



Women's Roles, Challenges, and Opportunities in Small-Scale Mining: The Case of Indigenous People in Loacan, Itogon, Benguet, Philippines

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Abstract

Small-scale gold mining is the primary livelihood of the Indigenous Peoples, specifically the Ibaloi's and Kankana-eyes of Loacan, Itogon, Benguet. Mining is a part of their community life, providing the major means of livelihood for the people including women and children. This study documented the contextualized experiences of women in the community, specifically their vital roles, challenges, and opportunities in the small-scale mining set-up. The study employed descriptive qualitative exploratory research design specifically the key informant interviews and small focus group discussions. Results showed that gender roles are evident in the mining workplace. Men are more involve in the heavy works like digging or excavating ores while the women and children carries and processes the ores in the ball mill. The ball mill is considered as the women's workplace—provided as avenue for them to negotiate their rights and welfare. Additionally, the women make decisions on health, education, reproductive and care role concerns, and on the general welfare of the community. Currently, the government's order to close the small scale mining operation in Itogon is their paramount challenge as it resulted to higher unemployment rate. Amidst these, the women still play vital roles in the promotion of cultural value on equal sharing of resources.

KEYWORDS

small-scale mining
joiners
paltek
naba
sagaok
Benguet mining/miner

Introduction

Historically, the mining industry is seen as a homogenous masculine occupation that favored men and do not accommodate women (International Finance Corporation [IFC]-Lonmin, 2009). However, recent studies showed increasing participation of women in mining activities. According to Hinton et al. (2003), there is a direct participation of women in mining that varies around the world with 10% in Asia, 10-20% in Latin America, and 40-50% in Africa. Poverty is the major driving force for women to seek mining jobs in South Africa, whereas, in Zambia and Indonesia,

women can act as mine owners and mine workers. In Kenya, women have been working as miners for generations due to their more honest behavior compared to men.

Moreover, approximately 30% of the world's traditional miners are women for whom mining is an opportunity for subsistence, regardless of its risk. In fact, traditional mining activities have increased by approximately 20%—proving its essence in many developing countries. These 30% of women miners play various roles from the operation of heavy machinery to artisanal mining processes (Miranda, 2004).

In the Philippines, records from the office of Mines and Geosciences Bureau-Cordillera Administrative Region (MGB-CAR) showed that women play a role in large-scale mining. Women make up 9.4% of the total employees of Philex Mines while 3.8% in Lepanto mines. Clerical jobs is the major role undertaken by them with 26.42% in Lepanto and 25.14% in Philex Mines.

On the other hand, the situation in traditional small scale mining community is different. According to the Cordillera Peoples Alliance (CPA, 2007), the indigenous people (IP) of Itogon, Benguet has been into gold mining for at least 1,000 years. During this sustained engagement, mining made a significant element in molding the belief systems, superstitions, rituals, economic activities and social organization in this traditional mining community. Small-scale mining is seen as a community affair that is defined by customary laws and characterized by equitable sharing, cooperation and community solidarity. Men, women, children and the elderly carry out their respective roles to fulfill in the extraction and ore processing. The community has also developed an environment-friendly and sustainable method of pocket-mining and gold-panning that has been passed down through generations since the 16th century. This corroborates with the study of Carino (2002) that states that Itogon small-scale miners use rudimentary technology for gold extraction and processing that involves a great deal of manual labor but without the use of toxic chemicals. They have developed their own traditional knowledge, skills and practices in gold mining which have been proven to be environment-friendly and sustainable (CPA, 2007).

The unique aspect of traditional mining in the CAR is the specialized role of women in ore processing. Women are given unused tailings of the crushed ore (linang), which can be refined further to extract the remaining gold. They also do traditional gold panning and other gold processes (Carino, 2002).

Gemerts (2015) asserted that women have a critical role within mineral production as well as in the development of sustainable communities. They have contribution to productivity, community stability and cohesiveness, moral and general well-being and can initiate positive change in mining communities. He also cited some opportunities given to women in the mining sector such as the

increase in number of well-educated females, regulation of gender equality within national mining companies and empowerment of female through different organizations and strengthening of women networks associated with the mining sector.

In spite of these opportunities, women still experience challenges in mining community. Based on the studies of Women in Mining South Africa (WiMSA) and the School of Mining Engineering at the University of Witwatersrand, most women in the mining industry still feel excluded and are not treated equally by their male colleagues (Borrvalho, 2014). This is supported by the study of Doret (2016) which showed various challenges accompanied by integrating women in the mining workplace. Women struggle to be fully accepted by male colleagues and are still subjected to some forms of discrimination. In the mining community, the development opportunities for women are not clear and transparent and there is lack of effective support mechanisms for them.

Some of these challenges experienced by women is associated with the cultural beliefs and gender stereotypes embedded in the mining community. According to Gemerts (2015), woman miners experienced discrimination from cultural beliefs, which preclude women from working in some sections of the mine. Additionally, their entrepreneurial drive is not always acknowledged nor seen as a common work but only as a traditional role of women as a service provider.

These challenges associated with the cultural beliefs are also observed in CAR. According to Chaloping (2006), the idea of mining being a man's territory interweaves with certain beliefs that women are not supposed to be entering underground work areas. For example, in 1989, the resident manager of Lepanto Mines issued an official order prohibiting women from the tunnels following a couple of disasters which are believed to have been caused by the violation of the Kankana-ey custom.

Despite changing times, this traditional stereotype about women are still observed in the mining community of Loacan, Itogon. For instance, during an informal conversation with the male miners, they commented that women were just there in the 'pagbormilan' (ball mill)



having 'chissmiss' (gossip) while waiting for the 'linang' (unused tailings) to be processed. This scenario motivated the conduct of the study to explore how the stereotypes against women have changed overtime. The study also aimed to document the emerging contextualized and localized experiences or stories of women in this small-scale mining community. Specifically, the study aimed to look into the vital roles of women in the small-scale mining community and to identify the challenges and opportunities that they experience. The data could serve as an important baseline data/information for policy recommendations. The findings will also contribute to the body of knowledge specifically on gender studies. The data will serve as primary sources in teaching gender and society courses both in the undergraduate and graduate level.

Methodology

Study Site

Barangay Loacan, Itogon, Benguet (Figure 1) is a mining community since time immemorial. Mining becomes one of the main livelihood of the people because of the availability of the mineral resource. Men, women and children work in the mining site for a living. According to Caballero (1996), small-scale mining is a significant activity in Benguet communities and in some

Kankana-ey ethnolinguistic groups, the whole family are involved in mining.

The barangay has a land total area of 4,581 ha (Local Government Unit [LGU]- Itogon, 2020). It is approximately situated at 16.4441°, 120.6803°, in the island of Luzon at elevation of about 878.3 meters or 2,881.5 feet above sea level (PhilAtlas, 2020).

Ethical Consideration

As an alternative to the free prior informed consent (FPIC) mandated by the National Commission on Indigenous People, community consultations were conducted to inform the participants about the objectives, significance and data gathering processes of the study. The meeting was attended by the barangay captain, barangay councilmen, president of the mining association and some members/representatives of the community. After the community consultation session, a written informed consent was secured to solicit the voluntary participation of the key informants. They were informed that they can retract their participation any time they feel uncomfortable during the study. This was also stated in the agreement that they signed before the start of data gathering. The consent was written in English but it was explained to them in their local dialect.

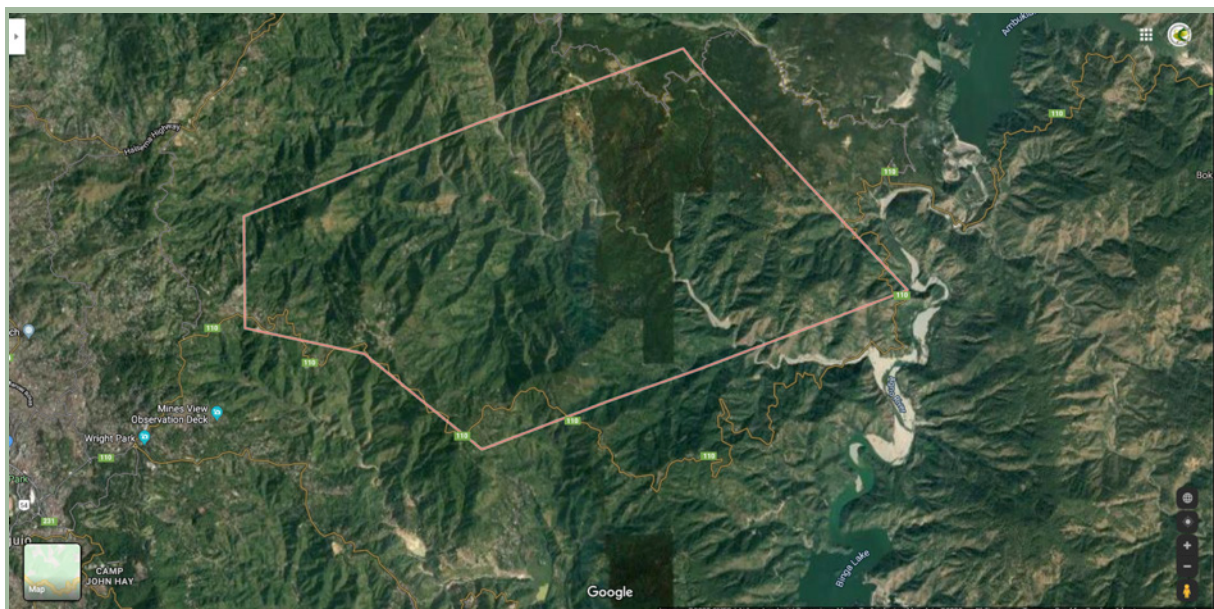


Figure 1. Map of Loacan, Itogon, Benguet (source: Google Map ©2020)



Data Gathering and Analyses

The study is anchored on the concepts of gender-based hierarchy and gender roles, which are culturally embedded in indigenous communities. The term gender-based hierarchy is expressed in an unequal valuation of what female and male roles are (Miranda, 2004). This allows observation of the differences and inequalities of opportunity between men and women in mining.

The study made use of qualitative descriptive exploratory research design that aimed to capture and document the significant roles, challenges and opportunities of women in the small-scale mining community of Loacan, Itogon, Benguet, through key informant interviews (KII) and focus group discussions (FGD). It also aimed to understand the contextualized lived experiences of the women 'joiners', a term used to the group of women working in the ball mill. The study was conducted from September 2017 to November 2018.

The study employed face-to-face interviews with the key informants using guide questions. FGD were also conducted to selected key informants to obtain data about the common challenges and opportunities they experience. There were 21 women and six men key informants of the study. These men were included as key informants to give additional information on the cultural beliefs and on taboos that affect women roles, challenges and opportunities in mining. Their ages range from 20 to 60 years old. Majority of them are married with six to ten family members. Most of them are Ibalois and Kankana-eyes. They had been 'joiners' (women) and miners (men) for more than 30 years and spent five to eight hours per day working in the mines and ball mill.

The data gathered were analyzed based on the contextualized and localized experiences communicated by the key informants. Thematic analysis was done to surface the identified themes as recommended by Clarke and Braun (2013) based on the responses of the research participants.

Results and Discussion

Roles of Women in Mining

Data show that women played significant roles in the mining processes specifically in the ball mill area. It is noteworthy to highlight that the women, locally called 'joiners', were given space or avenue to work on one of the important labors in the mining processes (Figure 2). The term 'joiner' literally means group of women who work in the mines and in the 'pagbormilan' (ball mill). It also means 'to join' or to participate in a group. The ball mill area is where women play a significant role in the processing of 'linang' (unused tailings), which can be refined further to extract the remaining gold.

As observed, the ball mill is actually the women's place that serve as an avenue of authority building. Forming a women's group called 'joiners' is a strategy for them to strengthen their social and economic relationships in the ball mill processessing and to negotiate with the men miners. However, men can also enter the ball mill area if there are some equipment to be repaired or when laborious task are needed. The partnership between men and women is explicitly observed in the ball mill area.

The roles of woman 'joiners' start from digging/excavating or burrowing called 'abucay', in the shallow exterior area of the 'usok' (tunnel) but they are barred from entering deeper into the mining tunnel. As shared by a key informant (K5), culturally and by practice, "*haan mabalin sumrek babae jay usok*" (women are not allowed to enter the tunnel) because of cultural beliefs and taboos associated to women. However, at present, few women are allowed to enter the exterior area of the tunnel. Women entering the tunnel is an emerging practice but this applies only to the wives of the financiers/tunnel owners. In order to understand the reason of this practice, some men miners were interviewed. According to them, the real reason why they do not allow women to enter the 'usok' is because "*it is risky inside the tunnel*". One of the men stated during the interview, "*we do not want something bad to happen to women if there are accidents inside the tunnel like soil erosions or landslide*".



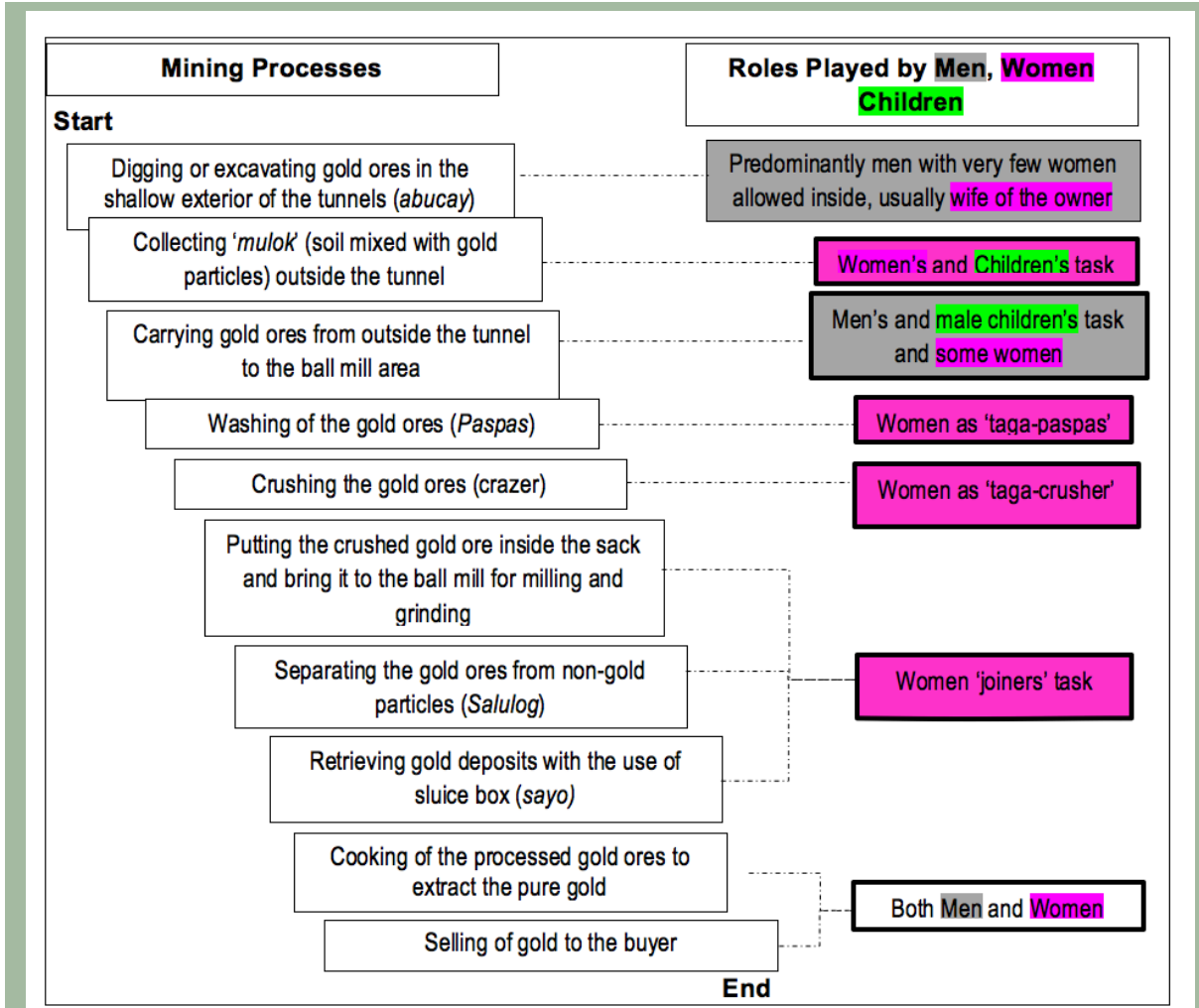


Figure 2. The processes in the traditional mining of Loacan, Itogon showing the roles played by women

Moreover, the tunnel owner (called supplier or financier) does not allow the women to join directly in the 'sagaok' (pre-ore crushing wherein men help each other to carry gold ore from the tunnel to the ball mill) since the work should be fast especially if they know that the 'paltek' (gold ore) is of high grade. This usually happens when the miners are already on the vein structure. Women do not participate directly in the 'sagaok' since it is a laborious task but they can search gold ores in the mine tailings. After the 'sagaok', the 'naba' (crushed ore) is carried from the tunnel to the ball mill area, which is usually paid per sack. The men considered this to be an arduous physical works that should be done by men and not women, though few women can actually carry the 'naba'. This implies that men actually care for the welfare of the women by not allowing them to participate in the 'sagaok'.

When there is no work in the ball mill, some women would join the children in collecting the 'mulok' (soil mixed with gold particles), which is situated outside the tunnel. As mentioned by K1, "no magay naba ay maitrabaho umey kami man mulok ta adi sayang di oras" (if there are no gold ore to be processed, we collect 'mulok' so we do not waste time). They put the collected 'mulok' in sacks to be carried by men to the ball mill area. In the ball mill area, the women are in-charge of washing of the 'naba'. They serve as 'taga-paspas' or washers of ores to remove the clay. They also work as 'taga-crazer' (crusher) of the 'naba'. From crushing, women proceed to milling and grinding in which the broken ore is pounded further into fine slime. Ball mills are run by fuel-driven motors and electric motors. The ball mills are mainly used for crushing the 'paltek' (high grade ores) or re-grinding the 'linang' (unused tailings).



'Joiners' are also in-charge of the 'salulog' or 'taga-salulog', that is, to separate the 'linang' (unused tailings) from non-gold particle and 'sayo', which is, to retrieve gold deposits with the use of sluice boxes lined with jute sacks or soft cloth that traps gold particles. This process also aims to separate the yellow colored samples that is cooked in the 'gangi' (clay dish) to extract the pure gold. They also do cooking (taga-luto) to extract pure gold. However, cooking can be done by both men and women.

Moreover, the 'ball mill' area is the space given to women to manage with less supervision from men except when there are damaged equipment that women cannot fixed and when machines need to be operated by men. The ball mill is an emerging development in the mining processes that accommodated women. This is where women make rules and regulations for purposes of equal sharing of gold profits. The estimated 'bingay' (share) in a month varies among the 'joiners'. However, their earnings depend on the number of 'naba' sacks the men allotted to women 'joiners' to process. The prices of gold also determine the share of the 'joiners'. For example, if the price is high, women can receive Php5,000 to 15,000 individually. However, the amount also depend on the gold ores grade. As mentioned by K2, "*nu nabagas jay naba nga adu ti paltek na, dakdakel ti bagi mi*" (if the gold ore is of high grade, they receive higher share). Also, if the 'paltek' is of high grade, they will short-cut the process. As mentioned by the key informants, "*No pure nga paltek jay naba, isu jay deretso nga demano ti umuna process na...nu jay naba ket dadakel nga ada sample na, isu jay ag undergo ti crusher and ball mill*". 'Demano' is a small ball mill that processes high grade ores that need not to undergo the process of 'salulog'. Thus, less time and effort are spent in processing the gold ore and the profits would be higher.

It is also interesting to point out that only the women 'joiner' who were directly involved in the gold ore processing can share the proceeds as a group then they split 'bingay' it among themselves. The study showed that this practice did not change overtime since the same was mentioned by Carino in 2002, "the gold that the women recover from the 'linang' (unused tailings) is theirs to sell and the proceeds are shared only among women who are directly involved in the ore processing".

During rainy seasons, specifically from July to November of the year, other women look for alternative works in the city to earn money for the family's basic needs. As stated by K12, "*no pinagtutudo haan mabalin agrabaho jay lalaki jay usok sunga awan maitrabaho ti babae nga naba*" (during rainy season, men cannot work inside the tunnel so there is no gold ore to be processed by women). This implies that the work of women in the ball mill is dependent on the gold ores excavated by men. However, other women choose to stay to collect the 'mulok' and process in the ball mill. This shows that natural calamities affect the work and wages of women in mining.

Challenges Experienced by Women in Small-scale Mining

Gender stereotypes and cultural barriers hampering the greater participation of women in mining activities. Some traditional gender stereotypes and cultural beliefs still pose challenges and limit women's participation in mining. According to women key informants, entering the *usok* is limited only to women who are tasked to "agebagon" (put the 'mulok' in the *bagon* or tunnel wheel cart) and "agesako" (put *mulok* inside the sack to be carried by men). The 'bagon' is a technological introduction that facilitates increased participation of women in mining. This is as an emerging practice, however, still, not all women are allowed to enter the mining tunnels. Young 'joiners' tend to ask the reason why they are not allowed but for the old 'joiners', they seem to just have accepted it.

In addition, it is rare to see women involved in the actual digging of ores; they are essentially barred from any activity that involves first contact (mineral discovery) inside the tunnel. As stated by K10, "*uray idi gamin ket haan mabalin umuneg babae ijay usok*" (even before, women are not allowed to enter the tunnel). This is often associated with the gender stereotypes that prohibit women from physically demanding activities, which are usually deemed men's work. This is consistent with the study of Lahiri and Macintyre (2006) that the "masculine" image of the miner created in the early industrial days when mining was dangerous, laborious, and risky operation, continuous to have a strong effect on excluding women from heavy mining duties.



Gender stereotypes are embedded in people's minds and transferred from generation to generation. Generally, women are seen as physically weaker than men; thus, they were not allowed to work inside the mines which requires physical prowess. During the group discussions, the male key informants asserted that this is for the safety of the women and they are just protecting them from any accidents that may happen like soil erosion/landslide or gas leakage. They also want to prevent the occurrence of sexual advances/harassments that may occur to women inside the tunnel. Majority of men remove their t-shirts inside the 'usok' since it is hot and also because water drip or leak inside the 'usok'. Being sweat soaked for a prolonged period of time could make the miners catch colds or get sick. It is unthinkable for the men miners to work with women without shirt or even with shirts but clinging to their skin because it is wet. However, at present, few husbands allow their wife to enter the 'usok' but this happens rarely either once or twice and only for a few hours. Usually, these few women are the wife of the tunnel owner or supplier/financier. But they are not allowed further in the interior of the tunnel for safety reasons.

Accounts of the miners showed that cultural beliefs from their ancestors are still observed at present. They believe that the smell of a woman will drive the gold away especially during their monthly menstrual periods. As stated by one of the male key informants, "*sabali ti angot ti babae*", inferring that a woman's smell is unusual or different as compared to men. They do not allow women to enter the 'usok' since they believe that it is 'malas' or bad luck, specially if they are expecting 'paltek' (high grade gold ore) mineral. They do not want to gamble their chance to get the gold by defying this old belief. This is consistent with the study of Addei and Amankwa (2011) where women during menstruation are prohibited from entering into mining pits for fear that the gods seeing the unclean person will withdraw the gold. Additionally, Catapang et al. (2015) mentioned that women having menstruation bring forth bad luck.

The belief that women during menstruation brings bad luck is still believed by the miners up to this time of globalization and modernization. This belief was evidently passed on from

generation to generation, undergoing little change over time. For the older women 'joiners', they had accepted these reasons since these have been the practice by their parents in the past. However, this belief is being questioned by young 'joiners' as they stated, "*sabali met idi ken sabali met tadta*" (the past is different with today's situation).

Another prohibition to women in the mine tunnel is the cultural belief that female miners are "loose women" and are deemed unclean; thus, excluded from carrying out underground mining (Verbrugge, 2017). This barrier is manifested in many countries with a connotation that women cause a spirit of bad luck when in close proximity to minerals, hence, the justification for banning them from pits (Hinton et al., 2003). This restrict women from accessing valuable first pickings of gold deposits. This belief was also evident in CAR (Chaloping, 2006). The reason as implied in local anecdotes, is based on the belief that the graded vein of gold becomes difficult to track down and mine workers become prone to accidents when women enter the mine tunnel.

Food taboos were also observed by miners wherein they believe that fishes, being 'nalangsi' (smelly) and ginger bring 'malas' (bad luck). Also, they believe that having elicited relationship is considered 'malas' (bad luck); thus, they do not allow men with elicited relationships, even those miners who have temporary affairs with prostitutes, to enter the tunnel.

During the interviews with male miners, gender stereotyping is evident in their statements on how they look at women. When asked about the significant works or participation of women in mining, the male miners commented that the women are just there in the ball mill having 'chimiss' (gossiping). Since the men always observed these women having conversation together and telling stories of their lives, they are viewed as 'chimososa' (gossipmonger). However, the women argued that while waiting for the machine to process the gold ores (which will take 2 hours or more), they utilize their time sharing life experiences rather than just seating only, "*ta haan sayang ti oras nga agtutugaw*" (not to waste time seating). Some women, though, admit that there have been isolated cases in the past when 'chimiss' (gossip) caused misunderstanding that lead to stereotyping all women as 'chimososa' (gossipmonger). However, one key informant



(K12) claimed that 'chississ' (gossiping) is not possible if there are many sacks of 'mulok' to be processed. Another key informant reasoned that the ball mill is noisy, thus, voices cannot be heard. Nevertheless, other female key informants confirmed that sometimes, "*agbalin nga tsismisan iti pagtrabahuan nga bolmilan*" (the ball mill area becomes a place for gossiping), especially if there are several women scheduled in a day.

In general, the women 'joiners' accepted these cultural biases and stereotypes in mining since these have been the practice of the community ever since. But young 'joiners' are the exception from this and are trying to negotiate if they can enter the tunnel regardless of their sex.

Gold scarcity and unsustainability of mining as livelihood. The female key informants admitted that mining in their area is no longer a sustainable livelihood since gold depletes after several years of mining. During the interviews, the male miners supported this concern of women. The male miners narrated that before, gold ores can be found in shallow areas so it is not necessary to dig deep but today, majority of the tunnels are already much deeper and they rarely find gold ores in shallow areas. Also, they acknowledge that the money from mining will not last forever and should be invested into a sustainable venture, e.g. business. However, this did not happen for most miners and joiners. They describe the money from mining as an easy money since it does not stay long in their hands. They describe it as "*napudot ti kwarta ti balitok magastos nga dagos*" (money from gold is hot, it will be spent immediately). They describe the situation as 'one day millionaire'. As stated by K15, this case is particularly true to single men miners "*karkaro dagjay babaros*."

Furthermore, K9 also shared that they do not have fixed income, "*Depende no ada ipatrabaho ti miners kadagiti joiners*" (it depends if the miners have work to give to the joiners). In addition, K13 also stated, "*Depende no palubusan iti aken bollmilan nga makijoin da*" (it depends if the ball mill owner allows them to join). This cause some 'joiners' to destroy other's reputation or image. "*Gapu ti apal, jay daduma agdidinadael da tapno lang suda ti maawat nga joiners*" (because of envy, some women destroy other's reputation in order that they will be the one to be accepted as 'joiners'). This scenario is sometimes the cause

of conflict among the joiners since one ball mill area cannot accommodate all women. Working schedules should be negotiated.

It is also sad to note that alternative livelihood like agriculture is, accordingly, not possible. Agriculture in mining communities has become unprofitable because of the lack of water, infertile and contaminated soil and the expensive agricultural inputs required. The rice fields have dried up due to lowered water tables caused by underground mining. Some women also shared that they had skills trainings in the past as an alternative livelihood but did not materialize due to lack of capital.

Effects of Mining on Family. The women value education, thus, they encourage their children to go to school and get a degree. However, at young age, these children experienced working in the mines to help their parents and experienced receiving money as their share (*bingay*) which is a large sum to their standard. As result, they view mining as a promising job; thus, they prefer working in mines rather than going to school. This makes it challenging for mothers to persuade their children to attend school. Even teachers cannot discipline these children since they regularly cut classes to go to the mines. Accounts also showed that only few of their children were able to finish tertiary education and majority of them are females. According to one key informant, girls have more interest and patience to attend school compared to males. Even the few male children who finished their degree do not want to apply for a job but prefers to work in the mines. Some students also dropped out from school to work in the mines. Jokingly these children said that they are having school at SLU or "*Sa Loob ng Usok*" (inside the tunnel). K5 shared that, "*ti maysa nga frustration ko ket jay haan nakaadal anak ko gapu ti minas*" (one of my frustrations is that all my children were not able to finish a college degree because of mining).

The narratives also show that through the years, women 'joiners' experience some family problems because of mining. Some of their husbands engage in illicit affairs with waitresses in disco bars in Baguio City. This happens after they sell the gold in the market and go to the disco bars partying, buying liquor and paying girls. They stay in the city until they spend all



the money and go home empty-handed. As narrated by one of the joiners, *"ultimo awan pay pamasahe da"* (they do not even have money left to pay their fare). K2 added that, *"dagijay babaro ket ijay inuman nangbirukan da asawa da"* (for the single men, they usually met their wives at these bars).

Some male miners also learn to engage in gambling while others are involved in casino. These vices deplete their savings and investments from years of working in the mines. Only few among the miners have investments like car, small business and land. The women also admitted that if they do not have work in the ball mill, they play cards. As mentioned by K8, *"nu awan iti maitrabaho ket apan da agtongtong-it ken agbingo"* (if they do not have work, they do card gambling and play bingo). Others said that these indoor activities are their pastime and socialization.

Some women also narrated that their children learned vices like smoking and drinking alcohol since they have money to buy such. K10 shared that their children got addicted to gadgets like cellphone that they bought with their wages (*porদিয়া*) in the 'minas' (mines). These challenges became the concern of the women mothers.

Care roles are also being sacrificed because of the mining activities. The expected care roles of parents to go home early after work and prepare food for the family and join their children during dinner are sometimes being sacrificed especially when parents need to render overtime to finish their task in the mines or the ball mill. This happens when the 'naba' (gold ore) is of high grade and if the price of gold in the market is high. Also, this usually happens before significant occasions like Christmas, New Year, and Holyweek. As mentioned by K14, *"isangbut da ti trabaho"* (they work overtime to earn cash for the holiday).

The use of technology like cellphone is helpful to the miners to be updated about the price change in gold. However, this also affected the care roles of the family members since they have to render overtime to deliver the finished product at the city or give it to the highest bidder. As stated by K9, *"tan nangina di presyon di balitok"* (the price of gold is high).

In addition, family bonding or gatherings is limited and often sacrificed since parents and children need to work for a living. K11 recounts, *"no mamingsan haan ko maaramid ti responsibilidad iti balay, sunga maladaw ti panagluto"* (sometimes I cannot do my duties at home, thus, I am late in preparing our meal). More time is spent working in the ball mill or outside the 'usok' (tunnel) than with the family. This statement was consistent with the sharing of the children. One of the children of the key informant observed and lamented that less time is spent for family gathering and bonding because their parents are busy working.

On the other hand, these domestic responsibilities of women limit the amount of time and effort they can spend in mining sites; thus, causing them to miss any financial, networking and mining knowledge gains.

Rainy seasons and natural calamities hinder mining activities.

During rainy season from June to November, most miners are forced to stop working underground due to heavy rains as safety precaution, or are forced to abandon their mine tunnel due to flooding, unpredicted landslides and soil erosions. Others also experienced mudslide due to monsoon rains or strong typhoons. During this time, women are forced to find alternative livelihood since there is no 'naba' (gold ores) to be processed. Some have informal works outside the community. Others applied as domestic helpers and work in other countries leaving their families. Others chose to stay in the community and cooked *kakanin* or snacks and sell them at the elementary school. Others also ventured to other works like putting up sari-sari stores. Thus during rainy season, the women's income are much smaller compared to what they earn working in the ball mill.

Closure of the small-scale mining operation.

The paramount challenge confronting women at present is the closure of the small-scale mining operations in the area due to the impact caused by super typhoon 'Ompong' (internationally named 'Mangkhut') last September 16, 2018. According to Tomacruz (2018), a massive landslide in Loacan destroyed four mining bunkhouses, leaving at least 26 people dead and eight missing. Among the dead in Loacan, ten were neighbors who tried to rescue those buried in the landslide. These caused the national government, particularly



the Department of Environment and Natural Resource (DENR), to order cease of all small-scale mining activity in the region.

During the FGDs, majority of the women lamented that the order of the government to cease small-scale mining operation caused significant impact to their socio-economic life. Many of the residents become jobless and helpless. They stated that there were relief goods given to them by the different organizations but these are just temporary help. What they need is a sustainable livelihood. K10 mentioned that even family members are having misunderstanding due to problems on where to work to meet the basic needs of the family. All the key informants admitted that they never expected this to happen in their life because their main livelihood is mining ever since.

Opportunities of Women to Participate in the Mining Activities

Amidst the challenges mentioned above, some opportunities opened up for women 'joiners' to participate in mining activities and community affairs.

Given space to work in the ball mill.

Allowing women to work and manage the ball mill is a big opportunity for them. It is a space where they can participate in the mining processes without being discriminated. The ball mill area is considered the women's domain where their significant roles in the mining processes are evident. The area is the avenue where they can negotiate their rights as women specifically, their work schedules and compensations or share. This is also a paid work; thus, a source of additional income to help their husband meet the basic needs of the family. Additionally, the space served as a venue for socialization and transmission of cultural values such as the value of equal sharing of resources. It also served as a place where they can unload their burden in life.

Organized Women's Association or Group.

The women who are mostly mothers organized themselves and formed an informal organization called 'joiners'. The word 'joiners' literally means to "join or to participate" in a work or someone who is included in the work. This strengthen their camaraderie where there is equal sharing of works and benefits so that no one will be left behind.

They have a concept of "*amin ket mangan*" (everybody eats), thus, everyone should be given equal opportunity to work and earn for their family. If the husband owned the 'naba' (gold ore), the wife and the children are automatically part of the 'joiners'. Sometimes the selection of members is based on clan relationship and friendship.

Moreover, the women cannot recall when the exact date or year they started calling their group 'joiners'. However, they certainly know what the objective of their organization is. Their aim is to give everyone the chance to work in the ball mill. They have schedules of works to assure that the 'joiners' earn something for their family. In addition, the organization defines the duties and responsibilities of each member. The proceeds from gold processing are divided equally among the 'joiners' and is computed based on the number of days a person worked and after the milling fee is deducted. The women 'joiners' mentioned that their voices are heard when they organized as one because they can negotiate with the men miners in matters pertaining to work and community affairs.

Conclusions

Mining is the main livelihood of the people in Loacan, Itogon Benguet because of the availability of gold deposits. Men and women have their own share of work in the mining activities. Men are more involved in the heavy work such as digging or excavating ores while women are involved in carrying and processing ores in the ball mill. The ball mill is considered a women's domain where their significant roles in the mining processes are evident and are recognized by men. Several gender stereotypes and cultural beliefs, carried over from past generations, still pose challenges to the women to participate in mining amidst modern time. The scarcity of gold and the government's order to close small-scale mining operation in the region are the greatest challenges confronted by the women in Loacan and that made them and their husband jobless. However, amidst these challenges, the women remain strong and take every opportunity given to them. Their involvement as ball mill managers and the women's informal group called 'joiners' present opportunities to counter or minimize some of the challenges in mining.



Recommendations

Women empowerment programs and activities need to be designed for the 'joiners'. Skills trainings and livelihood programs need to be introduced to the community as an alternative livelihood due to the closure of small-scale mining operations. Parents and teachers should also encourage the children and youth to value education and not to rely on mining since this is not a sustainable livelihood. This will be realized if the Miners' Association will make a policy not to allow children to work in the mines during school days. Cultural values should also be revitalized and taught to the children that mining is a collective activity. The value of 'sagaok' or sharing of resources should be instilled to the minds of the miners/joiners as well as to the young generations. This can be integrated in the values education related subjects in the school.

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