed by authors such as Jimenez (2016) and the Intercultural Economic and Solidarity-based Circuits [Circuitos Economicos Solidarios Interculturales] of Ecuador. These circuits are organised around a series of fields of economic action that share the values of SSE (solidarity, collaboration, equity and so on) (Arcos Alonso, 2018a; 2018b; Jimenez, 2016). Experiences based on a daily praxis with the values of SSE that can serve as the basis for the development of experiences in Artisanal Mining and on a Small Scale [Mineria Artesanal y a Pequena Escala (MAPE)]. As we shall see later on, alignments with the values of SSE can be observed, placing special emphasis on gender equality, thereby responding to the problematic issue of women miners in Colombia.

3. Artisanal mining and on a small-scale [Mineria Artesanal y a Pequena Escala] situation of women and SSE

MAPE is practiced by communities, groups and individuals with few technical means and through informal activities. It is a seasonal economic sub-sector, of low productivity, with no mining concessions or contracts, few safety measures, neither health care not environmental protection and with high levels of economic insecurity (Arcos Alonso, 2017). Various studies (ARM, 2013; Henchstel, Hrhuchska & Priester, 2002) have made it evident that, despite their precarity and vulnerability, the situation of insecurity that its professionals are living through, and the violation of human rights, has a function in local development. Childcare is also a reality assumed by projects like Somos Tesoro (Fondo Accion, 2015), which provided a framework for the completion of a series of studies with adult women miners, thereby highlighting the relation between childcare and the circumstances of women miners (Arcos Alonso, 2018a; 2018b).

With regard to MAPE, the role of women has traditionally been relegated to the lowest levels of the productive chain. The participation of women is minimal and they are generally engaged in what is known as subsistence mining, which consists of artisanal, manual and low-productivity mining practices (Bermudez Rico, Rodriguez Maldonado & Roa Avendano, 2011; Chaparro & Larde, 2009; MinMlnas, 2014; Stefanovic & Saavedra, 2016). The collective is fundamentally formed of women from mono-parental families, who at times work together in a collective, and carry out their activities
in an absolutely informal, precarious and artisanal manner. There are two types of profiles: barequeras (baptized with different names according to the country, i.e., bateadoras in Peru) and sorters of minerals (which also have other names according to the country, such as chatarreras in some zones of Colombia and pallaqueras in Peru). The barequeras extract gold from riverbeds or opencast mines with the gold pan as their only tool. Their situation is highly vulnerable, as they have to work in rural zones and depend on the permission of the mine owners to do so. The sifters or seleccionadoras, for their part, work outside the gold mines, in the main opening above all, and take advantage of the waste that the miners discard, crushing it generally with mercury to extract small quantities of gold. Like the others, they depend on the goodwill of the mine owners, but working on the outside, they are a little less vulnerable than the baraqueras (Serpa & Contreras, s/f). It is in both cases frequently the case that these women are found to be victims of sexual and intrafamily violence (Arcos Alonso, 2018a; 2018b). In addition to this mining group, we find women engaged in administrative tasks, a very feminised and subordinated job that is generally done far away from the mines. And, women that carry out ancillary tasks, such as cleaning, canteen work... who are the most invisible and in a situation of greater vulnerability.

There are, however, smaller groups of women who perform more specialised tasks in the mines, such as full-time miners, mine technicians, and technologists, administrators and engineers. The women miners, qualified mining technicians and technologists, mining administrators and so on perform masculinised jobs in mining, in the same way as men. They are very few and highly vulnerable to discrimination and gender violence. However, they are usually very powerful and motivated women, who constantly challenge gender roles and stereotypes. Many of these women carry out the activity because of family tradition or custom. In these cases, they are less vulnerable. The technicians, technologists and professionals perform very specialised work in workplace health and safety. The gender roles and stereotypes do not change because it is a dangerous female job. They are vulnerable to discrimination and violence, but to a lesser extent than the former, because they imply no challenge to the status quo of the gender relations in the sector. The environmental engineers, of mines and in other areas, are women who arrive at the mines with the authority that corresponds to their position as engineers and despite not escaping all together from discrimination and gender violence, they are far less vulnerable, as they are engaged in specialised work. In spite of that situation, mining is a masculinised job, associated with strength, in such a way that there are many obstacles to women performing such jobs, as well as significant gender-based differences and salary gaps. A study conducted in the framework of Somos Tesoro (ARM, 2015–2018)—currently in press—highlights that the absence of a gender perspective in social policies and economic development is the basis of these gaps. It is, therefore, important to look closely at the aspects that complicate and facilitate the access of women to this type of economy, so that it can be converted into economic development and not subsistence economics, as in general happens these days (Arcos Alonso s/f; Bermudez et al., 2011),

As examples of the experiences of SSE in mining, there are two fair-trade certifications: Fairmined and Fairtrade. The first is exclusively for artisanal mining on a small scale. The second is a broader certification that covers other projects such as agricultural produce, among others.

Fairmined is a fair-trade commercial standard that is based on market incentives and, at the same time, a proposal for continuous improvement of practices in the sector of small-scale mining. In other words, it starts with a broad set of requirements for best practice and over time, ratchets them up, as a part of its constant efforts to gain better prices and prize money for its gold. The Alliance Foundation for Responsible Mining [Fundacion Alianza por la Mineria Responsable] (ARM) developed this standard. The model consists of the Organisations of Artisanal Miners and of a Small-Scale [Organizaciones de Minería Artesanal y a Pequeña Escala (OMAPE)] that are expected to meet certain requirements, verifiable by a third-party auditing firm, described in the standard. Once approved, they receive the certification that has a validity of 1 year, subject to annual audits. The OMAPEs are organisations established in accordance with national legislation. They can be firms, small-firms, cooperatives or associations, among others, in which the majority of men and women
miners (50% + 1) must work within the scope of the OMAPE and must be community-based small-scale artisanal miners.

Improvements are introduced in various aspects in the certification process, divided into five areas: environmental protection, organisational development, traceability, social development and working conditions. This way of working is aligned with the values expressed in the Letter of Principles of a Solidarity-based economy of the Red de Redes de Economía Alternativa y Solidaria (REAS), which are: 1) Equity; 2) Work; 3) Environmental Sustainability; 4) Cooperation; 5) Not-for-profit and 6) Commitment with the environment. The certification facilitates the connection with international ethical buyers who pay fair prices: which is to say equal to or higher than 95% of the international price of gold set by the London Stock Exchange, thereby avoiding intermediaries in the sales chain. These buyers are usually fair-trade jewellers although there are other types, such as the foreign exchange firms. In addition, for each kilo of gold, the miners are paid prize money of around $4,000 dollars, which must be invested in improvements within the OMAPE and in the community, as part of the social responsibility of the organisation with its environment. The investment of this prize money is decided in a prize-money committee, formed of workers, and members of both sexes and other members of the OMAPE, and optionally, people from the community.

Among the best practices that Fairmined men and women miners should be implementing, we find policies against gender violence, policies of gender equality and, in general, principles of non-discrimination. In this way, Fairmined allows more equitable and egalitarian OMAPEs to emerge, acting as flagships and demonstrating that better mining is possible. Although we find that men and women miners generally join Fairmined to gain better prices and income from gold, it cannot be forgotten that the model responds to a set of values that is closely related to those promoted by SSE. Around this initiative, it is possible to identify some OMAPEs that have appropriated these values and that raise the flag of responsible mining, seeking to be pioneers and an example to the sector, in which bad practice and human rights violations abound and which, on occasions, is related with armed groups and money laundering.

Models like Fairmined promote values of the cooperation that advocate cooperation rather than competition within and without the associated organisations; they seek collaboration with other entities and public and private organisations; collectively construct a model of society based on local balanced development, fair trade, equality, trust, shared responsibility, transparency and respect, while promoting learning and cooperative work between people and organisations. All of the above is done through assuming shared responsibilities and duties that guarantee the maximum possible horizontality and in turn respect the independence of each person, without generating dependencies (Carta Solidaria de REAS, 2012). Thus, clear alignments with the principle of commitment towards the environment are visible, which are made manifest through participation in the sustainable territorial development at both a local and a community level and in the organisations, people and initiatives that are fully integrated within it, which requires involvement in networks and cooperation with other organisations forming the social fabric and surrounding economy within the same geographical area.

In any case, the challenges are major. Mining communities are characterised by a strong culture of machismo where the division of work between the sexes is very marked (Bermudez et al, 2011; Stefanovic & Saavedra, 2016). In the mining sector, especially and more so in the sub-sector of the MAPE, these communities are opaque, informality predominates as well as the barriers to equitable and egalitarian access for women. The work completed to date by various organisations has centred on women in subsistence mining, often working towards their economic reconversion and they have rarely centred on opening the MAPE to women. In this sense, strengthening work with mining men using values of social justice is important. The system is complex and this complexity has to be understood (MinMinas, 2014). It is a very informal subsector, which crosses various obstacles and has certain impacts of a social, economic and environmental type in the communities, such as problems of violence in the zone and the extortions of armed groups, violence against women, intra-family violence, substance abuse, human trafficking—women and children—, prostitution, a migrant
population that has implications in the host community because of the mass arrival of single men, a high level of insecurity in the mines, labour informality—which leads to a lack of stability and no social security payments are made—, contamination of the environment—such as the use of mercury in gold mines or the dredging of waste from river mining that diverts rivers and leads to desertification—. And finally, a rule that is not considered in the different scales of mining (small, medium and large) and that is very changeable, with scarce few training processes for men and women miners to be able to adapt to those changes. These questions lead us to reflect on the principle of equality, contained in the *Carta de Principios de Economía Solidaria* (Charter of the Principles of a Solidarity-based Economy) of REAS and the principle of justice in equality that recognises ‘everybody as people of equal dignity, and protects their right not to be subjected to relations based on domination whatever their social status, gender, age, ethnic origin, capability etc.’ (REAS, 2011). It demands that everybody be recognised as having equal rights and possibilities, which appears not to happen in this case. Everybody, whether man or woman, has to have the same rights and possibilities, so that the responses from organisations and administrations can be equitable with the interests and needs of everybody. As affirmed in this charter: ‘Equality is an essential social objective wherever its absence brings with it a loss of dignity. When it is linked with recognition and respect for the difference, we call it ‘equality’ (p. 3).

It is a matter of working towards recognition and respect for the difference and, of course, a matter of educating people in non-discrimination both within and without. In the case of mining, it implies toppling the gender stereotypes that block full access for women to this sector and promoting a diverse identity of the women miner, where the sexual division of work gradually disappears. Moreover, recognition at work is necessary of those women who are made more invisible, who carry out chores such as cleaning, selling and preparing food, among others, and who are very often in the same families as male miners. As stated in the third point of the principle of work:

> Within this social dimension, it has to be highlighted that without the contribution of work performed in the framework of caring for people, fundamentally carried out by women, our society could not sustain itself. Work that is still not sufficiently recognised by society nor equitably distributed.

It would in fact be desirable to value the work of many women as carers, which they manage with tasks associated with mining. Education in gender equality is as remarkable as a note left abandoned in the context that concerns us here.

In addition, despite the common presence of cooperatives in the OMAPEs, they do not usually function according to the real cooperative principles. It is common to find that the cooperative is formed by a number of male miners who are members, but that are many other miners for whom there is no possibility of participating. There are also cooperatives by name, in which various mines are grouped, but in reality, they do not cooperate, using these figures for tax exemptions or for other reasons. There are also associations of miners with the same characteristics. This problematic issue can be partially solved through an education in the values of SSE, as it goes beyond any mere adscription to certain concrete values. Experience shows that the initiatives that work from the bottom up in the spirit of SSE, are reflected in them, and in the daily practice of people who are working in entities that subscribe to this way of working the economy. In brief, it is taking a step beyond, and one way of making the difference, which delves into the change of perceptions of the people that are experiencing it as well as in their collective imagination. Equally, it is necessary to train people in cooperative work, as these sorts of initiatives are characterised by greater resistance in the face of adverse economic contexts. In addition, the work of conflict resolution—at both an internal and external level—is key to accomplishing effective cooperative work and the same also applies to gender relations. In this respect, networking and contact with other cooperatives is a core aspect, enabling membership of global initiatives such as Fairmined and Fairtrade. In short, the SSE in mining should be more than a motivation for better working conditions or better income; it should be
accompanied by a change of mentality that generates an identity of responsibility, solidarity and cooperative work that promotes gender equality.

Another of the problems that MAPE is undergoing is its opposition to the large and medium mining operations. Generally, MAPE is less productive, more community oriented and uses numerous local workers with less technical resources. It usually pays no tax or very little, which means it is less attractive for many governments than the medium and large-scale mining operations, which is evident in regulatory frameworks and support for medium and large-scale mining, and disadvantageous for MAPE. In addition, both male and female MAPE miners are usually criminalised, often also prosecuted if they have no mining qualifications. In this sense, the approval of SSE values can imply an added value at a social level that gives the MAPE a high profile as a pole of community development, where the negative perceptions that it generates (illegality, informality, contamination and human rights violations) are reversed in a focus on small-scale, responsible and ethical producers. In addition, a responsible MAPE with gender equality can counteract the numerous stigmas that may surround it and can be raised as an example within a mining sector that has very few in that sense.

It all means that formalisation first and foremost and then the improvement of practices that exceed international standards will be slow and difficult. Hence, moving from an extractive, short-term, wasteful culture towards social and solidarity-based principles is extremely complex. As in the Fairmined standard, it is important that there are incentives that seduce both male and female miners and that motivate them to change their practices. Therefore, the educational process has to be progressive, has to impart an identity of responsibility and change their perceptions and imagination as well as those of their community, institutions and finally society itself. In this way, MAPE can be transformed into a motor of local development that promotes more equitable gender relations. As referential experiences in doing so, we find the Circuitos Economicos Solidarios Interculturales de Ecuador (Intercultural Solidarity-based Economic Circuits of Ecuador). As Jimenez (2016) noted, they operate through systematic processes of production, transformation, services, commercialisation, consumption and recycling that are networked until a new political entity is launched. Moreover, we can see hope on the horizon in the words of Coraggio (2007) because as the author maintains the SSE:

> Has networks of organisations that have been woven together to improve the probabilities of survival: cooperatives, trusts and traditional associations of various types, and a large proliferation of other informal ones: purchasing and/or joint marketing, mutual help, solidarity credit groups, markets for barter or with local social currencies, networks of carer mothers, help with schooling, construction of infrastructure for local consumption and production, popular education networks, global network of free software (which incorporates over 30 thousand programmers and is based on reciprocal exchange between its members) (p. 29).

We can only imagine the set of possibilities that this type of alternative economy could bring to mining communities. As mentioned, the first step certainly begins with education, and in particular working one of the most problematic and vulnerable points, which is none other than unequal gender relations. Likewise, it is necessary to advance towards models of local development for production and consumption levels, distribution of goods and services that work towards the achievement of processes for the sustainability of life, a life that deserves to be lived and where the core of the economic act is the achievement of a sustainable life in its own time, space and context (Carrasco Bengoa, 2001, 2009; Perez Orozco 2015). Adopting alternative approaches towards the analysis of reality is also a challenge and an opportunity. An intersectional analysis of the real situation of women related with MAPE in its context, considering the multiple vulnerabilities that intersect them (Hill Collins & Bilge, 2016)—women, mothers, of Afro-descent, mestizas, proto-entrepreneurs, executives...—, can help to identify the causes of the problem and set out innovative responses. We believe that working from this perspective is not only a challenge, but also an opportunity for the improvement of the life of mining communities, as it is the women, in many cases, who lubricate the socioeconomic engine, even though they go unrecognised for doing so.
We are aware of the limitations of a work that approaches a topic of great complexity. With it, we wish to make evident a problem, a need and an opportunity. The development of the MAPE can advance in a positive way, with an approach that really integrates an aligned gender focus grounded in the values that an SSE develops, thereby favouring their incorporation and their leading role on the road towards empowerment. However, there is still a lot to be done, mining women are also advancing in the questioning of customs and cultures that they have traditionally inherited (Bermudez, Zambrano & Roa, 2014), thereby acquiring experiences and alternatives that can make a considerable contribution to this problematic social issue.

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