BIBLIOGRAPHY

DACNES, MARICEL V. APRIL 2013. Gold Panning in Tinongdan, Itogon,

Benguet. An assessment. Benguet State University, La Trinidad, Benguet.

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ABSTRACT

The study was conducted in Tinongdan, Itogon, Benguet with 50 respondents who

were engaged on gold panning. It was conducted to determine the reasons why the

respondents are engaged in gold panning, the family members who are involved in the

various processes of gold panning, where do they use the money they earn from gold

panning, and the problems encountered by the respondents on gold panning.

Majority of the respondents were male and married. In educational attainment most

of the respondents did not finish formal education and most of the respondents belong to

the older age bracket. Result showed that most of the respondents had been engaged in

gold panning for 1 to 10 years. Majority of the respondents claimed that their average

production of gold is from 1 to 3 grams in a week depending on their ability to work. An

average income of 1000 to 3000 pesos can be produced depending on the price of gold in

the market.

The results revealed that gold panning is the main source of income among the

residents of Tinongdan, Itogon, Benguet. The other reasons why the respondents engaged

in gold panning were as follows: it requires low cost of investment and gives high return

in a short period of time, it improves standard of living, and it is a good source of capital for farming activities.

The findings showed that fathers were more involved in panning than the other member of the family because of their strength and endurance. On the processing of gold, fathers were more knowledgeable and in the marketing, mothers were the ones who sell the gold. Gold panning promotes closer family ties among panners by helping each other to work on the various processes of gold panning.

The respondents claimed that the money they earned from gold panning was used for basic needs of the family. Other uses enumerated in descending order by the respondents were as follows: for buying clothes and paying credits, for buying medicines and for paying the school fees of their children and for house construction.

As for the problems encountered in gold panning, majority of the respondents experienced body pains and most of them experienced over fatigue and skin infections. Air pollution due to the use of chemical in the processing of gold is claimed to be the most common problem in the environment due to improper use and handling. In terms of the social problem, majority claimed that the migration of people is brought about by gold panning.



RESULTS AND DISCUSSION

Background Information about the Respondents

Table 1 presents the background information about the respondents as to their gender, age, civil status, educational attainment and the number of years in gold panning.

As shown in Table 1, majority of the respondents (66%) were males involved in gold panning activities. There were more males involved in gold panning since it is a very laborious activity where physical strength is needed; 31% of the respondents were females that were involved in gold panning.

Most of the respondents involved were from 51 - 60 years old, followed by 41 - 50 years old. This shows that most of the respondents were middle age and they preferred to do gold panning as their source of income.

Majority of the respondents were married. Out of the fifty respondents 34 were married, 11 were single and 5 were widows. This implies that married people were engaged in gold panning because they need more money to support their family.

As to the educational attainment, 56 % of the respondents had elementary education. 42 % were able to reach high school level of education and only 2 % had finished college. This shows that most of the respondents lost interest in going to formal education because they were engross with gold panning.

Forty percent of the respondents had been engaged in gold panning for 1-10 years, 28% for 11-20 years experience in gold panning. It showed that majority of the respondents were experienced gold panners. This implies that they preferred gold panning as their source of income to support their family.



Table 1: Background information about the respondents

PARTICULARS	NO. OF RESPONDENTS	PERCENTAGE
Gender		
Male	33	6
Female	17	31
TOTAL	50	100
Age		
20 - 30	10	20
31 – 40	5	10
41 - 50	13	26
51 – 60	19	38
61 - 70	3	6
TOTAL	50	100
Civil Status		
Single	11	22
Married	34	68
Widow	5	10
TOTAL	50	100

Table 1. continued ...

PARTICULARS	NO. OF RESPONDENTS	PERCENTAGE
Elementary	28	56
High School	21	42
College	1	2
TOTAL	50	100
No. of Years in Gold Pann	ing	
1 - 10	20	40
11 - 20	14	28
21 - 30	8	16
31 - 40	6	12
41 - 50	2	4
TOTAL	50	100

Reasons for Engaging in Gold Panning.

As shown in Table 2, most of the respondents (74 %) claimed to have engaged in gold panning because it provides employment. The other reasons, as enumerated by the respondents, in a descending order of preference were as follows: it requires low investment cost and gives high return in a short period of time, it improves standard of living, and it is a good source of capital for farming activities.

Results of the study imply that gold panning is a good source of income and it caters to the needs of the people in the rural areas. The findings relate to the claim of Andres (1997) that mining plays a major role in the national economy in terms of employment



generation. It has great positive contributions to both economy and development of the communities.

Table 2: Reasons for Engaging in Gold Panning

	NO. OF	PERCENTAGE
REASONS	RESPONDENTS	(%)
Provides Employment	37	74
Improves Standard of Living	12	24
Provides Capitalization for Farming Activities	4	8
Source of Income	42	84
Low Investment and Short Implementation Period	14	28

^{*}Multiple Responses

Average Production of Gold per Week.

As shown in Table 3, most of the respondents (76%) claimed to have an average production of gold from one to three grams a week. Other respondents claimed that their average production of gold in a week is from four to six grams, seven to nine grams in a week and ten grams

The finding implies that production of gold is dependent on the ability of the gold panner to extract gold from the river. Gold panning is a laborious activity where physical strength is needed, this means that you have a better chance of getting more gold when you are physically fit. According to the respondents they can also get more gold when they work for longer hours as long as they can tolerate the heat of the sun. They also claimed that they get more gold after there is heavy rain or after typhoons because of the runoff from the mines.



Table 3: Average Production of Gold per week

AVERAGE PRODUCTION (grams)	NO. OF RESPONDENTS	PERCENTAGE (%)
1 -3	38	76
4 - 6	9	18
7 - 9	2	4
, ,	2	•
10 and above	1	2
TOTAL	50	100

Average Income.

Majority of the respondents claimed that their average income from gold panning is from Php 1,000 to 3,000 per week. Followed by respondents who claimed that they have an average income of Php 4, 000 to 6, 000 per week. Only few claimed that they can have an income of Php 7, 000 to 9, 000 per week.

The result implies that they are earning an amount just enough to sustain their family needs. The respondents claimed that the income they get depends on the prevailing price of gold in the market.



Table 4: Average Income

AVERAGE INCOME(Php)	NO. OF RESPONDENTS	PERCENTAGE (%)
1,000 - 3,000	26	52
4,000 - 6,000	21	42
7,000 - 9,000	2	4
10,000 and above	1	2
TOTAL	50	100

How they Use their Money Earned from Gold Panning

As shown in Table 5, all the respondents claimed that the money they generated from gold panning is primarily use to buy food. Other uses enumerated in descending order by the respondents were as follows: for buying clothes and paying credits, for buying medicines and for paying the school fees of their children and for house construction.

The findings imply that most of the earnings of the respondents from gold panning is for buying mainly the basic needs of the family. The finding supports the claim of Punay (2004) that most of the families believed that the gold they get from mining is God's gift that has to be taken to meet their needs.



Table 5: Usage of Money Earned from Gold Panning

USES	NO. OF RESPONDENTS	PERCENTAGE (%)
For buying food	50	100
For buying clothes	31	62
For buying medicines	27	54
For house construction	11	22
For paying school fees of children	27	54
For paying credits	31	62

^{*}Multiple Response

<u>Family Involvement in the Various</u> Processes of Gold Panning

Family involvement in the various processes of gold panning as to panning, processing, and marketing as shown in Table 6.

Most of the respondents claimed that fathers were more involved in gold panning than the mothers or other members of the family because of their strength and endurance. This finding relates to the claim of Pena (2002) that small scale gold mining is an activity that relies on manual labor.

As shown in Table 6 most of the respondents claimed that the fathers were involved in the processing of gold. It implies that fathers were more knowledgeable on how to process gold.

In marketing, majority of the respondents claimed that mothers were the ones who sell the gold. It showed that mothers were trusted to handle marketing of gold.



Gold panning activities promotes cooperation among families. The respondents claimed that gold panning activities needs a full cooperation among family members to facilitate the panning and processing of gold.

Table 6.Family Involvement in the Various Processes of Gold Panning

PARTICULAR	NO. OF RESPONDENTS	PERCENTAGE (%)
Panning		
Father	37	74
Mother	22	44
Children	11	22
Multiple Response		
Processing		
Father	35	70
Mother	11	22
Children	10	20
Multiple Response		
Marketing		
Father	24	48
Mother	33	66
Children	17	34
Multiple Response		



Problems Encountered in Gold Panning.

Health problems were common to all of the respondents. Body pain was mentioned by 98% of the respondents and over fatigue was another complaint 72 % of gold panners since it is a laborious work. Other problems were skin infections and respiratory illnesses. This shows that gold panning had several health hazards.

With regard to the environmental problems that can be derived from gold panning, most of the respondents (74 %) claimed that air pollutants were due to the use of chemical (nitric acid) used in the processing of gold as major environmental problem. According to the respondents air pollution due to the use of chemical during the processing of gold is not only an environmental problem but it also affects their health. They also mentioned widening of river banks (58%), water pollution (22%) and siltation as contributors to environmental problems as a result of gold panning.

On the social problems, majority of the respondents claimed that migration of people (58%) is a major problem brought about by gold panning. Other problems were deterioration of peace and order and increase in the number of out of school youth. The result implies that gold panning induce migration of people in the community. Gold rush attracted migrants to try their luck. Several problems of physical injuries were recorded due to the drunkenness and misunderstanding among gold panners. According to the respondents there was an increase in number of out of school youth since they prefer to venture in gold panning and leave school.



Table 7. Problems Encountered in Gold Panning

PROBLEMS	NO. OF RESPONDENTS	PERCENTAGE (%)
Health Problems		
Respiratory Illness	4	8
Skin Infection	31	62
Over Fatigue	36	72
Body Pains	49	98
Multiple Response		
Environmental Problems		
Water Pollution	11	22
Widening of River	27	54
Siltation	5	10
Air Pollution	37	74
Multiple Response		
Social Problems		
Migration people	29	58
Peace and Order	17	34
Increase no. of	11	22
Osy		
Multiple Response		



SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

Majority of the respondents were male and married. In educational attainment most of the respondents did not finished formal education and most of the respondents belong to the older bracket. Result showed that most of the respondents had been engaged in gold panning for 1 to 10 years. Majority of the respondents claimed that their average production of gold is from 1 to 3 grams in a week depending on their ability to work. An average income of 1000 to 3000 pesos can be produced depending on the prevailing price of gold. All of the respondents claimed that the money they earned from gold panning is used for buying the basic needs of the family.

The result revealed that gold panning is the main source of income of the respondents. Gold panning promotes closer family ties among panners by helping each other to work on the various processes of gold panning. The respondents claimed that the money they earned from gold panning was mainly used for basic needs of the family.

As for the problems encountered in gold panning, majority of the respondents experienced body pains, over fatigue and skin infections. Air pollution was due to the chemical used in the processing of gold. These were the most common problems that results to serious threat in the environment. In terms of the social problem, majority claimed that the migration of people was due to gold panning activities where people from other places engaged in gold panning in Tinongdan, Itogon, Benguet.



Conclusions

The following conclusions were drawn based on the findings:

- 1. Gold panning is the main source of income of the people in Tinongdan.
- 2. Gold panning provides livelihood to the respondents and it promotes closer family ties by working together.
- 3. Most of the respondents' livelihood is gold panning, it is where they earn money to buy their basic needs.
- 4. Problems brought about by gold panning were environmentalwhich is pollution of air due to the chemical used, social which is migration of people and mostly health related problems which is body pain and fatigue.

Recommendations

- 1. Gold panners should invest their income to other livelihood projects to augment their household income.
 - People should consider safety precautions in handling chemicals during processing of and disposal of waste.
 - 3. Safety procedures and the use of protective gadgets should be observed during the processing of gold.



LITERATURE CITED

- ABRAMATEA, N. 2003. Manila Bulletin. August 26, 2003. Vol. 368. No. 26. p. 3.
- ANDRES, C. M. 1997. Social Acceptability of Mining. Ancestral Rights and Community Issues. P.109.
- BENNET, N.1996.DENR Solutions to Open Pit Conflict.The Baguio Midland Courier. XLIX. P. 15.
- BENTREZ, M. 2000. Baguio City Cordillera Resources Center for Indigenous People's Right Inc. and Mining Communities Development Center Inc. Pp. 5-7.
- BOTENGAN, B. 1997. Open Pit Mining Ok'd with some conditions. Baguio Midland Courier. Vol. XLIX: 10-15.
- BOSHKOV, L. 2003. Mining Facts. New York: McGraw Hill. P. 10.
- CARINO, J. 1993. Issue Paper 10. Itogon Inter-Barangay Alliance: Highlights of the General Assembly Meeting on August 2, 1992 and February 28, 1993. Cordillera Studies Center, 1993. Pp. 11-36.
- CHADWICK J. 1987. International Mining Corporation. New Jersey: Edward Brothers Inc. Pp. 19.
- MINING COMMUNITIES DEVELOPMENT CENTER AND THE CORDILLERA ENVIRONMENTAL CONCERN COMMITTEE, 1990. Open Pit Mining in Itogon, Benguet.
- NEW STANDARD ENCYLOPEDIA. 1996. Volume II. Publisher, edition. Pp. 281-282.
- PENA, LL. 2002. Philippines Law on Natural Resources. Quezon City. Rex PrintingCompany Inc. P. 142.
- PUNAY, MG. 2004.A Video Documentary on the Mining Operation to the Mining Communities of Itogon, BS.Thesis, BSU, La Trinidad, Benguet.
- WORLD BOOK ENCYCLOPEDIA. 1991. Vol.13, Pp. 57.

