SITUATIONAL ANALYSIS OF WOMEN IN SMALL-SCALE MINING IN T'BOLI SOUTH COTABATO

[1]Riceli C. Mendoza*

Abstract

This study is situational analysis of T'boli women in mining in Kematu and Desawo, T'boli, South Cotabato, Philippines. A total of 84 women respondents who were involved in mining were interviewed. They were 18-50 years old, married and with a household size of 5 to 10. Many reached elementary level of education. Their role in mining varied from being cooks, stone washers, "banlasera", sack washers and "unaw". The cooks bring food to the miners who were usually members of their households. The "banlasera" miners fit their sieves or filters in the water to catch the gold particles present in the flowing water. Those who worked as "unaw" brushed special stones impregnated with gold particles and catch these in a container of water. The sack washers washed the sacks infiltrated with gold dust soaking in the river water. The jobs of the women in mining made them earn additional income for their family; however, they claimed that it was not enough to meet the needs of their households. Related to mining, almost all the women reported that they experienced various ailments like skin rashes, headaches, stomach trouble, skin allergy, cough, colds/influenza, chest pain, diarrhea, stroke and eye irritation. They believed that these ailments were caused by bacteria in the contaminated water, polluted air and sudden change of temperature in the environment (hot to cold or vice versa). Working in the mining area poses health risk because the women were directly exposed to the contaminated water and polluted environment. Looking at their welfare, it is of significant value to make them aware of the proper precautions. Moreover, pregnant women must not be allowed to work in the mining area to avoid health risks to among them and their babies.

Keywords: women's role in mining, small scale mining, South Cotabato

*Corresponding Author: Riceli C. Mendoza, ricelimendoza@yahoo.com

1.0 Introduction

Globally, introduction of small scale mining badly affects women in Indigenous groups than men according to research (Hilson, 2002; Bashwira, Cuvelier, Hilhorst & van der Haar, 2014). The International Labour Office (ILO) report estimates that as many as 4 million of the world's 13 million small-scale miners are female, (Hilson, 2003; Ngahemera, 2015; Veiga & Baker, 2004). However, greater participation of Indigenous women in mining provides opportunities for individuals and families to benefit from mining (Jenkins, 2014). Moreover, it plays a vital role in poverty improvement and rural development (Bush, 2009; Hilson, 2012; Taabazuing et al., 2012). Most of those involved are poor and mining represents the most promising, if not the only, income opportunity available where as many as 80-100 million people worldwide depend for their livelihoods on scant proceeds (Hentschel, Hruschka & Priester, 2003; Armah, Luginaah & Odoi, 2013 cited Tschakert & Singha, 2007). Nevertheless, the sector is better known for its high poor health and safety record (Hermanus, 2007). Many continue to view it as dirty, unprofitable and fundamentally unsustainable (Hentschel, et al., 2003; Jennings, 1999). The pecuniary importance of small-scale mining can be considerable, particularly for communities lacking any alternative sources of employment or income (Yakovleva, 2007; Banchirigah, 2006). Although, mining brings about economic advantages, it also carries along with it disadvantages especially on the environment like soil erosion, pollution and loss of biodiversity not mentioning its impact on the other aspects of human lives (Burke, 2006; Spiegel, Savornin, Shoko, & Veiga, 2006; Spiegel & Veiga, 2005 cited by Mol and Outboter, 2004). Since mining industries are in the mountainous areas, the place of indigenous peoples, they are the ones usually affected by mining activities (Malpeli & Chirico, 2013; Kwaansa-Ansaha, Basu, & Nriagu, 2010).

While it is apparent that mining has contributed greatly to world development in general (Bebbington, et al., 2008). The role of mining in ASEAN development process has been associated by the widespread belief that native people seek to promote an environmentally sound life-style while those in the mining industry are commonly characterized as profligate destroyers of the relatively pristine environment which consequently provides negative impact to the lives of indigenous people particularly women and children who are greatly affected by mining (Crispin, 2003; Andrew, 2003). Pollution of the soil, rivers and other bodies of water could have serious effects on the health of the people which include asthma, tuberculosis, skin diseases, gastro-intestinal disorders and even cancer among others (Hendryx, 2015; Rapant, Dietzová & Cicmanová, 2006). This aggravated by the fact that they are directly exposed being miners themselves. As reported by Farah Sevilla of the Alyansa Tigil Mina (2011), reproductive health problems such as spontaneous abortion and malformed babies are the main health risks among the women miners. There is also a higher risk in HIV among miners (Meekers, 2000).

[1]University of Southern Mindanao, Kabacan, Cotabato City

Family dynamics in the Philippines indicates that generally, the male, usually the father or husband is the breadwinner of the family (Alcantara, 1994). However, the mother or wife who is mostly doing housekeeping and care giving could be supplementary bread winners (Dixon-Mueller, 2011). Thus, women also do productive work to help augment family income. In a mining community, women may participate as workers especially in small-scale mining or perform ancillary tasks (Labonne, 1996; Caballero, 2006; Eveline & Booth, 2002). In the Philippines, more women participate in the informal mining sector or small scale mining than in large scale ones (Lu, 2012; Chaloping-March, 2006). Aside from their productive roles in mining as stone or sack washers among others, they also perform ancillary roles like being cooks, cleaners or service providers (Anon, 2015).

Forced engagement of women in mining sector is evolving behind the rationale of the need for employment to augment income despite serious effects on health (Dreschler, 2002). Miners itself recognized the varied outcomes and the need for government interventions to improve their way of living which had been ignored, unexamined and may narrow the knowledge gap (Danielson & Lagos, 2001; Deb, Tiwari & Lahiri-Dutt, 2008). Apparently, real situation of indigenous women in mining remain unattended/insensitive to the differential health impact (Macintyre, 2006).

This study looked into the social, economic, health profile and contributions made by the women miners in Barangay Kematu and Desawo, T'boli, South Cotabato, Philippines. The information obtained from the survey may be used as basis for policy actions and interventions that will address the identified problems and issues among women miners.

2.0 Research Methodology

The survey was conducted in Barangay Kematu and Desawo, T'boli, South Cotabato, Philippines. A total of 84 women respondents who were involved in mining were interviewed. The data were collected using a survey questionnaire. To elaborate the findings, an in-depth interview was conducted. The interview was conducted among the key informants who were in mining for at least two years. The data were treated both quantitatively and qualitatively. Photo-documentation was also done to record the significant circumstances related to the situation of women in the mining area.

Prior to the survey, protocol was observed. Free prior and informed consent was sought among the tribal leaders through the National Commission of Indigenous People (NCIP). Linkages were established with the local government units (LGU's).

3.0 Results and Discussion

Profile of the Women Miners

A total of 84 women who were involved in mining were the respondents of the study. They were 18 to 50 years old. This finding indicates that many women were of the reproductive stage yet. Six percent were below 18 while 8.33% were 51 years old and above. Most of them were 18 to 40 years (65%) and married (96.43%). They had a household size of 5 to 10 (58.33%) and below 5 (40.48%). Many reached elementary level of education (54.76%) while some reached high school (17.86%) or were high school graduates (14.29%) (Table 1).

Table 1. Socio-demographic profile of the women T'boli miners in South Cotabato, Philippines

Demographic Traits	Frequency (n=84)	Percentage (%)
Age		
Below 18	5	5.95
18 to 30	29	34.52
31 to 40	26	30.95
41 to 50	17	20.24
51 to 61	7	8.33
Civil Status		
Single	2	2.38
Married	81	96.43
Separated	1	1.19
Household Size		
Below 5	34	40.48
5 to 10	49	58.33
11 to 15	1	1.19
Educational Attainment		
Elementary Level	52	54.76
Elementary Graduate	4	4.76
High School Level	15	17.86
High School Graduate	12	14.29
College Level	1	1.19

Role of Women in Mining

The women's role in mining varied from being cooks, washers, "banlaseras", sack washers and "unaw" (Fig. 1). The cooks bring food to the miners who were usually members of their households. Aside from cooking, they performed other direct mining tasks. The "banlasera" miners created routes (bypass) where they could fit their sieves or filters to catch the gold particles that are present in the flowing water (Plate 1). Those who worked as "unaw" brushed stones with gold particles impregnated into them. The purpose of brushing is to separate the gold particles from the stones (Plate 2 and Plate 3). The sack washers wash the sacks infiltrated with gold particles while being soaked in the river water for a few hours or one day (Plate 4). Other more strenuous jobs like gold extraction from the ores using mercury

and carrying of heavy ores are done solely by the men. Women were not allowed to work in the tunnels. They were allowed to participate in mining only through "banlas", i.,e., gathering gold by filtering the water that contains the gold particles, as unaw (stone washers) and as sack washers (Plates 5 to 7).

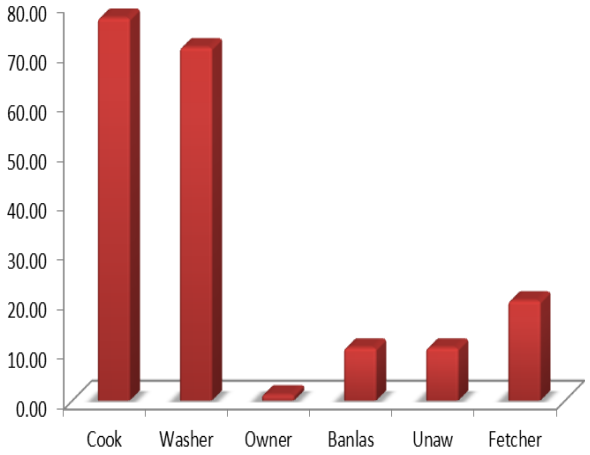

Figure 1. Role of women in mining

Plate 1. A "banlasera" filting, filter/sieve (usually sacks) to catch gold particles from the river water

It is worth noting that the "banlaseras" could not do their job on a daily basis. Otherwise, they reported that they will suffer from a sort of "foot rot" or fungi rot where their toes and fingers swell because of long exposure/contact with river water. They gathered gold particles from the Kematu River through hand-held sieves although others just left their sieves in the water for one day before harvesting the gold particles that stick on their sieves or filters which are usually sacks. The implication conformed the study of AFRIM (2012) which states that poverty and the attractiveness of immediate money from the mining industry attract children and women to work in the mines. Further, involvement of women in mining activities demonstrate fundamental importance of women (Purevjav, 2011).

Plate 2. Women brushing stones impregnated with gold ("unaw")

Plate 3. At the left is a stone impregnated with gold. At the right is a stone without gold

Plate 4. Sack washers wash the sacks with gold particles catching them in a basin of water

Plate 5. A T'boli woman watching her sieve during the duration of her work on "banlas"

Plate 6. Bagol or coconut shell is used by a T'boli woman in stirring the water to facilitate catching of the gold particles

Plate 7. T'boli women gathering gravel-like mixture with gold for "unaw" work

Economic Impact of Mining on the Women

There were women who were directly involved in small-scale farming either as "banlasera", "unaw" or sack washers. Their jobs made them earn additional income for their families. Other women facilitated the work of their husbands or household members by cooking and bringing them food. This will save time for the miners to go home and take their meals. It could be noted that the work place was about 1 to 2 kilometers away from their homes.

When women were asked about the income they got from mining, a respondent claimed that:

> *"Akong trabaho,ga-unaw. Dili per day ang bayad. Tag 50 ang buyong. Ug kung makakuha kag 5 ka buyong, 250 na. Dapat paspasanay, para makadaghan".* (My work is "unaw". The pay is not daily. It's P50.00 per buyong (gravel-like mixture). If you get 5 buyong, you will have P250.00. You need to work fast so that you will have more income.)

Regarding the adequacy of income, when a respondent was asked if P250.00 was enough, she said:

> "*Kulang gyud ang P250. Huna-hunaa na lang gud ang palitunon. Unsa man lang mapalit sa P250? Agwanta lang gyud.* (P250 is not enough. Just think of what you need to buy. What can P250 buy? Need to bear with it).

To help augment their income, the women had other sources of income. As reported by one woman:

> *Gapaninda ko ug barbeque para dagdag income. Pero nagsakit pa gyud akong umagad, nahurot ako puhunan pagpatambal niya* (I sell barbeque for extra income. But my son-in-law got sick. My capital got lost when I helped him financially for his treatment.)

When asked what food is bought out of the income, the reply of one respondent was:

> "*Palit mi ug gamay isda, isubak sa gulay nga talong, abalong, bisan unsa. Unya gamiton palit og bugas, pang eskwela , tanan na.* (We buy small amount of fish to give flavor to vegetables like eggplant, gabi, or anything. Then, some money is used to buy rice, for education and other needs).

As reported by Doyle, Wicks and Nally (2007), the government of the Philippines is promoting mining for poverty alleviation and contributing to the general economic well being of the people. However, there is scant evidence of mining benefiting the local poor especially the indigenous people in the mining community. It could be noted that the wages of the mining workers are relatively low. This is true among the households in Kematu and Desawo, T'boli, South Cotabato, Philippines. As claimed by those interviewed, the income derived by miners was not sufficient to meet the needs of their households. Moreover, women workers got lesser income compared to their male counterparts. Their income was mainly used to augment the income of the household head who is usually the father or husband.

Health Impact of Mining on the Women

As illustrated in Fig. 3, the women experienced various ailments like skin rashes, headaches, stomach trouble, skin allergy, cough, colds/influenza, chest pain, diarrhea, stroke and eye irritation. They believed that these ailments were caused by bacteria in the contaminated water, polluted air and sudden change of temperature in the environment (hot to cold and vice versa). Great sources of the contamination are polluted mine effluents and emissions that seep into the ground water and soil. Women in particular are more susceptible to water pollution due to the role they play in the family. This involves direct contact with water sources for performing household chores like collecting water, washing clothes and dishes, and bathing children (Anon, 2003). According to Dutta, Sreedhar & Basu (2003) many women were experiencing low back pain, difficulty breathing, coughing up blood, and blindness due to mining work.

When asked if they still worked when pregnant and what health risks were experienced, one woman miner

said:

> *Sa kaluoy sa Ginoo, wala man sad ko naapektuhan bisan buntis ko niadto. Pero karon gulang nako. Halos gatrabaho dire tiguwang na pud pareho nako. Wala na buntis diri karon.* (With God's grace I was not affected even when I was pregnant before. Today, I am already old. Also, others who work here now are usually as old as I am. No pregnant woman is working here now).

With the phenomenon of varied ailments encountered by miners, this manifested high health risk and led to a number a number of implications such as those conformed by reports of NGO in India (June 2010) that occupational disease which is silicosis – that comes from mining that contains silica – leaves many women widow at a young age. For reasons of no other option to survive economically, the widows go to the quarries themselves and run the risk to get the disease that caused the death of their husband.

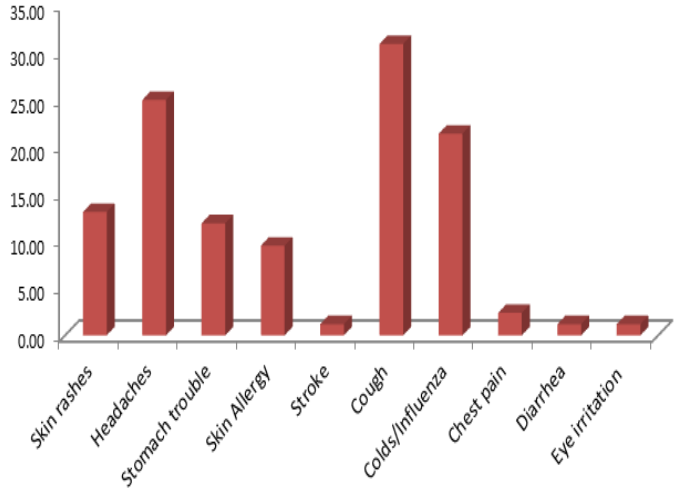

Figure 2. Health profile of women miners in the mine

The burden of work among the women

The women were usually burdened with work which includes household chores and work in mining at the same time. They have to wake up early and at times, do overtime as the need arises. As one respondent claimed:

> *Usahay alas 7 sa gabii moagas ang tubig, mag overtime mi. Pero kadaghanan, 4 A.M. ko mamata, gahikay nako, galuto, gapanlaba ug gapanlimpyo nako. Dili nako bayaan ang balay nga magkaguliyang.* (Sometimes, at 7:00 in the evening, the water will flow, so we do overtime. But most of the time, I wake up at 4:00 A.M. to prepare, cook, wash clothes, clean the house. I don't leave the house that is in mess.)

One woman respondent added that she does overtime at home because even her husband was busy also doing mining work. She had to perform household chores and at the same time, her mining work that she needs to work hurriedly.

When asked if their work at home is not sacrificed by their mining work, a woman miner answered that:

> *Dili uy! Magmata man kog sayo para makalimpyo, laba og luto.* (Not at all. I wake up early to clean, wash clothes and cook).

Results of study negated the study of Santiago (2008) that indigenous women's many roles in production add to their burden of daily household chores which remain as women's main responsibility. This implies women's domestic role overload especially those working as part time miners.

4.0 Conclusion

To augment the household income, some women participate in small-scale farming. They worked as bansaleras, as unaw or as sack washers as well as ancillary roles like cooking and bringing food to the household miner members. Among the women miners, their wages are relatively lower than their men counterparts. Other women facilitate the job of their household members who are working in the mining industry by cooking and bringing them food. In addition, they perform directly mining activities. As a result of their exposure in the mining industry, they suffer various ailments like foot rot. Moreover, they are burdened of working both at home and in mining. To some extent, some of their basic roles may be sacrificed. Moreover, there is a need for safety precautions among the women miners by wearing protective clothing and gadgets. Being directly exposed to the contaminated water, soil and air, many of them experience health risks.

Policy Implications for Legislations Involving Women in Mining

It could be gleaned from the findings of this study that the women miners need legislation to protect their health. Those who are in the reproductive stage are exposed to the risk of having abortion or malformed fetus. Measures must be done to protect their health by imposing them to wear protective outfit like plastic gloves and plastic boots among others and by prohibiting pregnant women to do mining work. They must be educated on how to protect themselves against possible contaminants especially from the river water which could be contaminated by some mine tailings.

Moreover, their economic benefits must be given due attention. As claimed by the respondents, their wages were low and not enough to augment the income of their husbands. Because of the low education of the women, they could not find good paying jobs. Enhancing their

economic capacity must be strategized through livelihood training programs using indigenous raw materials which are abundant in the community. Backyard livelihood programs may be promoted like gardening and animal raising (chickens, ducks, goats). If economically capacitated, the women may not be anymore too burdened in working at home and mining area at the same time.

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