

## EXPLORING RESPONSIBLE MINING : THE ISSUES

*Towards new, environmentally-friendly ways of mining*

How can Civil Society act on an international level to make its citizens firstly aware of and then actively involved in the technological, economic and political choices made by or for the benefit of the mineral industry?

Conference held on 21 March 2014 in Marseille



ISF SystExt, 2015 [CC-BY-SA]

*The international conference took place thanks to the support of the French Development Agency (Agence française de développement - AFD).*

## SOMMAIRE

|   |           |
|---|-----------|
| <b>1. Background .....</b>  | <b>2</b>  |
| <b>2. How should we go about letting people know about - and making them suitably aware of - mining issues? .....</b> | <b>4</b>  |
| 2.1. Properly identifying our public.....   | 4         |
| 2.2. Telling a story.....   | 5         |
| 2.3. Promoting transparency.....  | 7         |
| 2.4. Fostering a collective conscience.....   | 8         |
| 2.5. Creating a sensation .....   | 8         |
| <b>3. How do we get people to engage with mining issues in a way that is relevant to them? .....</b>                  | <b>9</b>  |
| 3.1. Connecting with miners .....   | 9         |
| 3.2. Assisting the fight, supporting local actions .....  | 9         |
| 3.3. Promoting empowerment .....  | 9         |
| 3.4. Co-ordinating at the local and international levels.....   | 10        |
| <b>4. How do we bring business around to social and environmental initiatives? 11</b>                                 |           |
| 4.1. Exerting pressure through voluntary initiatives .....  | 11        |
| 4.2. Bearing out the environmental and social costs.....  | 11        |
| 4.3. Bringing in players within mining at all levels .....  | 11        |
| <b>5. What is civil society's role?.....</b>  | <b>13</b> |
| 5.1. Civil society as a mediator .....  | 13        |
| 5.2. Civil society as a specialist player .....   | 13        |
| <b>6. Conference outcomes .....</b>   | <b>15</b> |

## 1. BACKGROUND

Since its founding in 2010, ISF SystExt (Ingénieurs sans frontières Systèmes Extractifs et Environnements) has been asking questions of the extractive industries and none more so than of mining. Our organisation has been specifically working on its human, social, environmental, economic and political impacts.

Our aim is to take part in establishing new, environmentally-friendly ways of mining. To meet this challenge, the mining industry - from the mine workings themselves through to our buying of manufactured products - needs to change. As we see it, such a transformation can be effected from deep changes at both the highest and lowest levels of the industry. Aware of the difficulties in bringing players within the mineral raw materials sector to task, ISF SystExt intends to bring about this change by raising consumer awareness. Put simply, civil society and its citizens must be able to get hold of transparent, clear and reasonable information, which will enable them to take charge of the technological, economic and political decisions taken by and for the benefit of the mining industry. Truly rallying citizens to our cause should shake the industry from top to bottom and set it on the road to respectable mining practices.

This approach requires that the agents within civil society already committed to questioning current mining practices work together. This is but the first piece in the jigsaw in reaching our previously stated goal. In 2013, Ingénieurs sans Frontières, the federation to which the organisation ISF SystExt belongs, together with the backing of the French Development Agency, launched a project to discuss best practice in the Global North and Global South between ISF and its partner organisations in Europe and the Global South in relation to the use of technology and the engineer's role within international solidarity. Ultimately, the aim is to set up a worldwide network of citizen engineers. To this end, ISF suggests holding annual talks to debate thoughts and standpoints about a specific issue of international solidarity related to technology or the engineering profession.

So it was that on 21 March 2014 ISF SystExt invited various representatives from civil society to Marseille to come together and meet for the first time. The theme of the meeting was education for development and citizenship as they pertain to mining technologies.

Through this day, ISF SystExt hoped to establish a forum for international discussions whereby different stakeholders from civil society would meet and get to know each other. Ultimately, ISF SystExt hopes that this meeting will fuel the discussions and advocacy actions undertaken by each participant by confronting them with each other's perspectives and viewpoints. Only then may collective action, a common stance and joint action be contemplated. The day more broadly aimed to once more question mining practices and to bemoan the lack of transparency and change in the industry and its structures. As an organisation made up of engineers, ISF SystExt sees this approach as an opportunity to further its awareness-raising work within engineering circles and to share its thoughts on the engineer's responsibility with regard to international solidarity.

The conference saw three themes debated, which allowed participants to share their views, practices and experiences with each other. The three subject matters - knowledge and understanding, awareness and action - were chosen to debate where the public at large currently stands with regard to issues in the mining sector.

The list of speakers was drawn up so as to include most “professions” from within education for development. As such, people whose role it is to inform citizens, experts ready to share their knowledge with civil society and even NGOs looking to raise consumer awareness or undertake advocacy actions were all present.

The following were all present:

- Basta! The independent French media portal, part of the French alternative media group, Alter-Médias.
- The Chilean organisation, Casa de la Paz
- The Belgian organisation, CATAPA
- The Congo’s Episcopal Commission for Natural Resources (CERN)
- The American organisation, Earthworks - No dirty gold
- The British organisation, Fairtrade UK
- The Spanish organisation, Ingeniería sin Fronteras (ISF - Engineers without Borders) Catalonia
- The British alliance, London Mining Network (LMN)
- The French organisation, ISF SystExt

**This document aims to summarise the key points raised during the day. It is in no way intended to serve as a comprehensive record of the discussions held. It is merely an overview of the main ideas to emerge from the debates as ISF SystExt understands them.**

## 2. HOW SHOULD WE GO ABOUT LETTING PEOPLE KNOW ABOUT – AND MAKING THEM SUITABLY AWARE OF – MINING ISSUES?

### 2.1. Properly identifying our public

Though it may seem obvious, one of the main strategies worth remembering is the need to tailor our message to our audience.

The **public at large** will be more receptive to audio-visual aids, such as films or web documentaries. Big-budget films, such as *Blood Diamond*, can have an unexpected impact. That such films have a greater impact than documentaries whose core content is just as remarkable was borne out in our discussions. Indeed, it is rare for documentaries to be broadcast on such a large scale.

→ *CATAPA (Belgium) heads up the “DocuLatino” Festival where three documentaries on problems related to the mining industry (for example, Blood in the Mobile) are shown in Belgium’s cities.*

Properly identified by civil society, a **targeted public** will feel more engaged by awareness-raising campaigns as well as education for development tools and even teaching guides.

→ *ISF Catalonia (Spain) has created a board game, similar to Monopoly, which aims to make children and families aware of the political and economic problems associated with the extractive industry.*

→ *According to Earthworks (United States), one of the best materials attempting to draw together the different links within the metal industries, raising awareness of the production conditions for goods and demonstrating the possible solutions is “The Story of Stuff” project, which also happens to make for very good viewing at the same time.*

→ *To engage the student body, CATAPA organises an academic week every year in Belgium so that students (usually 4,000 of them) can learn for themselves about mining issues. CATAPA endeavours to welcome a wide array of students (from business studies, engineering, biology, anthropology, but equally from medicine). This event’s success can be seen through the improved collaboration between universities; many dissertations on these issues are written each year. One project is currently underway with a university in Peru and shortly another will be taking place in Bolivia.*

A **public forewarned (or informed)** will be a public more interested in existing reports, or conferences on issues related to the extractive industries.

→ *CAPATA (Belgium) has published a report on mobile phones, which has already been read several thousand times in less than a year.*

→ *Earthworks (United States) points out that on the mining front, the report by the Human Rights Watch, “The Price of Gold,” has had a strong impact. Published in 2006, it is a leading document for its analysis of the entire Gold industry from the mines to the financial markets.*

→ *The London Mining Network (UK) referenced an excellent report by the GAIA Foundation, entitled “Pandora’s box.” This report specifically deals with the problems encountered by communities in respect of the mining industry. This report outlines a modern-day land-grabbing exercise in which the extractive industries keep local populations from their lands.*

The message may need to be adapted to make it relevant to a specific area according to the significance of the mining activity taking place there.

→ *Chile is a good example to explain why this is so. Casa de la Paz (Chile) stated that because of its country's specific geography, there is a sharp contrast between the North and the South. Unlike in the South, mining activity abounds in the North. This regional context has informed the work of Casa de la Paz whereby its ideas have been adapted to suit the differing information needs of local people.*

## 2.2. Telling a story

### 2.2.1. Taking on the difficulties

The abundance of mineable raw materials, the geographical areas affected as well as the stakeholders involved and the potential (human, social, environmental, political etc.) impacts all make it difficult for citizens to grasp the key issues within the industry. As it seeks to make its argument more intelligible, civil society tends to restrict its focus as it sets about tackling what is an undeniably complex problem. This complexity must be tackled head on and the message subsequently adapted. Mining takes place against a human, economic, political and technical backdrop that must be demystified if we wish to offer up a fair assessment of the problems encountered and ways of potentially improving them. We must tell a story: the story of the workers, the mining area, the mining company, the metal, the product, to name just a few that need telling.

Fairtrade UK insists that in such cases we need to distinguish clearly between small mines (traditional mining practices with little mechanisation) and big mines (industrialised mines). The problems associated with each one differ hugely and play out at many levels: human, social, environmental, etc. The sensationalism demanded by large-scale audio-visual productions and reports for the mainstream television channels tends to favour such larger-scale workings and it is these that are then held up as representative of the mineral industry as a whole. These two scales of mining do not share the same central issues, but can often take place in the same area and even find themselves working the same deposits. In such instances, civil society must learn to tell the two apart before it is able to do anything else.

### 2.2.2. Tracing the output to source

Technological change brings many and smaller metallic and mineral composites into our daily lives. As such, there is an important issue to be raised in shedding light on the composition of our consumer goods in order to rebuild the broken link between mining and the consumer. We might therefore aim to take a product apart and detail its make-up:

- How was it designed?
- What is it made of?
- Which minerals and metals were used?
- Where do these materials come from and what were the social, human and environmental circumstances in which they were extracted or recycled?

→ *ISF Catalonia (Spain) has designed a giant mobile phone with removable parts. Upon removing any piece, users can connect it to its various effects by locating them on a map of the world. This attraction has enjoyed huge success with many schools and organisations wishing to use it.*

### 2.2.3. Bringing the message to life

Awareness raising messages are all the more striking when they allow for the human connection lost during a product's development to be re-established.

Their aim is to reintroduce the human stories that brought about the product's existence and development, from the workers on the mineral seams at the other end of the world to the consumers who bought it. Consumers may then become aware of the human faces connected with the end product. They may realise that a consumer good tells a story beyond the shelves of the shop where it was purchased; namely, that they can purchase it only thanks to the people who worked to provide its raw materials. Bringing this message to life therefore helps the industry and its issues be understood.

→ Fairtrade UK invited five miners from Latin America to a conference held by the jewellery industry in October 2013. Whilst participants spoke about business or improving customer service, they could not ignore the presence of these five representatives on the stage, which made for a heavy atmosphere. These miners were introduced as follows:

*“This industry is built on the backs of the hard work, sweat and blood of hundreds of millions of people that you will probably never see. Five of them are stood before you today. They are your industry, your suppliers, and the ones who bring gold to the market and fill your bank accounts with money.”*

*Though provocative, this act was successful in tying the jewellers' reality to people and not markets. It forced the jewellery industry to see that to preserve its romantic, glamorous image is to neglect the essential role carried out by the mine workers whose job it is to provide them with the raw materials. Despite the tensions created in the audience, this initiative had a strong impact.*

### 2.2.4. Valuing positive actions

Defeat - or the lack of victories - takes the power to act away from citizens, which goes hand in hand with the negative effects of a constant stream of serious, worrying and pessimistic news items about the mining industry. According to Alter-medias (France), the vast majority of the information in the public domain emphasises the catastrophic impact of this industry and the unchanging reality of this across time and space. The innovative initiatives undertaken and the success of various struggles must gain greater coverage if they are broaden the realm of what is possible and stir the collective imagination.

→ ISF SystExt pointed to the originality of the Oro Verde initiative in the Chocó province in Colombia. The local community which is settled there has been mining gold in an artisanal way for generations without using chemicals to get at the metal. It is a matter of mining being in step with its environment and in harmony with the especially rich ecosystems found throughout the industry.

## 2.3. Promoting transparency

### 2.3.1. Fighting back against an industry shrouded in secrecy

In fighting a lack of transparency within the mineral industries, there is a need to promote tried-and-tested alternatives that consumers actually want. There are two main alternatives: respecting specific laws and certification.

With regard to the law, one of the best-known and most current examples is the Dodd-Frank Wall Street Reform and Consumer Protection Act, which obliges American companies to disclose and check whether their products contain conflict minerals (tin, tantalum, tungsten and gold). For Earthworks (US), this initiative is “a step in the right direction,” but they also feel that this legislation should be applied to all conflict minerals. CERN (DRC) echoed the DRC’s support for this legal provision. The Catholic bishops (behind CERN) and the government support it; some organisations, particularly where they support artisanal miners in Kivu, oppose it. For these organisations, these regulations make miners’ daily living conditions worse by depriving the local industry of potential markets. Indeed, many people depend on being able to mine cassiterite and other minerals daily, even where this is done illegally.

As for certification, this may well prove to be an avenue to explore in terms of awareness-raising and keeping consumers informed in much the same way as many of them, for example, now recognise a “fair-trade” logo. For Fairtrade UK, allowing for jewellery goods to be labelled according to well-known standards has significant potential.

In both instances, purchases made with product traceability and proper labelling in mind will still need consumers to be informed about - and made aware of - the problems faced by traditional industries.

### 2.3.2. Taking vested interest to task

The issue of transparency, in particular in the media, does not mean being neutral. It means picking apart the data with a view to the facts and their implications and not being satisfied with letting the figures speak for themselves. Alter-Medias (France) explained that the main problem for journalists lies in making complex issues intelligible. To do this, they need to report on the lives of the people they meet on the ground.

Often, figures have no real meaning and are too abstract. Broadly speaking, by the time they reach the end of a general-style article, readers are informed about the positive and negative aspects of a project (from the perspectives of its opponents and the company, for example) and conclude from this that is a matter like any other where everyone is looking after their own interests. Journalists therefore need to let each party have their say whilst still knowing how to challenge the statements made with facts and how to cut through the communication strategy that goes with them. The aim is to report the news realistically and fairly, however intricate the situation may be and regardless of how many people are involved.



## 2.4. Fostering a collective conscience

### 2.4.1. Drawing parallels

It may prove interesting to draw some parallels between problems related to mining and issues that are better known to the public at large. This means identifying topics that lend themselves to public debate or which invite controversy and supplementing them with information about mining. This is the strategy adopted by the London Mining Network (UK) which mainly works on mining issues as they relate to coal. It then easily connects them to the topic of climate change - an issue which is far better known to the British public. This strategy has the additional advantage of showing how the mineral industry is all around us and its significance to our economies.

### 2.4.2. Engaging the citizen as more than a mere consumer

When a country is not troubled - or barely so - by mining activity within its borders and/or when such activity is carried out in foreign countries by the transnational companies of said countries, consumers are de facto removed from mining issues despite their daily lives being replete with mining's fruits. Yet, whilst consumers may be caught in this dilemma, citizens find themselves in an entirely different position. The topic of mineral resources is an eminently political topic. What needs to happen is for it to be turned into a key issue within politics itself. In this way "mining" and its stakeholders will have to meet the public debate head on and take advantage of the turning political tide to bring forth concrete proposals. This approach though requires careful coordination between all stakeholders within civil society.

## 2.5. Creating a sensation

By creating a sensation - what social networks term "creating a buzz" - important messages can reach a great many different people quickly. This effect can be achieved through "shock tactics," which inevitably expose stakeholders within civil society to intense media scrutiny. This has to be managed strategically so that the salient messages are brought across successfully.

→ *ISF Catalonia (Spain) set up a fictitious mining company that wished to carry out mining works near Barcelona. As word of this spread, it came up against much local hostility. Upon discovering the deception, the authorities threatened the organisation with a fine, which led the media to take up the story. This notably allowed ISF Catalonia to show just how easily mining can take hold within an area. They were also able to make themselves known to a wider public, despite the risks taken.*

## 3. HOW DO WE GET PEOPLE TO ENGAGE WITH MINING ISSUES IN A WAY THAT IS RELEVANT TO THEM?

### 3.1. Connecting with miners

We must not lose sight of the fact that the main people affected are miners and their families. International civil society must therefore work as much as possible with these people. CERN (DRC) carries out this type of work by organising training and discussion forums to help them or by setting up round tables with miners, mining companies and government representatives, etc.

Mining remains a closed and guarded industry which, under the pretext of professional secrecy or strategic issues, offers up little by way of information about itself. Against this backdrop, civil society must now take up a whistleblowing role on behalf of the workers on the frontlines of mining operations and the potential risks they face.

→ *ISF Catalonia (Spain) cites the example of niobium, a by-product of tantalum ores, which has huge applications in the civil and military aviation industries but for which reliable information from industry parties is very difficult to come by.*

### 3.2. Assisting the fight, supporting local actions

The first line of approach is to capitalise on local needs and disputes. We could never do full justice to the fights people lead against certain projects carried out for short-term gain and which are incompatible with the proper development of an area or country. For example, CATAPA (Belgium) mainly supports struggles in Peru, Bolivia and Guatemala and promotes these local campaigns within Belgium. Bearing this in mind, support for certain key activist figures, whose civic actions put them at risk, must be extended across international networks. This will indirectly afford them a form of protection by tapping into the presence that such organisations enjoy on the international stage.

Civil society must also endeavour to bring together opposition movements against specific large-scale mining projects with other resilience efforts so that they may share their experiences and revel in each other's victories.

### 3.3. Promoting empowerment

When confronting the establishment of any mining operation, what local people most often lack is knowledge about their rights. As mentioned previously, mining companies reserve the right to decide whether or not to inform users about their processes, projects and suchlike. This is particularly acute when it comes to matters such as mining taxation or potential high-impact mining operations (opencast mining, surface water discharges, groundwater pumping, etc.).

Civil society must take on the role of informing people, chiefly about:

- Their country's environmental, tax and working legislation, amongst other legal areas;
- The risks associated with mining techniques and ore processing;
- The minimum obligations upon a mining operator or investor when they intend to set up in their area; and,
- The legal recourse should the statutory provisions in place be broken.

Upskilling the local people directly affected in this manner means that they will then be able to take charge of managing their area's mineral resources and come together to demand that the appropriate social and environmental minimum be carried out.

→ CERN explained that in the DRC the government does not have the means to undertake the technical evaluation studies required by law. As such, they are carried out by the mining operator and then approved by the authorities who are too ill-equipped to be able to critically evaluate the technical analysis provided. Although local organisations have experience on the ground at their disposal to detect unsafe locations, they do not have sufficient faith in this knowledge or trust that it will trump the claims of the operators.

### 3.4. Co-ordinating at the local and international levels

Countries and association networks should work together so that all local movements (setting up organisations, carrying out consultation projects, strikes, etc.) are more widely publicised and both local and foreign stakeholders are given greater food-for-thought. The goal is to root local demands in advocacy actions which are consistent with the line espoused in the countries from which the companies in question come from or which are taken by decision-making bodies such as the European Union.

→ ISF SystExt cited the example of an advocacy campaign carried out by Friends of the Earth in partnership with the international network CEE Bankwatch Network and the Zambian NGO Center for Trade Policy and Development with regard to the Mopani (Zambia) mining project carried out by a company that had Swiss Glencore as its majority shareholder. Following a detailed field survey and capitalising on the demands of local organisations, the advocacy campaign put forward recommendations which saw the European Investment Bank withdraw its subsidies for this project.

## 4. HOW DO WE BRING BUSINESS AROUND TO SOCIAL AND ENVIRONMENTAL INITIATIVES?

### 4.1. Exerting pressure through voluntary initiatives

Binding and voluntary approaches are two conceptually different approaches in the pursuit of a “miracle” solution to make companies toe the line of social and environmental responsibility. The first is often set out in the broadest terms by civil society as being the better solution, albeit more difficult to implement.

That said, a company’s image, regardless of its size, is a key element in the longevity of its operations. With this in mind, Fairtrade UK made the comparison with labelling food produce as fair trade which led to some manufacturers labelling certain produce simply because their competitor had already done so. Nowadays, manufacturers draw more negative attention to themselves by not acting of their own accord for a worthwhile cause than they would do so if they were simply to do nothing. It is therefore in civil society’s interest to indirectly back mining operators into a corner with regard to their public image rather than working to change practices with the operator directly.

### 4.2. Bearing out the environmental and social costs

All businesses are driven by financial imperatives and mining companies more so given the colossal sums involved in a project from its inception to its end. One of the most recently identified pressure points available to civil society is to question investors directly about the risks that they are exposed to when factoring in environmental and social costs. For the most part, these represent a sufficiently significant financial sum to threaten the shareholders’ returns on their investment.

→ *Earthworks (US) cited the example of the Conga gold-mining project in Peru, slowed down by significant local rallying and which equated to daily losses of USD 2 million for the intended mining company whose majority shareholding was held by Newmont.*

→ *ISF SystExt reiterated that we can equally take our case directly to the financiers themselves. Indeed, a group of organisations led by Friends of the Earth asked the French bank Société Générale, which was investing in the huge Alpha Coal mining project in Australia’s Galilee Basin, for its accounts.*

### 4.3. Bringing in players within mining at all levels

It cannot help but be said that the players within mining are sometimes more financially powerful than the states in which they establish their operations. ISF SystExt showed this premise to be true by once again taking the example of Glencore whose turnover in 2012 exceeded USD 100 billion whereas Zambia, the country in which it was operating, namely via the Mopani project, had a GDP of USD 20 billion for the same period. These striking imbalances represent one of the dangers associated with transnational mining companies operating in certain countries. It is common for governments and local people alike to hold high hopes that a mining project in the pipeline will bring with it economic opportunities (jobs, new infrastructure projects, significant tax revenues, etc.).

Mining operators, even where smaller in size to foreign transnational companies, necessarily contribute to the country in question's economic development. They can even carry out social development projects such as building schools, contributing to reforestation schemes, funding local sporting organisations ... activities that often cause an outcry from non-governmental organisations who question such initiatives against the backdrop of the potential harmful effects of mining operations.

→ ISF SystExt gave the example of the French mining company, Eramet, being questioned by several NGOs in 2013 about its claims of being outstandingly environmentally-sympathetic with its Weda-Bay project (a huge nickel mine) in Indonesia at the same time as reports from local organisations noted serious instances of expropriation and threats.

Such parallelisms do not adequately help us manage the complex stakeholder game since very different issues are lumped together as one. Indeed, civil society, particularly abroad, is in reality faced with:

- Workers and authorities' economic and social aspirations.
- The operator's terms and demands.
- Its own social and environmental aspirations linked to a fair and sustainable, joined-up way of doing things which comes from a different cultural perspective.

Civil society must acknowledge the needs and wants of local stakeholders with regard to increasing social action. In wake of such developments, it must review its analysis of the issues raised by mining operations and consider different parties' aspirations and allow everyone's voice to be heard in a dedicated forum and in as equal a manner as possible. Foreign NGOs cannot presume to know what is good or not for the economic growth of an area.

→ Casa de la Paz (Chile) increasingly sets up consultation strategies with all parties affected by the arrival of any mining operation. The organisation wishes to show that the mining industry is a very important stakeholder to be consulted at all levels: political, social, environmental etc. so that they are aware of the responsibility incumbent upon them with regard to the localities in which they establish their operations.

## 5. WHAT IS CIVIL SOCIETY'S ROLE?

### 5.1. Civil society as a mediator

It is often said that civil society's role is to sound the alarm and inform people about the issues and problems related to mining activities (dangers to human health, environmental impacts, contextualising local cases within the global strategy, etc.), which leads other stakeholders (namely, the authorities and mining operators) to withdraw from this field of action. This necessary dissemination of information must be shared amongst all stakeholders with civil society's role becoming more a role of mediation and consultation.

→ *CERN gave the example of the reform to the mining law in the Congo which was mainly shouldered by stakeholders from civil society whereas it would have been more appropriate for this group to work in concert with representatives from the ministries in question to set up a joint communications framework.*

According to Casa de la Paz (Chile), this matter calls for a forum in which the public at large can be involved in issues related to mining. Setting up a forum for discussions which brings together citizens, public authorities, operators, local organisations and non-governmental organisations allows word of different campaigns to grow and spread whilst making everyone aware of his or her rights and obligations. Operators can then assume the obligation that falls to them of passing on information whilst being able to do so in a calmer forum than through media scrutiny. In this scenario, Earthworks (US) points out that research laboratories and universities can also contribute to this process by using different tools to complement the ones traditionally used.

### 5.2. Civil society as a specialist player

Denouncing the damage caused by industrial mining operators calls for stakeholders within civil society to apply an increasingly high-level technical know-how in presenting their case and making it credible on the public stage.

With regard to specific damage to the environment and health, convention holds that the case to be outlined should establish a link between the disruption and the mining activity. ISF SystExt has first-hand experience of the difficulty in obtaining reliable analyses and information (from water and soil samples, for example) and of carrying out diagnoses on a case-by-case basis. Assessing health hazards must take into account many factors from workers' customs to their general state of health and lifestyle whilst assessing the environmental impact notably needs an understanding of all possible contributing factors (other industrial or farming activities, the workings of the ecosystem, etc.). Against this backdrop, attributing a share of pollution or contamination to a mining operator, even where the evidence for all people affected points in the same direction, remains a virtually impossible task.

→ *Earthworks (US) cited the example of the company Newmont which was accused of poisoning the local population living near to the Yanacocha gold mine in the Cajamarca region of Peru during the 2000s. Newmont (the majority shareholder of the mining company) was never charged in relation to the serious health and environmental effects noted near to the mine. Some plaintiffs were even threatened with the operator showing them that they would be bound to lose their case owing to the lack of data proving its own accountability.*

Stakeholders in civil society must therefore be realistic about what is achievable in taking up this type of fight. The aim is to make the company listen to a clearly crafted argument without necessarily dragging plaintiffs into a legal abyss.

→ An interesting example, brought to light by ISF SystExt, is the counter report “Areva and Niger, a sustainable partnership” commissioned in response to the accusations published in Greenpeace’s report “Left in the dust.”

Exerting pressure in this way does not necessarily allow the case to be won; instead, the company is urged to be more vigilant about its activities whilst being made to realise that technology is not its preserve alone. To strip the industry of its “all powerful” standing on technical matters, there needs to be a counter-balance of citizen expertise whose worth is rooted in the technical and engineering studies that fall entirely within civil society’s domain and which can serve citizens of any country. This is why civil society’s technical role may also include training citizens, regardless of whether they are directly affected by mining activities (in the case of miners and their families) or not.

→ *The Casa de la Paz (Chile) foundation has designed a teaching pack for mining that has received a great deal of feedback, allowing them to improve its quality. The pack explains in very simple terms the legislation in place to its target audience (especially people living near to mining operations) as well as including more technical aspects.*

## 6. CONFERENCE OUTCOMES

The participants all agreed that it was important to tackle in turn the issues of disseminating information, raising public awareness and rallying people to the cause - much as ISF SystExt had set out in its preliminary plan for the day. These are after all key in reshaping behaviours and attitudes.

The conference was also an opportunity to create a forum for discussion allowing everyone to speak freely whilst taking the time to listen to different organisations, thereby affording participants the chance to get to know each other. The participants also appreciated this conference as a means of creating links and networking and expressed a wish to continue their discussions in the future. In August 2014, some partners were planning joint projects. Some participants mentioned that it was very inspiring to meet other organisations committed to similar issues.

The range of participants and the sharing of experiences may not initially produce defined lines of action. Nevertheless, the many viewpoints contribute to a richer debate and allow participants to step outside their comfort zone and contemplate alternative ways of doing things. Some participants had wanted to include other organisations in the debates but respected our wish for a small-scale affair.

Sharing knowledge was much appreciated and even though non-specialists had fewer opportunities to contribute to the debates, they learnt a great deal about many issues. Following the conference, an online forum was set up in order to facilitate the exchange of information between the different participants and help their relationships continue to flourish.

Finally, others noted how difficult it must be for engineers to question the body of their profession and how it was encouraging to see that some, such as ISF SystExt, are ready to rise to the challenge of doing so.

