

making an action plan for the implementation of ethical mining in their community. They tried to define ethical mining according to their culture as well as based on the lectures of the previous day. The participants also identified the activity's advantages and disadvantages. They were able to formulate an action plan for the future implementation of ethical mining. The session was facilitated by Professor Scott Saboy, Mr. Edmund Bugnosen and Mr. Edgar Banasan.

To officially end the conference, the hosts presented certificates to the resource persons and the participants. A group photo was also taken.

Table 3. Actual Flow of the Conference for Day 2

morning	Recap of Day 1 facilitated by EDAYA Staff
12:00	Lunch
Afternoon	Advantages and Disadvantages of Ethical Mining facilitated by Prof. Scott Saboy Elements of Ethical Mining, facilitated by Engr. Edmund Bugnosen and Prof. Saboy Statement on Ethical Mining, facilitated by Edgar Banasan Action Planning, facilitated by Edgar Banasan
	Closing and Distribution of Certificates

A site visit to the old Batong Buhay gold mine in Barangay Balatoc, Pasil was arranged after the two-day conference. The research team included Dr. Satoshi Murao, Mr. Edgar Banasan and Ms. Ayaka Yamashita of EDAYA Arts, Mr. Leo Emmanuel Castro and Ms. Danae Pantano of Environweave. Mr Edgar Banasan led the team to the site and introduced key informants. Access to the site entailed a two-hour hike from the provincial road. The visit ended with lunch near the site, at the house of one of the informants.

3. Opening Ceremonies, Film Showing and Cultural Exchange

3.1. Registration and Orientation

Registration for the participants along with the distribution of the seminar kits began at eight o'clock in the morning at the main hall of the hotel facilitated by the staff of EDAYA Arts Cordillera. Most of the participants arrived on time. Before the start of the program, snacks were served to the participants while Wryneth from EDAYA oriented the participants about the rules and reminders in the venue and the changes in the program. General information sheets to be filled out by the participants were distributed and will be collected at lunch.

To break the ice among the participants, they were organized into groups, were seated together accordingly and were tasked to make a cheer to be presented right before the start of the program. Ayaka Yamashita, director of EDAYA Arts Cordillera also gave an orientation about the conference hoping for a fruitful and successful conference since it is a new concept for the participants.

The program started at exactly ten o'clock in the morning and was opened through an invocation led by Guzman Guimba, one of the community elders. Mr. Guimba recited an Ugayam, an indigenous chant for good luck and prayer for the success of the activity. Wryneth Mayapit of EDAYA Art Cordillera, the master of ceremonies, welcomed all the participants to the event and introduces Dr. Satoshi Murao to deliver the opening remarks.

3.2. Welcoming Remarks

Dr. Satoshi Murao, the senior research scientist at the Institute of Geo-Resources and Environment, National Institute of Advanced Industrial Science and Technology (AIST), officially opened the conference and welcomed the participants to the beautiful province of Kalinga. He apologized for his late arrival caused by the canceled flight of the plane from Manila to Tuguegarao. He explained the role of gold mining in the community life, stating that the activity has contributed to the development of not only Kalinga but also the world as the trend for mining is now expanding, shifting to ethical lifestyles including environment-friendly procedures. Dr. Murao emphasizes the importance of fusing or combining traditional values to modern technologies in implementing ethical mining methods.

Dr. Satoshi Murao also presents efforts in order to reduce the use of mercury in gold mining as discussed in the 2013 Minamata Convention of Mercury in Japan. With the visible sentiment of the people for gold in Kalinga, he hopes for a more sustainable community and culture as they embark on another new concept, ethical mining. Furthermore, he claims that the conference is only the first step towards achieving the goal of capturing ethical mining as the world trend.

3.3. Inspirational Message

The inspirational message was given by a councilor of Pasil Kalinga on behalf of the municipal mayor of Pasil, Kalinga, Hon. James Edubba. Mr. Yao mentioned that there have been several meetings with the local government and Mr. Edgar Banasan of EDAYA about ethical mining. With three barangays/municipalities involved, he explains that the presence of the experts and researchers today as well as the purpose of this conference is to introduce and teach an alternative to the present method of gold mining in the area especially to those who are planning to pursue mining. They are here to learn and he recognizes the event/activity as a blessing for it provides alternatives to mining.

Before the start of the technical sessions, Wryneth introduced the participants according to where they came from. Participants were generally from the villages of Balatoc, Colayo and Guinaang, governmental organizations, EDAYA Arts Cordillera and Environweave, private companies-Bugnosen Mineral Engineering and Academic Institutions -AIST.

3.4. Introduction of the Conference

Ms. Ayaka Yamashita, co-founder and director of EDAYA Arts Cordillera based in Baguio City gave the introduction of the conference presenting the orientation framework, objectives as well as the flow of the program. She introduced first EDAYA Arts Cordillera as an organization advocating the preservation of culture, arts, crafts and musical instruments of the Cordilleras. With the interests and with her meeting with Dr. Satoshi Murao at an ASEAN meeting in Japan, they have both agreed to collaborate on a project in Kalinga. The logo that was introduced for the conference presents a mountain and a hometown with many blank spaces which represents the question of what you can still do about mining in Kalinga. The objectives of the conference are the same as above. The main goal of the conference is for the participants to think about what they can do for their communities and to make an action plan regarding the current mining situation in the area.

3.5. Video on Minamata Disease

A video presentation was shown during the working break of the first day of the conference. It was a documentary from the Minamata City Library about the Minamata sickness in Japan caused by mercury poisoning. The outbreak began when mercury was discharged to the sea by the Chisso Corp. Factory and polluted marine life in the area. Because of this, the people experience incidents of cerebral palsy like symptoms. This was later discovered as the disease which attacks the nervous system causing convulsions, numbness of hands and feet, madness, etc. because of methylmercury poisoning identified as the Minamata disease (named after the Japanese city where it was discovered). The disease spread in the area increasing the number of victims. Trials were held because of the incident later on achieving justice to the victims forcing the Chisso Corporation to provide victims medical care assistance. The video also showed how the government was able to create a political solution to the problem such as the cleaning up and the reclamation of the bay.

The second performance was also a dance and a song number spontaneously performed by the participants from the community (most of those who joined the activity were from the Guinaang tribe). They performed a traditional community dance of the cordillera where the women imitate the movement of the birds while the men dance while playing the gangsa or the flat gongs of the Cordilleras.

The participants from Environweave showcased and played some indigenous instruments from the different parts of the Philippines. They also performed and taught the participants, Pangalay, a traditional temple dance from southern Philippines imitating the movement of the waves of the sea.

The resource persons also had their share of presentations. Dr. Satoshi Murao sang an opera song performing an Italian classical song about love. Mr. Edmund Bugnosen, being a Cordilleran, sang a traditional Cordillera song wherein later on, everyone joined in the singing. Mr. Scott Saboy also performed a Cordillera traditional song.

The founders of EDAYA, Mr. Edgar Banasan and Ms. Ayaka Yamashita also performed songs accompanied by both western and indigenous instruments. Mr. Banasan sang a song in Kalinga while Ms. Yamashita, a Japanese song. At the end of the activity, participants joined in the community dancing. Dinner was served afterwards.

4. Plenary Sessions

4.1. Introduction of Ethical Mining

Ms. Ayaka Yamashita introduced the concept of what is ethical by giving its dictionary meaning (Literal meaning: morally good or correct). It is interpreted as avoiding activities or organizations that harm people or the environment. In the Kalinga sense, the concept of what is ethical becomes relational and holistic according to the culture of the region: not only are they mindful of the activity (in this case, mining), but of the whole surrounding environment. The usual example used when talking about what is ethical is clothing. The speaker introduced a tragedy in Bangladesh where a factory collapsed because of overload. Efforts have been made to raise the awareness of consumers regarding the clothing production situation such as holding fashion revolution days and through vending machines which let you donate to causes supporting the laborers of the industry. Consumers are now changing. They are now becoming more conscious about who and how they are making these products and are becoming willing to pay for the additional cost of ethically-produced goods.

4.2. “World Trend About Ethical Mining”

Speaker	Dr. Satoshi Murao
Presentation	Delivered in English.
On the JPOI, 2002	<p>The presentation starts with the Johannesburg Plan of Implementation (JPOI) of the World Summit on Sustainable Development in 2002 where it recognizes the contribution of the extraction of minerals and metals in economic development.</p> <ul style="list-style-type: none"> • The JPOI formulated an outline of considerations with regards to the contribution of the mining industry to sustainable development.

	<ul style="list-style-type: none"> • This includes various aspects from the environmental, economic, health and social impacts of mining to worker’s health and safety, participation of the different stakeholders, governmental or otherwise, the key of which is the transparency and accountability of the mining industry and its various stakeholders. • Special mention was made in enhancing the participation of women and indigenous communities in the life cycle of mines as well as rehabilitation of these sites. • Sustainable mining practices must be fostered through the provision of different types of support: financial, technical as well as capacity building. • Besides mining, the JPOI further states that if appropriate there should be initiatives to improve value-added processing, upgrade of scientific and technical knowledge and provide after-mining rehabilitation/reclamation of abandoned mining sites.
On mineral production in Asia	<p>Asia is a major producer of minerals and metals: 82.5% of the world mine production of antimony, 19.8% of copper, 23.8% of gold, 53.4% of lead, 41.3% of molybdenum, 29.1% of nickel, 79.1% of tin, and 42.3% of zinc.</p> <ul style="list-style-type: none"> • But in the different economies of Asia, the mining sector contribution in the GDP of these economies ranges from 5.6 % (China) to 0.01% (Japan) and for the Philippines, it is 1.6%. From these figures, mineral development can be an economic driver in the region. • There has been an increase in demand for green technologies world wide. These technologies need Rare Earth Elements and Metals, thus the increase in demand for these and China have been a major producer accounting for 90% of the production of these Rare materials.
On gold mining	<p>Gold mining has also been mentioned as the being the second-worst source of mercury pollution.</p> <ul style="list-style-type: none"> • Anti-mining campaigns have strengthened and have globally networked due to the prioritization of mining industry without proper regard over the rights and safety of people and community.
On action by international organizations	<p>Various international organizations have begun implementing some of the JPOI agenda.</p> <ul style="list-style-type: none"> • One example is the Global Reporting Initiative which is network-based

	<p>organization which pioneered the formulation of a sustainability reporting framework widely used for transparency and improvement purposes.</p> <ul style="list-style-type: none"> • With respect to mercury contamination, a partnership between international organizations such as the United Nations Industrial Development Organization and United Nations Environmental Protection through the Global Mercury Partnership formed in 2005 have aimed at a 50% reduction of mercury in ASM gold mining by 2015.
On action in the mining industry	<p>At the mining industry sector level, there has been increased cognizance of the impact of mining to peoples and communities.</p> <ul style="list-style-type: none"> • There is a growing awareness of constructive community engagement as part of good business. • Investors have begun to demand that investments be made on mining companies that is environmentally and socially responsible.
On the “Eco-Town” concept	<p>Part of the presentation is the introduction of the Eco-Town concept which is an integrated approach which makes mineral extraction and processing more viable environmental by taking into consideration town and community planning, waste management, recycling, environmental remediation and industry modernization. Slides were shown of communities in Japan where the concept have been successful.</p>
Open Forum	<p>John Dulawen, a former SB member of Pasil, pointed out that the presentation should be translated to Kalinga so that the participants can better comprehend the topic being discussed. He also suggested that the JPOI be translated to Iloko.</p>
	<p>Former Vice Mayor of Pasil Mr. Artemio, spoke about the following:</p> <ul style="list-style-type: none"> • Small scale (artisanal) mining as a new concept- no assistance from the government. • In Pasil, development of small and large scale mining is in accordance with Mining Act of 1995 • the requisites for small scale mining as legislated makes it difficult for real small scale miners to acquire rights. As far as he knows there is only one permit issued under the Minahan ng Bayan for the entire country • Concept of ethical mining more doable in small or large scale mining? If

	<p>it is doable in small scale mining, the permitting process should be easier for real small scale miner.</p> <p>Dr. Murao's response:</p> <ul style="list-style-type: none"> • concept of ethical mining is exclusively for artisanal mining • through legislation and effective implementation, the experience of Mongolia artisanal small scale gold mining is successful
	<p>Prof. Saboy raised that point of developing skills (in doing ethical mining) and offered his assistance as a Kalinga researcher.</p>
	<p>The question was also raised as to what the AIST can offer the communities of Pasil.</p> <p>Dr. Murao's response:</p> <ul style="list-style-type: none"> • The AIST is a clearinghouse of information, it can provide data and information • As a researcher, he can provide/suggest links to other institutions which can provide resources in support of local mining initiatives <p>Ms. Ayaka's response:</p> <ul style="list-style-type: none"> • Collaboration project with Japan but it does not mean everything will be provided by one stakeholder only. Action plan for all stakeholders • Practice should be supported by theory (skills training)

4.3. "Present Status of Ethical Gold Production in Mongolia"

Speaker	Dr. Satoshi Murao
Presentation	Delivered in English.
On the project framework	<p>The institutional framework of the project is a cooperative engagement between the stakeholders</p> <ul style="list-style-type: none"> • the government where the initiative is to protect the miners and grow the artisanal gold mining sector into an industry; • development assistance from a foreign government and for the miners whose incentive to engage in ethical production is the direct exportation of their product.
On Mongolian	<p>In the Mongolian context, the product is called fair-mined gold.</p> <ul style="list-style-type: none"> • The certification comes from the Alliance of Responsible Mining who has

<p>fair-mined gold</p>	<p>set a standard for what is fair-mined gold.</p> <ul style="list-style-type: none"> • The framework in Mongolian experience comes from Gov. Resolution 308 where the central government, with the assistance of the local assembly and other government agencies, shall identify and establish an area for processing of gold ore extracted by small scale miners. • A local business entity will be chosen based on its capacity to comply with the terms and conditions set by the resolution.
<p>On sustainable ASGM</p>	<p>A Sustainable Artisanal Mining site was documented in the presentation with photos of the different structures and technologies involved in the fair-mined gold production in Mongolia. The head of the business entity, Mr. Otogonbataar, was interviewed and several points were raised during the interview:</p> <ul style="list-style-type: none"> • he said that he wanted to focus efforts and support for the miners and for the miners to have increased responsibilities in the endeavor • an NGO was then formed complying with the national rules and its charter in the operation of the business enterprise. • the plant was set-up with funds from three investors as well as assistance of the Swiss Overseas Development Assistance fund • The enterprise also has its controversies when it came to the tailings. • Since the tailings still contained gold, the question is who owns the tailings--the business entity or the local miners? The miners are suing the local authority for full ownership of the tailings.
<p>Open Forum</p>	<p>From Mr. Dalasen:</p> <ul style="list-style-type: none"> • narrates of a proposal circulating in Pasil where a cooperative is formed to own and operate a small mining corporation. • He also pointed out that the members and owners are homogenous because they belong to the same community and probably relatives too. • The local government unit will act as facilitator and provider of needs and necessities of the cooperatives.
	<p>From Ms. Ayaka:</p> <ul style="list-style-type: none"> • She asked the participants how can the people of Pasil replicate the experience in Mongolia where there is no agriculture in the area where the fair-mined gold was being processed. • How can the communities in Pasil utilize the concept that was successfully done in Mongolia?

4.4. “Ethical mining and Chemicals”

Speaker	Engr. Edmund Bugnosen
Presentation	Delivered in English and Iloko.
On process of gold mining	<p>Overall, Engr. Bugnosen gives a schematic of gold mining as an activity.</p> <ul style="list-style-type: none"> • From identifying who the small scale gold miners are, their contribution to the overall production of gold in the country to the bureaucratic process of getting different permits from the different agencies and the institutional support being provided, Engr Bugnosen stressed that the work, practices, systems and attitudes should be proper, moral, legal and do no harm to the environment and others, acceptable to the community and have respect for the views and rights of others.
On types of gold deposits	<p>The different types of gold deposits and its recovery were discussed.</p> <ul style="list-style-type: none"> • According to the presentation, the type of gold deposits and its qualities determines what is the best method to extract and recover this precious metal.
On gold recovery methods	<p>Recovery methods in extracting gold from the ore were discussed:</p> <ul style="list-style-type: none"> • The first is the physical process where gold is separated manually from other minerals due to its color, appearance, malleability and hardness. • Second is its affinity to mercury which is the basis of the amalgamation process. Third is the reaction of gold to chemicals. Gold is soluble in diluted alkaline cyanide after which the solution is precipitated in activated carbon. This is the basis for the cyanidation process. • Last is the gravimetric process where the differences of the specific gravity of a mix of different minerals of similar sizes will separate through different physical methods such as the introduction of air or water.
On gravimetric processes	<p>Different gravimetric process are then discussed with the goal of illustrating that there are practices which small scale miners can adopt which are not harmful to the the health, to the environment and is part of an ethical mining practice.</p>

4.5. “Ethical Mining : A Conservative -Humanitarian View of Small-Scale Mining in Kalinga”

Speaker	Professor Scott Saboy
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Presentation	Delivered in English
On ethical and moral	The presentation begins with the differentiation of what is ethical and what is moral. The difference being ethical is relational (with respect to the other) and moral is personal. In the context of mining, it is the responsible extraction and production of minerals and metal to which, according to the presentation is a “myth” in local practices.
On Kalinga core values	Prof. Saboy also discussed the three core values of Kalinga culture, namely: <ol style="list-style-type: none"> 1. Paniyaw which means taboo 2. Fain meaning shame and, 3. Ngilin, abstinence <p>These three core values guide how Kalinga relate with each other and with the environment.</p>
On perspectives of how IPs are viewed	Three perspectives on how the Indigenous Peoples are viewed is presented: <ol style="list-style-type: none"> 1. The first perspective is the primitivist-environmentalist perspective which views IPs as having a superior culture thus resulting in their separation from society. 2. The second perspective is the political-liberal where the IPs are viewed as victims thus the resolution to their issues is through liberation. 3. The third perspective is the conservative-humanitarian view. The IP is seen as human agents capable of determining their actions and this results in their recognition as part of society with full rights and responsibilities equal to the rest of society.
On the Bodong System	For Kalinga, the Bodong System represents the third view on how the Kalinga ethno-linguistic groups govern their territories. The core of the Bodong, is the “Pagta” or law, and the “Bugis” or territory. <ul style="list-style-type: none"> • This is illustrated in the Banao Bodong Association within which Gaang mine is situated. With the proactive leadership and community participation in this traditional system, it actively engages the government, non-government organizations, people’s organizations and individuals thus ensuring recognition and respect for its system in governing their ancestral domain. • The Banao Bodong Association is able to implement non-toxic methods in recovering gold, and through proper capacity building of the stakeholders, they are able to recover gold higher compared with the use of mercury and other chemical means.

On assessment frameworks	The gains are sustained through a framework where the community goes through a process of acknowledging challenges by having their own assessment mechanism. From the challenges enumerated, they have the option to engage in productive partnerships from which programs of activities and projects are organized and implemented. Results are then assessed through self/group evaluation. With the evaluation, new challenges are identified and it goes through the process once again.
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4.6. “Mercury Free Mining in Gaang”

Speaker	Hon. Vice Gov. Jesse Capuyan Mangaoang
Presentation	The speaker narrated the experience in Gaang mines, located in Barangay Balbalasang in the municipality of Balbalan, which is adjacent to Pasil.
On Gaang Mines	<p>About the Gaang Mines:</p> <ul style="list-style-type: none"> ● Gaang Mines in Balbalan, Kalinga is one of the largest ancestral domains in the country measuring 55 sq km. ● This area is managed by the Banao Bodong Association in which the Vice Gov. was the former president. According to the Vice Gov. Jesse, foremost consideration in managing the territory is safety and protection of the people and their territory. ● According to the Vice Gov. Jesse, though unverified, Gaang mines produce 100 Kgs. of gold every 15 days.
On management of the mining site	<p>Three of the fourteen barangays of Balbalan manage the territory.</p> <ul style="list-style-type: none"> ● The three barangays carefully control who can enter and engage in mining in their territory. ● Outsiders can only visit the mine site up to seven (7) days after paying fees to the community. ● The members of the eleven barangays of Balbalan are given the privilege to mine in the area with limits to the number of miners allowed to dig up tunnels and extract gold.
On issues in the community	<p>Because of the increase in income due to gold mining, problems have cropped up.</p> <ul style="list-style-type: none"> ● Flaunting of wealth is discouraged. ● As narrated by the speaker, before, miners would go to Tabuk and close down a popular restaurant so they can spend on food and drinks. Miners are now investing their earnings on acquisition of land.

	<ul style="list-style-type: none"> • Another problem have been illegal drugs. The Bodong Association has required mandatory drug-testing of miners before they can engage in mining activities.
On mercury-free mining	With the introduction of mercury free mining, the Bodong Association has embraced the practice and has imposed mercury-free extraction of gold in its territory through the help of Ban Toxics, an NGO based in Quezon City.

5. Discussions and Outputs

5.1. Focused Group Discussion (First Day)

A focused group discussion was conducted as part of the planning for ethical mining. It was facilitated by Mr. Leo Emmanuel Castro, the executive director of Sanghabi Inc. He introduced the topic by discussing his former work in the provinces regarding the process of acquiring permits in local government units and offices. His research team suggested ways on how to improve the process and eventually implement the changes for the efficient use of the bureaucracy. They have concluded in this study that simply changing processes does a big change.

With this in mind, the participants then grouped themselves according to the community they belong to. The discussion began and enough time was given to present to everyone their outputs. The facilitator gave the participants guide questions. The two sets of questions given are listed below:

1. Identify the process of mining gold in the community
2. Based in what you have learned from the earlier inputs, identify whether the method you use for mining is ethical or not.

The discussion was conducted primarily in English, with some interpretation to Kalinga as needed. Diagrams made by the participants helped in communicating the process of gold extraction done in their respective communities.

Each group was able to present given the very limited amount of time for their discussion and the making of their paraphernalia. The Balatoc ELG was the first community to present through enumerating the answers for each question. The second group to present was the Guinaang ELG. The third group was the Colayo ELG presenting their output through an illustration.

All of the communities were able to answer the first question even with additional information. However, due to the lack of time for the session, they were not able to proceed to the second question. The answers of the participants are organized in the tables below:

Table 4A: Balatoc Focused Group Discussion Output

	Guide Questions	Balatoc
1	Where is the ore found? (Source of Ore)	<ul style="list-style-type: none"> • From the outcrop at the top of the mountain • At the outcrop, tunnels are made and are searched through veins made from the main tunnel
2	Where do you process the ore?	The group processes the ore in the community
3	Near which areas do you bring the ore?	<ul style="list-style-type: none"> • the mountains • the river • the community
4	How do you process the ore? How do you extract the gold from the ore?	<ul style="list-style-type: none"> • Milling • The use of foragrill • Sluicing with water • Mixing mercury with the concentrated ore • Squeezing with the use of a handkerchief • Cooking the product with borax
5	What do you use to extract the gold from the ore? (Chemicals)	<ul style="list-style-type: none"> • Ball mill • Sample pan • Mercury • Borax
6	After processing the ore, where do you throw the waste?	Every group has their own tailings pond
7	Where do you send the extracted gold? Do you get the right price for it?	They send the extracted gold daily to Tabuk, Kalinga and/or Baguio City, Benguet. The products are sold at the prevailing price
8	How many people do the work?	Each group consists of seven members
9	Additional Information	<ul style="list-style-type: none"> • Korean and Chinese Companies come to the mining area to buy truckloads of the community's tailings or waste.

	<ul style="list-style-type: none"> • The companies bought almost all of the contents of the tailing ponds of the community. • Tailing ponds are located in fields. • Nowadays, locals put the tailings in sacks, put it along the roads to be picked up by trucks and brought to Tabuk. • Various minerals can actually be found in the tailings of the mining activities in the area such as copper and gold. • The locals sell the tailings for 2 pesos – 12 pesos/kg , depending on the mineral content.
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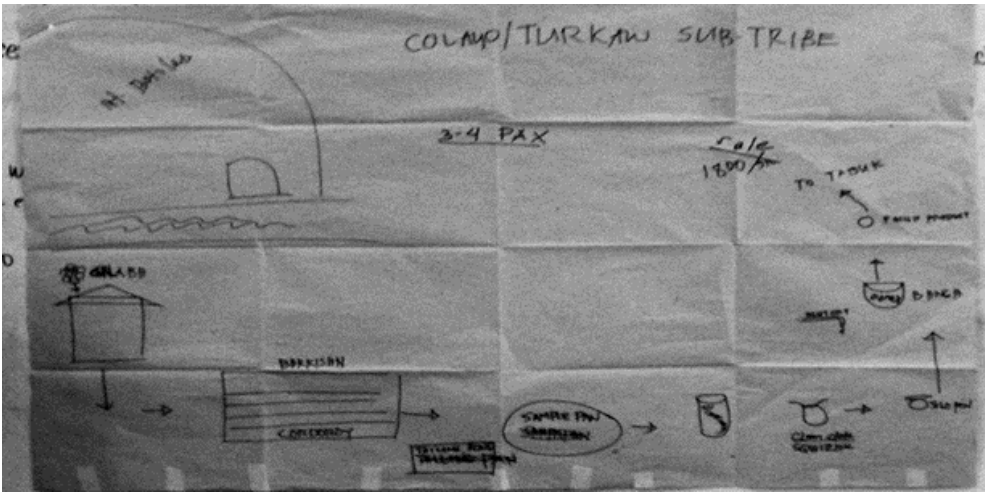
Table 4B: Guinaang Focused Group Discussion Output

	Guide Questions	Guinaang
1	Where is the ore found? (Source of Ore)	<ul style="list-style-type: none"> • The community extracts the gold from a 3,000-hectare area called the Tabia Gold Mills. • The mills can be accessed from the nearest road point through a 4-6 hour hike in the pathways. • There are three main sites in the area; the Magangan, Tumbok and the Butray Galan. Distance of each site from one another is 1-2 kilometers. • Just like other communities in the Cordillera, they extract the ore through tunnels or the Adit
2	Where do you process the ore?	
3	Near which areas do you bring the ore?	
4	How do you process the ore? How do you extract the gold from the ore?	<ul style="list-style-type: none"> • Some groups own a portable drill to make holes. They blast the holes with dynamites. When the “good” ore is acquired, they pack it in sacks and bring it to the community. • The good ore is crushed into small sizes with an axe. • The crushed ore is put in a ball mill powered by a water gauge (the water coming from the river). [Ball mills have the capacity of 4 sacks] The process usually takes 4 to 5 hours. • The ore is then subjected to sluicing. The sludge is put into a sludge canal made out of wood, a foot wide and six to ten feet long, covered

		<p>with cloth.</p> <ul style="list-style-type: none"> • After passing through the channel, the sludge is rolled and washed in a basin. • The accumulated material or the sludge concentrate is cleaned in a sample pan of 12 inches in diameter with sand. • The sludge concentrate is further cleaned through melting the impurities with borax. • After that, they clean it through squeezing with mercury. • Then, they smelt the amalgam (mercury and gold) with borax.
5	What do you use to extract the gold from the ore? (Chemicals)	
6	After processing the ore, where do you throw the waste?	The tailings after sluicing goes to the stream and flows to the Tabia river.
7	Where do you send the extracted gold? Do you get the right price for it?	The extracted gold is sold in Tabuk. Some bring it then to Baguio City to be sold at a higher price.
8	How many people do the work?	Each group consists of four to five members. [There are two shifts a day: the first 2 will enter at daytime and the other two in the evening

Table 4C: Colayo Focused Group Discussion Output

	Guide Questions	Colayo
1	Where is the ore found? (Source of Ore)	<ul style="list-style-type: none"> • The community miners operate with the old abandoned mines in their area. They have operated the existing tunnels left behind by Lepanto Mines. • The mines can be accessed through existing roads made during the time of the Lepanto Mines in the area.
2	Where do you process the ore?	

3	Near which areas do you bring the ore?	
4	<p>How do you process the ore?</p> <p>How do you extract the gold from the ore?</p>	<ul style="list-style-type: none"> • The ore is caught up in Corduroy cloth to strain the gold. • After straining, the material is put in a basin. • Using a sample pan, they will separate the gold from the rest of the material. • The accumulated gold is then separated and put in bottle, then mixed with mercury and shaken. • If it is now possible to extract the mercury, it will be put on a clean cloth to be squeezed with the material to take away all other impurities. • It will be then put in a clay pot with cellophane and clay and cooked with a blowtorch.
5	What do you use to extract the gold from the ore? (Chemicals)	
6	After processing the ore, where do you throw the waste?	
7	<p>Where do you send the extracted gold? Do you get the right price for it?</p>	<p>The finished product will be brought to Tabuk or Batong Buhay to be sold.</p>
8	<p>How many people do the work?</p>	<p>In the community a group may consist of up to twenty miners but usually only consists of 3-4 miners.</p>
9	<p>Schematic of the mining activities in their area:</p> 	

5.2. Planning Workshop (Second Day)

The second day began with a recap on what was discussed during the sessions of the previous day. Each of the participants stated what they have learned about Ethical Mining. The participants describe ethical mining as an advantageous activity for the community as it uses alternative technologies instead of toxic substances thus making health issues a priority when it comes to mining. Ethical mining basically is the promotion of responsible mining for it challenges not only sensitivity/ responsibility to the environment/surroundings but also community unity and cooperation.

The participants also mentioned some of their recommendations when ethical mining is implemented. For them, ethical mining should go beyond banning the use of toxics and infuse/integrate the method to the current small scale mining practices. It should also be culturally sensitive and abide to the local custom of the community, recognize/coexist with the communities' rights to self determination and land use thus raising the banner for communities.

All these are possible if a series of consultations with the community and follow-up will be organized allowing management of expectations, efficient information dissemination and informed decision making. Also, a structure based council should govern the activities of the community similar to the Banao-Bodong Association of Balbalan, Pasil, Kalinga.

There should also be the presence of government assistance to the small scale mining community from the government in the form of:

- bottom-up budgeting for livelihood program of Pasil
- steps toward the legalization of small scale mining in Pasil by applying Minahang Bayan for the betterment of the organization (note that the Provincial Regulatory Board is the one issuing the declaration from the Minahang Bayan to the SSM)
- considering and incorporating SSM activities with the LGU's ongoing plan creating a cooperative for Pasil
- ensuring that mines are exclusive to the people of Pasil

The community participants appreciate the discussions and presentations made for it showed them alternatives to the practices and sees this as an opportunity to affect change to the world beginning with themselves.

With the affirmation of the participants to the concept of ethical mining, efforts of the community towards its implementation are advised and encouraged by Dr. Murao and Ms. Yamashita stating that its success is a concerted effort of from the community and assisting agencies. Dr. Murao adds that assisting agencies such as AIST and UP Baguio will be happy to provide the information,

training and education of the whole community. These academic institutions shall be the partners of the local community. In line with this, Mr. Guzman Guimba, a community elder, introduces the Kalinga concept of the Bodong, a socio-political system equivalent to the concept of a state. He states that should there be a declaration or a memorandum of agreement, considering the Kalinga way, the community may need a Pagta (equivalent to a declaration).

The goal of the second day of the conference was to formulate a declaration and/or an action plan for the implementation of ethical mining, however, having no particular experience in the new method, they participants proceed to defining ethical mining based on the Kalinga culture. The participants begin with identifying the advantages and disadvantages of the method organized in the table below:

Table 5A. Advantages and Disadvantages

Advantages	Disadvantages
<ul style="list-style-type: none"> ● Increase safety of miners 	<ul style="list-style-type: none"> ● Requires logging ● damage to physical environment ● may cause conflict among the community ● labor intensive, more effort, more work ● greediness of the people (overlapping declaration causing conflict of ownership?)

In order to organize the concept and discussions, Mr. Bugnosen suggests a new organization of the topics according to the focus of the activity and the theme. Below is the list of all enumerated descriptions to characterize ethical mining, as well as the organization of topics in succeeding workshops, suggested by Mr. Bugnosen:

Table 5B. Characteristics of Ethical Mining and suggested Organization of Topics

Characteristics of Ethical Mining	<ul style="list-style-type: none"> ● no use of toxic chemicals ● fair compensation for miners ● humane treatment for worker ● no child labor (below 15 years old) ● minimize cutting of trees/ deforestation ● respect for traditions particularly rituals ● strengthens customary law ● EM supports the DENR
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	<ul style="list-style-type: none"> ● unethical for children to work because it affects their studies. ● ladies do not usually go inside the tunnels. Usually assist miner in their needs ● face to face interaction to understand each other no middlemen ● there should be a comfort room ● there should be a compost pit in order for proper disposal of waste ● considers the welfare of other communities ● there is proper waste management, and waste considered as a resource (closed loop) ● it will give people jobs ● it has benefits to the environment ● Engr. Bugnosen, on the practice in Gaang, Balbalan: if access to a mining site is to be restricted from other tribes, this is not ethical: it should be open to all; it is greedy if you do that. If we use the Kalinga way, mining resources should be available to everyone
Organization of topics	<ol style="list-style-type: none"> 1. Permitting <ul style="list-style-type: none"> – the Pasil people feel that mining without the permit from the Bureau of Mines is ethical, but we still want to comply because we want to get assistance from the government 2. Labour 3. Ore Extraction 4. Cultural practices 5. Marketing 6. restoration 7. use of income 8. organization 9. women participation

The participants then organized the concepts above into the following themes:

Table 5C. Elements of Ethical Mining

Theme	Statements
ENVIRONMENTAL	<ul style="list-style-type: none"> ● limit cutting of trees ● take what is needed ● proper waste disposal ● no use of toxic chemicals ● reforestation required

CULTURAL	<ul style="list-style-type: none"> • respect for traditions • minis is open for all • cultural sensitivity • strengthen customary laws • ritual performance • strengthen culture
ECONOMIC	<ul style="list-style-type: none"> • fair compensation for miners • we can sell it to anyone not necessarily legal markets (central bank) • proper pricing
SOCIAL	<ul style="list-style-type: none"> • series of proper consultations • should undergo proper process • women can do some mining works • responsible leadership • we still need to comply for the government assistance • permit needed for it is ours (Pasilians) • accountability of leadership • consider the welfare of the neighboring areas • humane treatment of workers • direct negotiation, no middle management • consider women's welfare • minimal social problems • assistance for education • think of the educational welfare of the young • avoid child labor • provides job opportunities

To complete the definition of ethical mining, the participants constructed sentences based on the concepts above in the table below:

Table 5D. Statements on Ethical Mining

Topics	Sentences
Ownership Labour Women Participation Organization	<ul style="list-style-type: none"> • Adhere to and sustain the traditional ownership of land and resources therein and will endeavor to comply with the government permitting requirements • Allow 18 years old and above and women to participate • consider the decision of the mining tribes as to who are allowed to work

	and get the consent of tunnel owners
Extraction Recovery Restoration and Waste Management	<ul style="list-style-type: none"> • Apply safe and acceptable mining methods including blasting and processing technology but totally prohibit the usage of Hg • Properly contain and manage generated waste including tailing and other domestic wastes • Due to necessities, allow cutting of trees provided that there must be tree planting as replacement
Marketing Use of Income	<ul style="list-style-type: none"> • Sell gold products to buyers not necessarily the central bank • Promote production of jewelries from the extracted gold
Cultural Practices	<ul style="list-style-type: none"> • Shall respect, be sensitive and apply cultural traditions including rituals • maintain harmonious relationship among miners through direct consultation and negotiation.

After defining ethical mining, the participants have now constructed an action plan calling themselves the Pasil Ethical Mining Interim Technical Working Team composed of mobilizers/facilitators, community organizers, ethical miners and leaders. Below is the copy of the complete plan of action of the community with their assigned committees and their roles in the implementation.

1st Ethical Mining Conference
October 29-30, 2015; Pasil Kalinga

**Pasil Ethical Mining Interim Working Group
Action Plan**

Plan of Action	Specific Activities	Target Date
Preparation and Planning of the Interim Technical Working Group	a. Information Materials b. Program c. Financial Requirements	November 1, 2015 – December 31, 2015
	d. Coordination with LGUs and Concerned Agencies	January 1, 2016 - March 31, 2016
Reorganization or Strengthening of the IPO of the 3 tribes- Colayo, Bolatoc, Guina-ang	a. Meetings and Workshops (3 series for each tribe)	April 1, 2016 – June 31, 2016
	b. Invite concerned agencies as resource persons	April 1, 2016 – June 31, 2016
Registration of the organization of IPO's with SEC or DOLE (non-stock)	a. Preparation of the Constitution and By-Laws b. Filing of Registration	July 1, 2016 – September 30, 2016
Execution of MOA between the IPO's and EDAYA	a. Draft Memoranda of Agreement by EDAYA, AIST and working group b. Presentation of MOA with Translations to the perspective IPOs c. Signing of MOAs	October 1, 2016 – December 31, 2016

Committees:

EDAYA

Dr. Satoshi Murao

Guina-Ang: Mr. Dalsen, Mr. Walter Latawan

Colayo: Mr. Mike Gayaman, Ms. Rita Garcia, Mr. Randy Binuloc

Balatoc: Ms. Benita Codian, Ms. Shiella Sagasag
