Executive summary

Introduction
This is a report of the findings from a learning focused evaluation of Publish What You Pay’s (PWYP) innovative Data Extractors’ (DE) programme. The programme, supported by the Omidyar Network, the Natural Resource Governance Institute (NRGI) and Oxfam Denmark, was a direct response to the publication of the first mandatory disclosure (‘payments to governments’) reports in Norway, the EU and Canada.

PWYP aimed to develop the capacity of its members to access, analyse and use mandatory disclosure and other data from individual research projects in their campaigns. 23 participants took part in 2 year-long courses involving a combination of face to face workshops and remote mentoring. The programme took a learning by doing approach to enable participants to uncover discrepancies and interesting stories that could then be packaged and communicated in case studies among other formats. Face to face meetings were intended to develop connections and peer support between participants. They also aimed to encourage collaborative projects between members from the Global North and members in resource rich countries in the Global South. In addition, PWYP had a scaling aim. Programme designers hoped that the Data Extractors would gain sufficient knowledge and skills to take up the training baton, contributing to a small but active data community within the PWYP coalition.

The evaluation set out to test some of the key assumptions underpinning the programme’s theory of action, making use of recent theory and evidence from the Transparency Participation and Accountability field concerning:

- the importance of technologies, tools and data being relevant to problems defined by users in local contexts;
- the benefits of taking holistic strategies to link the work of pro-accountability actors engaging with local communities affected by extractives projects with national level advocacy.¹ Data and information tactics used in such approaches are informed by a deep understanding of contextual factors and power relations that shape ‘accountability ecosystems’ that are, for the purpose of this report referred to as ‘natural resource governance ecosystems’.² Such ecosystems include informal as well as formal accountability processes and mechanisms within and outside of the state. Successful approaches often involve collaboration between civil society activists and reformers in state institutions;
- the complicated nature of relationships that need to be brokered and mediated to make different kinds of data and evidence relevant and useful for various pro-accountability

¹The idea of linking local to national level work is sometimes referred to as ‘vertical integration’, described by Jonathan Fox as a way to do accountability differently. It aims to identify power imbalances that cause accountability failures and address them through the coordinated action at local, sub-national and national and transnational levels. Several examples of successful integrated approaches to demanding accountability can be found in Aceron, J., & Isaac, F. (2016). Going Vertical: Civil Society Policy Monitoring and Advocacy in the Philippines. However, only a few are focused on data
²National natural resource governance ecosystems is a term closely related to accountability ecosystems used in the TPA field. Interested readers can refer to a paper by Brendan Halloran (2015): Strengthening Accountability Ecosystems.
actors. These are complex because they involve people located in different parts natural resource governance accountability ecosystems with different data needs.³

Conclusions

The PWYP Data Extractors programme was timely and relevant. Data Extractors are aware that data and evidence are not sufficient to trigger accountability. However, they recognise that good quality data inspires confidence and can support or complement other actions. While there are other actors supporting capacity development in the field, recent reviews on the extractives sector find that data use is an under developed area of work.⁴ Thus most participants interviewed were keen to develop their skills and valued the opportunity to participate in the programme. Even those who were critical of some of the methods used thought it should continue, albeit with improvements.

The Data Extractors programme demonstrated that combining international workshops and remote mentoring can enable coalition members to find and use data to uncover important issues related to weak transparency and accountability in natural resource governance. Given the innovative and ambitious nature of the programme, it achieved impressive results. 14 Data Extractors were able to complete case studies and it is possible to demonstrate that the programme made important contributions to this result. However, as the findings indicate, building capacity to use data effectively is no mean feat. Furthermore, the PWYP Data Extractors model suffers from a number of limitations.

Although the programme convinced a fair number of participants that mandatory disclosure data is important, it was less successful in persuading DEs and other coalition members from resource rich countries of the data’s relevance. Thus, in this instance, the programme failed in its ambitions to support collaborative projects. It is important to note that this evaluation is not stating that mandatory disclosure data is not relevant, rather that the programme was unsuccessful in persuading or demonstrating to coalition members of its relevance. Much more study would be required to assess mandatory disclosures data’s relevance in different contexts for addressing different problems.

Few DE projects resulted in requests to companies or governments for more information or more specific policy and campaign asks. This made it difficult to test the assumption that data based evidence will influence change in accountability behaviours. The lack of a communications and intermediation strategy involving media could be partly responsible for this low level of advocacy and campaigning activity. But the programme’s short duration and the political sensitivities associated with challenging vested interests in some resource rich countries also affected outcomes in this area. Moreover, the evidence from this pilot, like similar programmes, shows that evidence is not enough. Without thoughtful intermediation, requests for additional data or efforts to use analysis to influence legislation can have disappointing results.

The Data Extractors programme was reasonably successful in using international workshops to build connections between coalition members that improved prospects for sustaining some initiatives and increasing the scale of its effects. But overall these were modest. When considered

³ For a useful discussion on intermediation and translation of evidence see Results for Development’s paper on evidence based policy.  Brock with McGee (2017) provide useful definitions of infomediation that focuses the specialist processes of analysing and communicating data which is a distinct type of intermediation.

⁴ McDevitt 2017, My Society 2017
alongside stories of DEs not completing projects because of competing work priorities or ending up feeling poorly equipped to share anything beyond very basic messages concerning the benefits of data, the limitations of the current Data Extractors model become apparent.

More important than its achievements, perhaps, are the lessons that the Data Extractors programme generated relating to the challenges of building capacities and creating incentives for data use in support of wider accountability work. Some lessons relating to fairly operational issues such as the length and locations of workshops matter, but will not be dwelt on here. Instead I focus on the most important and strategic issues with reference to supportive evidence from the literature, where it is applicable.

- **Capacity building initiatives that are data led and aim to increase the use of a particular kind of data, in this case mandatory disclosure data, may not be the most effective strategy to build a data culture.** Many PWYP coalitions are very data savvy and use data well in campaigns. However, building a data culture where members view data and evidence as part of their everyday work means going further. Coalition members need to develop confidence to use data in ways that are most relevant to their concerns and the audiences they want to influence. This is one of the most important messages found in contemporary evidence from the TPA field. The evaluation found that this relevance will be determined to some extent by local member organisations and the local political context. But it will also be affected by a range of other factors that influence an individual’s motivations and capacity to engage in programmes like this and the questions they can address with data.

![Figure 1: Factors that influenced DE’s research questions and outcomes](image)

- **There is a need for a modular approach conceived as part of a longer term strategy to strengthen resource governance ecosystems.** Though some Data Extractors managed to undertake quite complex data analysis, others acquired more basic skills or failed. This was partly due to their different baseline skills. In addition, Open Oil was not an ideal training partner for participants with no previous experience of working with data. Inadequate contractual arrangements between Open Oil and PWYP regarding the management of the programme, particularly during the first year, exacerbated this problem.

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5 Reboot (2015) is a particularly useful resource that elaborates on this.

6 I am indebted to Jed Miller for shaping some of this thinking
One of the most useful outcomes of the programme is a user case tool developed by Open Oil that partly responds to the lesson that coalition members have varied training needs. It helps to define the varied uses and users of different types of extractives data within the broader resource governance ecosystem. Importantly, the tool also begins to identify different data capacity building needs. These are described both in terms of the levels of difficulty associated with different goals, and also in terms of the roles that different state and CSOs play in natural resource governance and accountability systems. This tool is important for 2 reasons:

1. Because it encourages a more user centred approach to thinking about capacity building that is consistent with what is considered good practice.
2. The analysis of different users and uses gives a flavour of the complexity of the overall natural resource governance ecosystem.

- **A collaborative approach informed by analysis of local contexts and natural resource governance ecosystems plus the complexity of intermediation may offer important insights**. Fortuitously, the DE programme included opportunities to learn from several School of Data fellows, one of whom was a DE participant. The fellow approach is not, in and of itself, the most interesting feature of this model whose success is influenced by the technical and social skills of the fellow as well as the context. What is important is that the person supporting capacity building begins by developing relationships and trying to understand the governance, or accountability ecosystem and different data use needs before embarking on training. The locally contextualised approach taken by the Data Extractor in Myanmar, for example enabled a collaborative and user driven approach to building capacity to use data that included journalists and MPs. A variation of the Myanmar model is currently being used in an NRGI experiment to stimulate interest in and use of Shell’s mandatory disclosure data on payments to the Nigerian government. It similarly offers PWYP important opportunities to learn about the potential effectiveness of a locally driven approach that demonstrates important elements of what is currently considered good practice in the field.7 These include very specific approaches to working with and building the capacity of media organisations and state audit institutions to use data.

**Recommendations**

The PWYP Data Extractors programme has generated useful lessons on the opportunities and challenges associated with building capacity to use data in the extractives sector. The International Secretariat might consider 2 options regarding how to apply these in its future strategy.

- **Option 1**: Tweak the existing DE offer using the Open Oil user case tool to segment users of different types of data and develop a modular approach to delivering training through one or more strategic partnerships. An example of such a modular approach to training is illustrated by the Open Data Institute’s skills framework. It describes the different areas of skills and knowledge associated with the use of Open Data with different tiers – from beginner to expert.

- **Option 2**: Radical adaptation to a locally driven, systemic approach informed by analysis of data capacity building needs within the context of national natural resource governance ecosystems. In addition to developing a modular way of working, this would also involve

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7 Interview with NRGI staff
the International Secretariat applying lessons from the Myanmar example above in a few priority countries.
1. Introduction
This is a report of the findings from an evaluation of Publish What You Pay’s (PWYP) innovative Data Extractors’ (DE) programme that aimed to develop the capacity of coalition members and allies to find, analyse and use extractives data for campaigns and policy advocacy. I start by outlining the programme’s hopes and aims before describing the evaluation objectives and methodology. The evaluation findings, conclusions and recommendations that were co-constructed with members of the PWYP Secretariat follow.

2. PWYP’s Data Extractors’ programme hopes and aims
The Data Extractors programme was proposed in 2015, following the publication of the first mandatory disclosure (‘payments to governments’) reports in Norway, the EU and Canada that had resulted from PWYP’s successful campaigns. At the time there was little awareness among coalition members around the world that these reports existed or how they might be used to demand accountability of corporations and governments.

Mandatory disclosure data

Mandatory disclosures have brought unprecedented levels of relevant and timely project-level data on the payments corporations make to government into the public domain. This data is published several years ahead of the publication of Extractive Industry Transparency Initiative data in countries where corporations mine and extract resources. Hence, when combined with data from other sources it can be a powerful tool that can be used for various purposes. These range from better-informed national public debate on the management of a country’s natural resources to community demands for a fair amount of profits to be spent on services in the area where the company extracts natural resources.

PWYP’s Data Extractors programme, supported by the Omidyar Network, the Natural Resource Governance Institute and Oxfam Denmark, was a response to this. It aimed to develop the capacity of Data Extractors to access, analyse and use data from individual research projects in their campaigns over 2 year-long projects involving a combination of face to face workshops and remote mentoring. In other words, the programme took a learning by doing approach to enable participants to uncover discrepancies and interesting stories that could be then be packaged and communicated in case studies among other formats. Face to face meetings were intended to develop connections and peer support between participants. This included fostering advocacy opportunities between DEs based in jurisdictions where large companies are listed and DEs based in countries where these companies have extractive projects. In addition, the programme had a scaling aim. Programme designers hoped the Data Extractors would gain sufficient knowledge and skills to take up the training baton, educating other PWYP members ‘back home’, thereby creating a small but active PWYP data community.

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8 This section draws from James Royston’s handover notes for Duncan Edwards, workshop reports, case study analysis and interviews with key people involved in the design and management of the programme
3. Programme management and implementation

Since the small PWYP secretariat was without a core competency in data extraction and use, PWYP developed a partnership with Open Oil to help manage and implement the programme. In the first year this consisted of an Open Oil staff member being funded to spend half of his time designing and helping to deliver training. His responsibilities also included providing participants with one to one mentoring, which was delivered mostly remotely. A few members of the PWYP Secretariat helped in training delivery as well as remote support for the Data Extractors’ research projects and final case studies.

The year 1 Data Extractor intake was selected from an open application process, publicised across PWYP’s mailing lists and on its website. PWYP offered candidates from resource rich countries a $4,000 incentive to help with their research. Each applicant was required to submit a proposal. These were reviewed by both Open Oil and the Secretariat who provided guidance on refining each project and on specific data extraction tools, including during in person workshops.

Those participating in the Data Extractors programme were also required to sign a contract that explicitly stated the roles and responsibilities of the participant vis a vis Open Oil and the Secretariat. It was the responsibility of each Extractor to ensure that they had adequate support from their managers to find the space and time to implement their chosen project.

By the end of the year, 12 data extractors had joined the programme - 2 from the USA and UK plus 1 from each of the following countries: Indonesia, the Philippines, Zimbabwe, France, Niger, Mozambique, Zambia and Mongolia. The composition of this cohort reflected the Secretariat’s desire to achieve a balance between participants from northern and southern coalitions and to encourage collaborative projects.

During year 1 PWYP held two in-person 2 day workshops. Both workshops were organised and facilitated by the PWYP Secretariat and Open Oil, with support from NRGI and other data experts. There was some turnover in terms of individual participants. Only 9 from the first workshop were among the final year 1 cohort of 12.

In year 2 there were 11 participants from Australia, Congo-Brazzaville, Tunisia, Iraq, Malawi, Canada, South Africa, Ukraine, Nigeria, Myanmar and India and a number of changes were made to the training design due to lessons learned in year 1. A more formal contract with Open Oil replaced a somewhat loose arrangement. In addition, PWYP chose a more strategic approach to selecting the participants, directly contacting candidates from organisations and coalitions directly. As the Secretariat felt the offer of $4,000 to support DEs’ projects in resource rich country had created unhelpful incentives, it was not repeated.

Despite the above changes, in year 2 the overall training design remained much the same. The programme facilitated 2 workshops. 4 alumni from year one were engaged as trainers for each year.

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10 This section draws from James Royston’s handover notes for Duncan Edwards, workshop reports, case study analysis and interview with key people involved in the design and management of the programme, e.g. Paul Dziedzic from Open Oil, James Royston and Alexandra Malmquist.
11 Interview with Secretariat staff member
12 Discussion with the Secretariat 22nd June
13 This count of Data Extractors is taken from the list on the website plus the Niger DE who helped with the Avera case study. [http://www.publishwhatyoupay.org/our-work/using-the-data/the-data-extractors/][Accessed 06.06.2018]
2 workshop. Since two Extractors were unable to attend the workshop in the Philippines, an additional ‘mini-workshop’ was held in Accra, Ghana to bring them up to speed.

NRGI played a more active role in year 2, providing in-kind training and mentoring support. It also recommended that one of their School of Data fellows participate in the programme. This was to help NRGI compare the strengths and weaknesses of the School of Data Fellow approach to building capacity for data use with the Data Extractor model. PWYP invested in a similar experiment. To reduce the prohibitive costs of interpretation that had been incurred during year 1, in year 2 DEs were exclusively English speaking. PWYP thus decided to cater to French speaking members by dedicating a Fellow to work with the coalition in Côte d’Ivoire.

Case studies were required as outputs in both years, however programme participants received more strategic advice on communication plans during the second year.

4. Evaluation objectives and approach
The principal objective of this evaluation was to assess whether the Data Extractors model that was used in this pilot programme ‘worked’ or not and test its key assumptions. In other words, although it sought to consolidate data on outputs and outcomes, this was mainly for learning rather than accountability purposes.

Given the evaluation was to enable learning and inform adaptation, I took a theory based approach to testing key project assumptions. In the absence of an explicit theory of action, I used the following implicit and explicit programme assumptions that were identified in documents and early interviews:

- The DE programme would provide participants with the skills and connections to find and use data to uncover transparency and accountability issues related to extractives and resource governance, as well as communicate their findings to different actors
- Ignorance of mandatory disclosure data and weak technical capacity are the main obstacles to coalitions using such data for holding actors to account; collaborative research projects can overcome this
- Corporations or governments would have the incentive and capacity to respond when presented with appropriate and easy to understand evidence and asks
- Developing a cadre of infomediaries would have a scaling/diffusion effect and help build a culture for data use
- Donors, corporations and policy makers would be influenced by evidence of use

The terms of reference also required me to compare the strengths and weaknesses of the Data Extractors programme design against other models that build capacity to use data. My approach to this was influenced by theory and evidence from the broader transparency, participation and accountability field concerning:

- the importance of technologies, tools, data and information being relevant to problems defined by users in local contexts. Evidence suggests that externally driven programme and solutions are rarely sustained and that locally ‘user centred design’ approaches that encourage learning and adaptation tend to be more successful;

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14 Interview view with the relevant Data Extractor
15 Interview with Alex Malmquist
16 Arguments for user centred design to increase data use have been made by Reboot. [https://reboot.org/wordpress/wp-content/uploads/2015/07/Reboot_Using-Data-to-Influence-Government-]
the benefits of taking holistic and vertically integrated strategies to link the work of pro-accountability actors engaging with local communities affected by extractives projects with national level advocacy. Tactics used in such approaches are informed by a deep understanding of contextual factors and power relations that shape the local ‘resource governance ecosystem’. This ecosystem includes informal as well as formal accountability processes and mechanisms within and outside of the state. Successful approaches often involve collaboration between civil society activists and reformers located within in state institutions.

Arguments for integrated approaches take the point about locally defined data and technology solutions a step further. They seek to address criticisms - such as those that have been levelled at the EITI concerning the disconnect between work at national and sub national levels. Taking an integrated approach to strengthening resource governance systems involves creating stronger links between those working at subnational and local levels. When it comes to data, this means developing strategies to build a data culture rather than tactics for individual campaigns. In addition, it requires analysing political contexts and incentives for different stakeholders at different levels to use data in support of stronger resource governance ecosystems;

the complicated nature of relationships that need to be brokered and mediated to make different kinds of data and evidence relevant, useful and actionable for various pro-accountability actors: the TPA field now accepts that infomediaries or translators play an essential role in helping data or information gain traction. They do this through making it more understandable as well as socially and politically relevant to different target audiences. Some infomediation tasks entail quite complicated financial analysis, while others are relatively straightforward. In addition to infomediation, successful advocacy and campaigns also require skilled intermediation. This involves navigating power relationships to enable information to get to and be deliberated on by the right audiences. In the case of


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https://opendocs.ids.ac.uk/opendocs/bitstream/handle/123456789/12718/MAVC_Going_Vertical_FINAL.pdf

Interested readers can refer to a paper by Brendan Halloran (2015): Strengthening Accountability Ecosystems.


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Interested readers can refer to a paper by Brendan Halloran (2015): Strengthening Accountability Ecosystems.

For a useful discussion on intermediation and translation of evidence see Results for Development’s paper on evidence based policy. Brock with McGee (2017) provide useful definitions of infomediation and intermediation.
the extractives sector, productive intermediation requires extending tactics already used by some PWYP coalitions. These involve building relationships between data translators in many different institutions, including communities, local government, national government, parliament, audit institutions, the media and corporations.

5. Methods

I began with an evaluability assessment of programme documents to establish the quality of evidence available to support the programme’s contributions to expected and unexpected outcomes. (The full list of documents reviewed can be found in the Annexes.) One of the main purposes of the evaluability assessment was to define a sample of 13 data extractors for interview to strengthen the evidence of the programme’s contribution to outputs and outcomes identified in the documents. To maximise learning opportunities, they represented a range of projects that with different levels of ‘success’. In this instance, success was defined in terms of having completed a project that demonstrated some learning around findings and using data in ways that were consistent with the programme’s purpose.

Interviews with the 12 Extractors that I managed to contact were complemented by conversations with 4 Secretariat members, 1 Open Oil staff member involved in delivering the programme plus 3 donor representatives and a consultant. The consultant, an expert in the field, had supported the programme during year one. (The full list of people interviewed can be found in Annex 1.)

The analytical process involved organising output and outcome data as it relates to the programme’s main assumptions and also identifying factors that had helped or hindered progress towards the Data Extractors’ programme aims. Early findings were discussed with members of the Secretariat as part of a process to co-create recommendations.

The meeting with the Secretariat led to a subsequent iteration of analysis during which I considered whether alternative approaches could offer more effective means to achieve the programme’s long-term aims of building a data culture among PWYP Coalition members within national contexts.

Limitations

Although unlikely to have any bearing on the main conclusions, the methods suffer several limitations:

- No opportunity to triangulate the Data Extractors’ self-reported claims of training others with colleagues or community members, despite some efforts to do so. This makes the report vulnerable to criticisms that evaluations in the extractives sector rely on expert interviews and are thus biased.23
- Although I could assess whether DEs had demonstrated ability to use tools and approaches, I was not able to test their figures or financial models for accuracy.
- Case study outputs and interviews gave some indication of Data Extractor capacity and how the programme had contributed to it. However, the varied baseline skills of participants made it difficult to judge with precision the extent to which what they produced was due to new skills nurtured by the programme.
- Currently there is a dearth of publicly available good quality evaluations with evidence on successful data capacity building programmes. This has made it difficult to assess the programme’s relative strengths and come up with evidenced based alternative models.

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23 McDevitt (2017), p 5
6. Analysis of Findings

Key findings are organised in relation to the assumptions mentioned earlier. The report then goes on to discuss the factors that helped and hindered the programme’s achievements.

Providing skills to use data to uncover and communicate

The Data Extractors programme validated the assumption that face to face meetings and individual mentoring can increase capacity to use data to uncover transparency and accountability issues in the extractives sector. But the findings also suggest that achieving capacity improvements with the current programme model is difficult and by no means guaranteed. Over 50%, 14/23 of the total Extractor cohort with varied degrees of skills and confidence at baseline managed to complete case studies. While this is impressive given the ambition and innovative nature of the programme, these successes have to be considered alongside evidence that 9 Extractors did not manage to complete projects for various reasons. 1 person changed jobs and 1 went on leave. Several lacked sufficient motivation or struggled with competing priorities in their day to day work.

The completed cases discussed in detail in Annex 2 demonstrate that 14 data extractors were able to use different types of data for a variety of purposes, for example:

- 2 undertook complicated modelling to check valuations that uncovered unfair pricing;
- 4 used data to uncover a lack of transparency by corporations or governments;
- 4 raised awareness of laws not being implemented that mean citizens are denied a fair deal;
- 4 raised awareness of communities’ rights to access information on receipts.

The 14 Data Extractors performed various intermediation roles, communicating their work and findings to different audiences. In addition to producing short case studies, the DEs shared and presented findings to a range of users. These included MPs, corporations, governments, communities, journalists and civil society actors. Some participants focused on sharing stories of data use within the programme, by posting blogs on Extractafact, for example. Others used more orthodox campaign tactics, such as PWYP-France’s efforts to influence an amendment to a bill on corporate transparency in France. Infographics in letters to governments; simple killer facts for use in conversations with communities; and presentations to or guidebooks for civil society were among the communication tactics used.

The programme contributed to case study outputs in various ways. The overview of completed case studies suggests that the programme enabled:

- most extractors to search for relevant data and organise it if they found it;
- 6 to apply data cleaning tools the programme had promoted;
- 8 to use visualisation/infographics tools that had been taught on the course (1 already had the requisite capacity at baseline); and
- 3 to create appropriate data base portals.

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24 This is taken from my analysis of the cases and interviews. It can be found in Annex 4.
25 Open Oil Summary note and interviews with relevant alumni.
26 These are not mutually exclusive. Some projects covered more than one theme. All analysis comes from the case analysis that was informed by interviews and document reviews.
Overall the programme had somewhat limited impacts on participants’ data analysis skills; only 2 extractors manage to undertake sophisticated financial modelling within their projects. Other extractors who had started with low levels of data literacy did not feel they had gained sufficient skills to perform complex analysis or use some of the tools they were introduced to.27

In a few instances the programme’s main contribution to outcomes was in carving out space for members to pursue data related projects they had long been interested in. Others remarked that the programme had made them more confident about how to use data in advocacy and communication, for example simplifying messages for communities.28

As well as contributing to case study outcomes, the programme enabled other learning in support of its broader aims to enhance the use of data to uncover transparency and accountability issues:

- **Communities are important data users and stakeholders:** The projects undertaken in India, South Africa, the Philippines and Zimbabwe all highlight the importance of identifying communities as important users and generators of data in efforts to strengthen national natural resource governance accountability systems.

  *There is a need to distinguish between specific and relevant data:* PWYP-Philippines had to revisit their assumptions about what kind of data communities find relevant and useful during the implementation of their project.29 While project level EITI and mandatory disclosure data may be specific to a location, that does not automatically make it relevant to communities living there.

- **Building capacity requires the identification of different data users and uses.** The range of issues participants chose to work on drew attention to the wide variety of data sources, data users and uses that exist within the resource governance ecosystems. Thus one of the most important outcomes of the programme was Open Oil’s [user cases](#) tool. This begins to identify different questions driving different infomediation tasks. It also segments different data users, uses and levels of data analysis. Examples from the tool can be found in Annex 4. User case number 4, for instance, describes the questions driving PWYP France’s exploration of Areva’s business valuation in Niger. This involved complicated modelling to assess the fairness of product pricing. It generated data for central government and audit authorities that could feed into national debate. In contrast, User Case 3 describes the somewhat simpler ‘follow the money’ process pursued by PWYP Zimbabwe. They aimed to help communities understand local mining revenue alongside government budgets and demand that a fairer share of the proceeds be made available to support local services.

- **Extractives data analysis should be coupled with the assessment of tax and legal frameworks.** Both PWYP US cases demonstrate that communities often lose out because of the unfairness of existing and historic laws, rather than illegal or incompetent behaviour on the part of governments or corporations. They highlight the potential benefits of coupling analysis of discrepancies relating to corruption and illegal behaviour with more fine-tuned analysis frameworks relating to the fiscal regime (e.g. tax, royalties, fees, etc.) In addition, these cases illustrate that extractives data analysis is but one ingredient of the recipe
needed to strengthen extractive resource governance ecosystems. Integrated approaches are likely to require other ingredients such as strategic partnerships with actors like the Tax Justice Network and Open Contracting Partnership.\(^{30}\)

*Engaging local journalists is challenging:* The Canadian extractor chose to explore the ease of generating interest and engaging local journalists in extractive stories. This prompted useful reflections and tips on how to make information relevant and how to be a more effective intermediary.

- *There may be advantage in taking a more contextually informed, collaborative and multi-stakeholder approach to building data capacity, such as that used by the School of Data in Myanmar and Cote d’Ivoire.* Evaluation interviews usefully highlighted key distinctions between the School of Data and Data Extractors approach to building capacity to use data.\(^{31}\) The School of Data approach pays a data expert to provide in person training and mentoring to local coalitions in their home contexts. In contrast, the Data Extractors model expects to build the capacity of activists to use data and then train others on what they have learned alongside their other work. But arguably a more important difference is that the School of Data fellows are actively encouraged to build relationships and analyse user needs, capacities and incentives as a preliminary step to designing their data use and capacity building projects.\(^{32}\)

### School of Data approach identifies incentives and encourages effective intermediation

In Myanmar, the School of Data Fellow took a particularly politically savvy approach to assessing the data needs of different actors involved in the governance of Myanmar’s Jade industry. This allowed him to identify and capitalise on the incentives of different actors as well as develop the relationships needed to intermediate effectively between them.

Those working for the government wanted to comply with senior government directives to improve transparency, while MPs were keen to understand the data better. On the demand side, CSOs and journalists were motivated by the prospect of accessing more information to hold the government to account. They also wanted to be part of a project that provided an opportunity to show what Myanmar, a country that has been cut off from the world for many years, could do with technology and the database designed by the fellow fulfilled this aspiration. It combined visualisation tools, stories and data for the different users.

This user centred relational approach is quite different from the data driven and campaign approach used by the Data Extractors programme. Arguably it is more consistent with locally driven strategies that are currently viewed as good practice in the TPA field and used by coalition members in other aspects of their work.

Success is not guaranteed - The extent to which some of the potential benefits are realised will depend on the data analysis, training, social and political advocacy skills of the individual.

\(^{30}\) The complexity of relationships and intermediation tasks related to this kind of work was discussed by Data Extractors at the Harare workshop, Harare workshop notes

\(^{31}\) Interview with Yan Oak

\(^{32}\) NRGI Open Knowledge International Fellowships to Support Data Literacy in Resource Governance, Final Narrative Report, and interview with the Yan Oak
Fellow and the particular coalition and its context. Some School of Data Fellowships have not been successful. What is more, when comparing 2 examples judged to be relatively successful – in Myanmar and Cote d’Ivoire - it is possible to identify important areas of difference.

In Myanmar the Fellow interpreted understanding the local context and the community’s potential data capacity building needs quite broadly. For example, he engaged with MPs, journalists and other government actors. In Cote d’Ivoire, however, the local community was interpreted more narrowly – the PWYP coalition. It was not possible to determine the reason for this difference. But it does suggest the approach might be improved through the integration of more deliberate analysis of power relationships within the local accountability ecosystem. This would help coalition members to assess incentives and identify spaces where they are most likely to influence change. On occasion, this may include collaborating with state actors, as was the case in Myanmar.

Mandatory disclosure data
Assumptions that a lack of awareness about and ability to use mandatory disclosure data are the main obstacles to coalitions using it for transparency and accountability demands partly hold. But there is more to it than that and collaborative projects do not offer straightforward solutions. Interviews revealed considerable confusion as to whether the main purpose of the Data Extractors programme had been to design projects to explore mandatory disclosure data or not. In practice the design pushed the idea of using mandatory disclosure data through collaborative projects between coalition members in host and resource rich countries but this had mixed results.

7 extractors (3 from resource rich countries and 4 from Global North) of the 14 who produced case studies used mandatory disclosure data. One other Extractor from the UK chose to develop a handbook on its use. But only 2 of these involved twinning collaborations between Extractors in host and resource rich countries. 1 other collaborative endeavour was dropped when the Extractor concerned moved jobs.

Some Northern members of the coalition were disappointed that the number of extractors from resource rich countries prepared to engage in collaborative projects was not higher. However, they recognised it would be wrong for coalition members from the Global North to impose the use of mandatory data as a condition for projects. This was well judged. 4 respondents – not all from resource rich countries – pushed back against the focus on mandatory data. One claimed her right to choose her own approach while others questioned its relevance for the following reasons:

- EITI and mandatory data are difficult to reconcile because of their different reporting periods
- The corporations behind most mines in Myanmar are registered in Asia. Therefore, they were not listed on EU, Norwegian or Canadian registers or stock exchanges

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33 Review of several reports of School of Data Fellows in Cote D’Ivoire, Tanzania and Myanmar and interviews with the Myanmar Fellow and NRGI.
34 Interview NRGI
35 The case studies were undertaken by one participant from the UK, participants from France, Canada, the US Indonesia and Zimbabwe. Niger participated in collaboration with PWYP France. Another UK participant developed a handbook related to the use of mandatory data and the participants from the DRC, South Africa and Australia used their research to campaign for mandatory disclosure data in their respective countries.
- Communities engaged in the Philippines project found most mandatory data concerning extractives projects in their communities largely irrelevant.

Even though some extractors decided not to use mandatory data, evidence that the programme convinced most of them of its importance is quite compelling. In addition to the 7 participants that used mandatory disclosure data, 3 more – 2 from resource rich countries and 1 from Australia - used their cases to highlight the importance of mandatory disclosure in the countries where they worked. Another participant who chose to focus on a local community project also regarded learning about mandatory disclosure data as important.  

Admittedly, much of the participants’ interest was on the link between mandatory disclosure data and local social impact rather than more sophisticated financial modelling that might be used to spur widespread public debate on natural resource governance. But both issues are important and need to feature in a holistic and integrated approach to building a data culture within extractives sector governance systems.

Influencing corporations & governments
Assumptions that data supported campaigns will create incentives for corporates or governments to become more transparent or accountable, and that they will have the capacity to respond were not tested to any great extent. But the results from Data Extractors that did attempt to influence duty bearers were not particularly promising. Only 4 Data Extractors used their projects to try and influence politicians or to demand additional information from corporations or government within the programme timeframe. These requests had various results. The Australian participant believes Australia’s Opposition Party found her case study useful in their adoption of a mandatory disclosure policy, however they would have adopted the policy anyway.37 In France, PWYP’s analysis successfully supported an amendment relating to the Sapin II extractives transparency bill.38 But ultimately it was not passed as the influence of the evidence was mediated by local politics.

The collaboration between PWYP UK and PWYP coalitions in Nigeria, Indonesia and Tunisia led to requests for more information from several oil companies.39 These were partly successful. Petrofac Tunisia responded to a request by publishing a corrected payments report with the previously missing information. Shell similarly responded regarding its operations in Nigeria. But the company’s refusal to disaggregate between oil and gas payments suggests such requests may have little impact. Relatedly, responses to requests for more information from governments in Indonesia and Nigeria were not forthcoming.

In some instances, it may be too early to assess the influence of Data Extractor research on duty bearers and PWYP should continue to monitor research and advocacy that may yet bear fruit. For example, in Zimbabwe community requests for information relating to extractives work appear to be escalating.40 Similarly, PWYP-Rep of Congo (Brazzaville) still has to decide how to use findings from

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36 Interview Marco Zaplan  
37 Interview Jessie Cato  
38 Sapin II case  
39 PWYP-UK’s case study  
40 Various tweets and blogs by Mukasiri Sibanda
the DE case to advocate on more accountability from a State Owned Enterprise paying careful attention to the sensitivity of the local context.\footnote{Interview with Charlotte Boyer}

**Scaling and sustainability**

There was evidence of some impressive efforts on the part of programme participants to connect with and influence others. But these were not sufficient to build significant capacity at country level in resource rich countries. This raises doubts about the validity of assumptions concerning the Data Extractor model’s ability to achieve sustainability or scale.\footnote{Interviews with relevant participants} 8 of the extractors I spoke to were still highly enthused and interested in sharing their experiences or building the capacity of others.\footnote{Interviews with relevant Extractors} Several of the year 1 Data Extractors had participated in year 2 events. A number had participated in and shared experiences at Mining Indabas in Zimbabwe and South Africa.

Extractors in Zimbabwe, South Africa and the Philippines all reported that they were continuing to inform communities of the importance and potential use of extractives data.\footnote{Interview former PWYP US staff member who had deigned Extractafact.org} Likewise, several people based in the UK are committed to promoting the benefits of mandatory disclosure data through the dissemination of a handbook and recently published Mandatory Disclosure fact sheet.

It is notable that the Mandatory Disclosure fact sheet was published on PWYP-US’ portal, \url{http://www.extractafact.org}, which is one of the four portals developed to enhance access to and use of data under the Data Extractors programme.

### Extractafact

Extractafact was developed as a portal to enable and demonstrate the use of extractives data.\footnote{Interview Jana} It was created as a central resource for the coalition in the US but also globally. The idea was to produce tools that would extend opportunities for the PWYP network to learn how to access and analyse data, as well as to see examples of what others had done with the information. In the process the site would generate evidence of data use that could be used to support continued advocacy for transparency within the sector.

The DE who developed the portal used it to support 2 online webinars delivered during the programme. These were to help data enthusiasts with mapping and other tools. Although it is not possible to assess efficacy, they certainly generated significant interest, attracting over 70 people including representatives from the International Monetary Fund, journalists, academics and INGO staff, for example from Oxfam America. \footnote{Interview Jana} Extractafact.org now hosts data and links to training materials from 11 training activities conducted between June 2016 and June 2018.\footnote{http://www.extractafact.org/training.html} As of June 2018 the portal had been accessed by individuals from over 120 countries.\footnote{Interview Jana} It also hosts regular blogs relating to or demonstrating the use of extractives data, including several by DE alumni in recent months.\footnote{http://www.extractafact.org/blog}
The other three portals are:

- the PWYP- Indonesia portal,
- a database in Myanmar which the government is going to take over,\(^{49}\) and
- a database initiated by Bantay Kita/PWYP- Philippines that has received additional support from Hivos and been renamed as the Open Mining Governance portal.\(^{50}\)

Unfortunately, I was unable to assess the whether these three sites are still operational. The Indonesia site is inaccessible; the Philippines site does not appear to have been updated recently; and content on the Myanmar site is undated.\(^{51}\) Although the Philippines and Myanmar portals may still be active, the inaccessibility of the Indonesian site raises age old questions concerning the sustainability of portals developed under short term projects and the risks of unintentionally contributing to multiple and duplicative data portals.\(^{52}\)

There is no doubt that the enthusiasm of some of the people interviewed and the energy that they have put into blogging and training on extrafact.org have achieved some small scaling effects. In the interests of balance, however, their successes need to be viewed alongside the evidence that 10 Extractors were unable to complete case studies. What’s more, at least one who did felt she would need more training and support in order to feel sufficiently confident to train others.\(^{53}\)

Evidence of data use influencing donors, corporations and policy makers

It is too early to assess whether the Data Extractors’ use of data will influence donors or policymakers’ views on the value of transparency in the extractives sector and this assumption remains largely untested. The efforts of DEs to use and demonstrate use of data, for example through blog accounts on Extractafact.org appear to have been somewhat overlooked. According to one respondent they hardly featured in the controversial My Society evaluation of data use within the extractives sector. That being said, a number of DE case studies featured in the input for the EU Accounting Directives review.\(^{54}\) Undoubtedly, these were fewer in number and less significant than the DE programme designers had expected. Nonetheless, they include important examples of PWYP members engaging with and or using data and some of the DE donors interviewed regard this as a step in the right direction.\(^{55}\)

Factors that helped advance the programmes aims:

The Data Extractors’ achievements listed earlier were helped along by a number of factors:

- The enthusiasm of a core group of committed extractors: 8 of the extractors I spoke to were incredibly positive about the general aims of the project, even though some had some

\(^{49}\) Myanmar case study
\(^{50}\) Interview with Marco Zaplan
\(^{51}\) https://www.openmininggovernance.org/milestones.html
\(^{52}\) The risks of short term projects leading to duplicative portals was also raised in the My Society Extracting Value report
\(^{53}\) Interview with relevant Extractor
\(^{54}\) EU Review position paper
\(^{55}\) Interview Andrew
criticisms of the design. The basic premise that evidence based approaches were important resonated with them strongly.

- **Face to face meetings and deadlines:** several people commented on the added value of coming together with other coalition members and sharing experiences. One extractor noted that regular workshops in the first year created a peer pressure incentive to move forward with a project in order to be able to share progress during subsequent gatherings.

- **Time effect:** at least 3 people commented that the learning by doing approach helped them carve out time to make progress on research; in one instance this entailed developing a database that would have been difficult to schedule otherwise.

- **An interest in technology and tech tools:** several people were motivated by the technology aspect and timesaving tools.\(^{56}\)

- **Support and mentoring:** everyone was appreciative of the Secretariat and Open Oil’s mentoring support for their project design and case studies, even though some needed more help.

- **Year 2 programme adjustments:** Learning in year 1 led to adjustments that made the programme easier to manage. These included establishing an English language speaking requirement and a clearer contract with Open Oil. However, the effects of these changes were not carefully researched during the evaluation and thus there is no evidence that they improved outputs. Only 6 DEs from the year 2 intake completed their case studies compared with 8 in year 1.

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**Challenges to achieving the aims of the Data Extractors programme**

Being a new and innovative initiative, the Data Extractors programme experienced a number of hiccups. On the one hand, these reduced its effectiveness and the extent of its outcomes, however on the other hand they represent valuable lessons that have informed my recommendations.

- **The extreme diversity of participants’ baseline experience and skills proved a problem for those delivering training.** Some participants had no prior experience using Excel\(^{57}\) while others were already competent data analysts.\(^{58}\) Moreover, effective use of extractives data for advocacy requires knowledge of the sector, and skills in advocacy as well as data analysis. Designing workshops that could cater to participants’ differing needs in each area was particularly hard for Open Oil staff who were more accustomed to working with data analysts with fairly advanced skills.\(^{59}\)

- **Workshop designs and locations:** The workshops were too short for participants to get to grips with some of the more technical tools and poor connectivity in Palawan made it an inappropriate location.\(^{60}\) 3 people interviewed felt that the workshop agendas were too

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\(^{56}\) Interview NRGI and 2 Data Extractors

\(^{57}\) Interview Open Oil

\(^{58}\) Interviews with Data Extractors

\(^{59}\) Interview with Open Oil

\(^{60}\) Interviews with various Data Extractors
flexible and that there was not enough time dedicated to ‘hard work’. This could also reflect the mixed abilities and experience of participants with some needing more time to get up to speed with the basics of the extractives sector than others.

- **The data driven programme made it difficult to come up with researchable ideas:** A couple of people commented on the process being too data driven- some Extractors had to find an issue to research to demonstrate their skills rather than respond to an identified problem.\(^{61}\) As a result a few participants struggled to answer their research questions because they were too broad or because the data was inaccessible. Defining researchable problems and executing research in a short space of time is notoriously difficult anyway.

- **Inadequate communications and intermediation strategy:** Since some of the projects emerged without a clear problem and advocacy target participants found it difficult to identify an appropriate advocacy and communications strategy. Though the Data User Form introduced by the programme was a helpful tool in this regard,\(^{62}\) it did not seem to be accompanied by the kind of training required to undertake power analysis and design successful intermediation strategies. Additionally, the Secretariat introduced communication strategy support too late during the first year.\(^{63}\)

- **Safety risks associated with local political contexts:** At least 3 Data Extractors that completed cases uncovered issues that were difficult to pursue without endangering people in their respective contexts. An example from the Philippines is discussed below.

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Local politics make it difficult to act on discoveries in the Philippines

PWYP Philippines used a participatory process to develop a multi lingual ‘Demanding Action, Transparency, and Accountability Portal’. Its aim was to help civil society organisations and communities in different regions demand and use data from extractive companies to answer the question ‘are we getting a fair deal from government or companies?’ on issues that matter to them.

Communications and exchanges around this data resulted in indigenous groups realising that their informal leaders may have been complicit in denying them a fair deal. They considered the risk of violent reprisal so great that the community was unable to act on this discovery. PWYP Philippines attempted to reconcile the data with both the company and recipients and has clarified certain issues with relevant indigenous groups, but further intermediation has been difficult because of the complicated political context.
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- **Limitations of the case study output:** The communications support to finish case studies in the second year was highly valued, however as one programme participant remarked, the short word length limited the utility of the cases.\(^{64}\) Furthermore, she also commented on the reputational risks of non-peer reviewed analysis being published. Calculations in her case study had been questioned by the evaluators undertaking the My Society review.

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\(^{61}\) Interviews with various Data Extractors, Open Oil summary note
\(^{62}\) 2 Data Extractors mentioned this being useful
\(^{63}\) Interviews with relevant Extractors and Secretariat members
\(^{64}\) Interview with Extractor
Though she felt their queries revealed a poor understanding of her methods, the challenge still raises an important point about the reputational risk that could arise from data work that is not suitably validated.

- **Over reliance on contracts:** The Secretariat assumed that programme participants who had signed contracts would be supported by their managers where this was relevant. In practice, however, several people in the second year struggled to complete research projects that were not part of their regular work. 1 participant suggested this might have been mitigated had programme managers liaised more closely with her managers.

- **Missing assumptions relating to power, politics and incentives:** On the face of it the assumptions underpinning the programme were somewhat technocratic. The original design seemed to assume that generating interest in mandatory disclosure data and undertaking research through partnerships between coalition members in the Global North and resource rich countries would be unproblematic. There was insufficient attention to what incentives those in resource rich countries might have to use data and engage in the twinning part of the programme. Similarly, there was little evidence that the programme encouraged a politically smart, strategic intermediation approach to building relationships with state reformers and others who might have incentives to support transparency and other demands. As already noted, some Data Extractors, for example in Myanmar and Zimbabwe worked in this way, however it did not appear to be explicitly encouraged by the programme.

- **First year tweaks were possibly not radical enough:** several adjustments were made to the design based on learning during year 1, for example regarding the management relationship with Open Oil that had not worked well. But questions were raised on whether they went far enough. This is, of course, a particularly pertinent question given the innovative nature of the programme and the sector’s fascination with real time learning and adaptation. It could be argued that the programme might have benefited from more radical change in terms of ambition or design at the end of year 1. However, it is easy to say this with the benefit of hindsight and such changes would not have guaranteed better outcomes.

### 7. Conclusions

**The PWYP Data Extractors programme was timely and relevant.** Data Extractors are aware that data and evidence are not sufficient to trigger accountability. However, they recognise that good quality data inspires confidence and can support or complement other actions. While there are other actors supporting capacity development in the field, recent reviews on the extractives sector find that data use is an under developed area of work. Thus most participants interviewed were keen to develop their skills and valued the opportunity to participate in the programme. Even those who were critical of some of the methods used thought it should continue, albeit with improvements.

**The Data Extractors programme demonstrated that an international workshop and remote mentoring approach can enable coalition members to find and use data to uncover important**

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65 Interview with Secretariat member
66 McDevitt 2017, My Society 2017
issues related to weak transparency and accountability in natural resource governance. Given the innovative and ambitious nature of the programme, it achieved impressive results. 14 Data Extractors were able to complete case studies and it is possible to demonstrate that the programme made important contributions to this result. However, as the findings indicate, building capacity to use data effectively is no mean feat. Furthermore, the Data Extractors model suffers from a number of limitations.

Although the programme convinced a fair number of participants that mandatory disclosure data is important, it was less successful in persuading DEs and other coalition members from resource rich countries of the data’s relevance. Thus, in this instance, the programme failed in its ambitions to support collaborative projects. It is important to note that this evaluation is not stating that mandatory disclosure data is not relevant, rather that the programme was unsuccessful in persuading or demonstrating to coalition members of its relevance. Much more study would be required to assess mandatory disclosures data’s relevance in different contexts for addressing different problems.

Few DE projects resulted in requests to companies or governments for more information or more specific policy and campaign asks. This made it difficult to test assumptions that data based evidence will influence change in accountability behaviours. The lack of a communications and intermediation strategy involving media could be partly responsible for the low level of advocacy and campaigning activity, but the programme’s short duration and political sensitivities associated with challenging vested interests in some resource rich countries also affected outcomes in this area. Moreover, the evidence from this pilot, like similar programmes shows that evidence is not enough. Without thoughtful intermediation, requests for additional data or efforts to use analysis to influence legislation can have disappointing results.

The Data Extractors programme was reasonably successful in using international workshops to build connections between coalition members that improved prospects for sustaining some initiatives and increasing the scale of effects. But overall these were modest. When considered alongside stories of DEs not completing projects because of competing work priorities or ending up feeling poorly equipped to share anything beyond very basic messages concerning the benefits of data, the limitations of the current Data Extractors model become apparent.

More important than its achievements, perhaps, are the lessons that the Data Extractors programme generated relating to the challenges of building capacities and creating incentives for data use in support of a data culture. Some lessons relating to fairly operational issues such as the length and locations of workshops matter, but will not be dwelt on here. Instead I focus on the most important and strategic issues with reference to supportive evidence from the literature, where it is applicable.

- Capacity building initiatives that are data led and aim to increase the use of a particular kind of data, in this case mandatory disclosure data, may not be the most effective strategy to build a data culture. Many PWYP coalitions are very data savvy and use data well in campaigns. However, building a data culture where members view data and evidence as part of their everyday work means going further. Coalition members need to develop confidence to use data in ways that are most relevant to their concerns and the audiences they want to influence. This means being power aware and helping to build capacity to use data on issues that are most relevant to different kinds of users. This is one
of the most important messages found in contemporary evidence from the TPA field. The evaluation found that this relevance will be determined to some extent by local member organisations and the local political context. But it will also be affected by a range of other factors that influence an individual’s motivations and capacity to engage in programmes like this and the questions they can address with data.

Figure 1: Factors that influenced DE’s research questions and outcomes

- There is a need for a modular approach conceived as part of a longer term strategy to strengthen resource governance ecosystems. Though some Data Extractors managed to undertake quite complex data analysis, others acquired more basic skills or failed. This was partly due to their different baseline skills. In addition, Open Oil was not an ideal training partner for participants with no previous experience of using data. Inadequate contractual arrangements between Open Oil and PWYP regarding the management of the programme, in the first year particularly, exacerbated this problem.

One of the most useful outcomes of the programme is a user case tool developed by Open Oil that partly responds to this. It helps to define the varied uses and users of different types of extractives data within the broader resource governance ecosystem. Importantly, the tool also begins to identify different data capacity building needs, both in terms of levels of difficulty associated with different goals, and also in terms of the roles that different state, and CSO organisations play in natural resources governance and accountability systems. This tool is important for 2 reasons:

1. Because it encourages a more user centred approach to thinking about capacity building that is consistent with what is considered good practice, though arguably more users and intermediaries need to be added, e.g. media actors.
2. The analysis of different users and uses gives a flavour of the complexity of the overall natural resource governance ecosystem. This discourages a focus on individual data users and single campaigns in favour of more integrated approaches that require building different kinds of capacity at and relationships between different locations in the overall system.

- A collaborative approach informed by analysis of local contexts plus the complexity of intermediation may offer important insights. Fortuitously, the DE programme included

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67 Reboot (2015) is a particularly useful resource that elaborates on this.
68 I am indebted to Jed Miller for shaping some of this thinking.
opportunities to learn from a School of Data fellow who was amongst the DE participants. The fellow approach is not, in and of itself, the most interesting feature of this model whose success is influenced by the technical and social skills of the fellow as well as the context. What is important is that the person supporting capacity building begins by developing relationships and trying to understand the natural resource governance ecosystem and different data use needs before embarking on training. The locally contextualised approach taken by the Data Extractor in Myanmar, for example enabled a collaborative and user driven approach to building capacity to use data that included journalists and MPs.

A variation of the Myanmar model is currently being used in an experiment to stimulate interest in and use of Shell’s mandatory disclosure data on payments to the Nigerian government. It similarly offers PWYP important opportunities to learn about the potential effectiveness of a locally driven, multi stakeholder approach that demonstrates important aspects of what is considered good practice in the field. These include very specific approaches to working with media and audit institutions.

NRGI explores the utility of mandatory disclosure data in Nigeria

NRGI performed some initial analysis of mandatory disclosure data in Nigeria before visiting different stakeholders to find out what they would find most useful for their work. Subsequently NRGI developed and formally launched a briefing specific to these interests.

Discussions around the launch helped NRGI identify different users and use cases. Mainstream journalists, for example, could see how mandatory data would add value to their efforts to raise public awareness on extractive revenues. However, they did not have time to undertake investigative journalism to use data to uncover discrepancies themselves. Thus they needed help in identifying a few salient pieces of data to make their points. NRGI’s tactics to build this capacity appear to have been successful. Several media houses picked up and reported on some important data regarding payments to government last April, when it was released.

A CSO working to strengthen the Supreme Audit Authority was another use case. They saw opportunities to provide the Authority with data in a format it could use to hold central government to account for inter government transfers.

8. Recommendations
The PWYP Data Extractors programme has generated useful lessons on the opportunities and challenges associated with building capacity to use data in the extractives sector. This section presents several options concerning the strategic choices facing the Secretariat on how to apply these in its future strategy.

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69 Interview with NRGI staff
71 http://www.extractafact.org/blog/shell-published-its-payments-to-governments-nigeria-has-taken-notice
- **Option 1:** Tweak the existing DE offer using the Open Oil user case tool to segment users of different types of data and develop a modular approach to delivering training through one or more strategic partnerships. An example of such a modular approach to training is illustrated by the [Open Data Institute’s skills framework](#). It describes the different areas of skills and knowledge associated with the use of Open Data with different tiers – from beginner to expert.

This would require a more detailed assessment of the strengths, weaknesses and niches of PWYP’s training skills and that of different training partners, such as Open Oil, Reboot, the Open Knowledge Foundation and the Open Data Institute. It would probably also involve mapping potential coalition member user interests, then segmenting them according to different baseline capacities. Improved selection criteria and course evaluations are other recommended improvements, as is dropping the case study output.

It might also mean PWYP is more realistic, recognising that it is not advisable to train all coalition members to undertake high level analysis in each jurisdiction where it operates. When advanced modelling is required in a particular location where they are missing, the coalition might be better advised to draw on the pool of resources it has at its disposal internationally. The national coalition that needs help could invite support from members that do have such capacities though they might be situated in other locations, such as NRGI. Alternatively, the national coalition may need to ask the international Secretariat to act as an intermediary who is able to broker relationships and contract services from specialist data analysts and modellers, such as Open Oil.

As well as using course evaluations to assess the efficacy of training, this modular approach needs to encourage participants to establish robust theories of action. These must make assumptions on the incentives and capacities that will enable audiences to respond to data and evidence in their given context explicit. Documenting assumptions would help PWYP members to develop meaningful frameworks for assessing and learning about their impact.

**Advantages:** This model builds on what has been learned, and could work well for helping nurture basic infomediation and intermediation skills. It could also incorporate modules on mandatory data use targeted at particular kinds of users and transnational partnerships. In addition, this model would continue to support a small international data community able to engage in transnational learning and sharing.

**Disadvantages:** This model could still result in short term discrete data projects and some alumni feeling isolated and unable to build on what they have learned in international spaces once they get back home. Additionally, it does not necessarily address design weaknesses such as the data driven nature of the Data Extractors model. To correct this, PWYP would need to ensure those designing training programmes have the capacity to facilitate sessions on context, power analysis and intermediation. Arguably this could be addressed within a learning approach such as that facilitated by Global Integrity during the Making All Voices Count programme. Global integrity took a participatory approach to supporting action learning by civil society actors from different countries working to enhance open governance work at local levels. Like the Data Extractors model, it included international workshops, but with considerable time dedicated to exploring assumptions on
how different projects worked or not. If this option were pursued, workshops would need to be longer to accommodate learning around key assumptions.

**Figure 2: Example of a modular approach that could adapted for option 2 or 3.**

- **Option 2** – Radical adaptation to a locally driven, systemic approach informed by analysis of data capacity building needs within the context of national natural resource governance ecosystems. A key aim of this option is to incorporate tactics and ideas from the Open Knowledge Foundation’s School of Data model that are consistent with what is increasingly viewed as good practice in evidence informed policy making and transparency, participation and accountability fields.

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73 https://www.r4d.org/resources/scoping-study-evidence-translators-role-in-evidence-informed-policymaking/

This approach would prioritise mapping the data community within a natural resource governance ecosystem that might include coalition members, audit authorities, MPs and journalists. It would then involve building collaborative relationships that allow PWYP members to tap into different users’ perceptions of problems and their incentives for demanding or using different kinds of data to hold actors to account. A modular approach could be taken to building capacity while also strengthening relationships between those using data for advocacy at national level and those using data to monitor the receipt and use of extractives receipts at subnational and community levels.

The idea would be to try the approach in a few priority countries with the aim of creating a ‘demonstration effect’ which may encourage replication elsewhere.

**Advantages:** this option overcomes power relations that negatively impacted the DE programme and is much more user driven. Also, it takes advantage of the PWYP coalition’s unique convening power and ability to bring together diverse stakeholders with different interests working at different levels. Arguably it would provide an opportunity to test assumptions that transnational collaborative projects that use mandatory disclosure data offer the best opportunities for campaign wins. In this model the idea would be for members in resource rich countries to request assistance on projects that interested them and involved mandatory disclosure data, rather than such initiatives being pushed by members in the Global North. If successful and underpinned by an appropriate monitoring and learning framework, it could provide a demonstration model with prospects for generating lessons for replication elsewhere.

**Disadvantage:** such an approach is resource and capacity intensive, not least because it needs to incorporate a substantive monitoring and learning component that allows different coalition members to test data approaches and learn and adapt. It would probably only be possible in a few countries and establishing the roles and responsibilities of different actors, including the Secretariat would require considerable work.

One initial consideration is whether such a model is best implemented through a more politically/governance informed School of Data fellow approach, or an alternative model. The School of Data fellow model relies on one individual – a data expert- to analyse user needs and create spaces where coalition members, journalists and members of government come together and work to build a data culture for improved accountability in resource governance. In practice, it may be more effective to have a team comprising different skills and expertise working in partnership to build capacity towards such a goal. The team would certainly need to include the kind of monitoring, evaluation and learning expertise to support a locally designed programme to monitor, learn and adapt. Importantly this learning approach needs to be sufficiently robust to mitigate continued criticisms of evaluation in the extractives sector being overly subjective and biased.
Annex 1 - List of people interviewed

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Date</th>
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<tbody>
<tr>
<td>1. Marco Zaplan</td>
<td>Ex PWYP Philippines (Now EITI Secretariat)</td>
<td>09/05/2018</td>
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<td>2. James Royston</td>
<td>PWYP Secretariat</td>
<td>23/05/2018</td>
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<td>3. Andrew Clarke</td>
<td>Omidyar Network</td>
<td>23/05/2018</td>
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<td>4. Alexandra Malmqvist</td>
<td>PWYP Secretariat</td>
<td>25/05/2018</td>
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<td>5. Paul Dziedzic</td>
<td>Open Oil</td>
<td>18/05/2018</td>
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<tr>
<td>6. Mukasiri Sibanda</td>
<td>PWYP Zimbabwe/ZELA</td>
<td>07/06/2018</td>
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<tr>
<td>7. Charlotte Boyer</td>
<td>Ex Justice and Peace Commission of Pointe Noire, PWYP Congo</td>
<td>04/04/2018</td>
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<tr>
<td>8. Yan Oak</td>
<td>Phandeeyar, Myanmar</td>
<td>05/06/2018</td>
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<tr>
<td>9. Tafadzwa Kuvheya</td>
<td>PWYP South Africa</td>
<td>05/06/2018</td>
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<tr>
<td>10. Dominic Eagleton</td>
<td>PWYP UK/ Global Witness</td>
<td>06/06/2018</td>
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<td>11. Camilo Nhancale</td>
<td>PWYP Mozambique</td>
<td>06/06/2018</td>
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<td>12. Duncan Edwards</td>
<td>PWYP International Secretariat</td>
<td>13/06/2018</td>
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<td>13. Jessie Cato</td>
<td>PWYP Australia</td>
<td>14/06/2018</td>
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<td>14. Hafsat Ajia</td>
<td>BudgIT Nigeria</td>
<td>16/06/2018</td>
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<td>15. Elisa Peter</td>
<td>PWYP International Secretariat</td>
<td>19/06/2018</td>
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<td>16. Shreya Shah</td>
<td>IndiaSpend</td>
<td>06/06/2018</td>
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<td>17. Jana Morgan</td>
<td>ICAR, Ex PWYP US</td>
<td>06/06/2018</td>
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<tr>
<td>18. Jed Miller</td>
<td>3 Bridges, Open Data Consultant</td>
<td>28/06/2018</td>
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<tr>
<td>19. Alexander Malden</td>
<td>Natural Resources Governance Institute</td>
<td>18/06/2018</td>
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<tr>
<td>20. Katarina Kuai</td>
<td>Natural Resources Governance Institute</td>
<td>14/06/2018</td>
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<tr>
<td>21. Jean-Phillipe Rabin</td>
<td>European Commission</td>
<td>20/06/2018</td>
</tr>
<tr>
<td>22. Miles Litvinoff</td>
<td>PWYP UK</td>
<td>19/06/2018</td>
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</tbody>
</table>
Annex 2 – Analysis of cases

Overview of Data Extractor case studies

Year One

1. **PWYP France** used high level modelling and analysis of mandatory disclosure data to answer questions on the effectiveness of the French SAPIN II transparency legislation that permitted certain companies to avoid project level reporting. The model demonstrated that the law was ineffective and informed a policy debate plus a bill amendment in the French Parliament. The Extractor’s story was also picked up by the media. However, ultimately the campaign was unsuccessful and the amendment was not passed.

   In partnership with PWYP Niger, PWYP France - Oxfam used mandatory disclosure data to answer the question: have commodity sales been correctly valued? Their analysis demonstrated that Areva, a French state owned company, was under valuing its uranium mining business. This resulted in reduced royalty payments to the government of Niger while also allowing Areva an unfair competitive advantage on global markets.

   *Programme contribution*: Not validated - but OCR tools and Open Refine were used to organise the data and add filters. With support from Open Oil PWYP France used an interactive map to show which countries would be excluded from Total’s reporting under SAPIN II.

2. **PWYP Indonesia** analysed payments of over $2.38 billion to Indonesian government entities using mandatory disclosure data reported by oil companies in the UK and Norway. This data was used to create an interactive online map and app of the companies, their operational sites and the payment data disaggregated by payment type to be updated annually. PWYP Indonesia claimed this contributed to public debate. However, they were unsuccessful in their attempts to get the government to send them the data they needed to answer the question: can the government verify receipts?

   *Programme contribution* - not validated, but reference in the case to several tools included in course: Google scraper, tabula and Abby fine reader. Piktochart was used to visualise the information and Tableau. PWYP Indonesia had previous experience undertaking EITI data analysis.  

3. **PWYP Philippines** used a participatory process to develop a multi lingual ‘Demanding Action, Transparency, and Accountability Portal’. One aim was for it to help civil society organisations and communities in different regions demand and use data from extractive companies to answer the question ‘are we getting a fair deal from government or companies?’ on issues that matter to them. These include royalties and environmental protection matters. PWYP played a useful intermediation role. Communications and exchanges around this data led PWYP Philippines to re-evaluate their assumptions concerning what information was important to communities. PWYP also reported they led young people to realise that companies were duty bearers with responsibilities to communities rather than generous patrons bearing gifts. In addition, conversations resulted in some indigenous groups realising that it was their informal

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75 [http://www.publishwhatyoupay.org/pwyp-resources/pwyp-indonesia-on-using-project-level-data/](http://www.publishwhatyoupay.org/pwyp-resources/pwyp-indonesia-on-using-project-level-data/)
leaders denying them a fair deal, not merely corrupt business or local administrations. They considered the risk of violent reprisal so great that the community was unable to act on this discovery. Bantay Kita appeared unwilling or unable to take any further intermediation role because of the complicated political context at the national level.

Programme contribution: Portal required using tools introduced in the programme, for example mapping and visualisation tools as well as data cleaning tools. DE also appreciated the advice received from peers. A data user form introduced by the DE programme was useful for helping communities identify their data needs. Though he valued learning about mandatory disclosure data, the DE chose not to use it because of its perceived lack of relevance for the communities with whom he was working.

4. **PWYP UK**’s efforts to use mandatory disclosure data in partnerships with Nigeria, Iraq, Indonesia and Tunisia coalition members to check governments had received payments had mixed results.

- The UK extractor equipped PWYP Nigeria with visual graphics that they used to communicate with the government and ask the question **can the government confirm payments from Royal Dutch Shell?** But PWYP received no response. A UK based inquiry into an anomaly regarding the valuation of Shell’s production entitlements paid in kind was more successful. The company provided some extra information on operations in Nigeria, but refused to disaggregate between oil and gas payments.

- Similarly, PWYP UK supplied PWYP Indonesia with infographics combining payments by BP and Shell so they could communicate with the government and ask the question: **has the government received the amounts reported?** PWYP Indonesia confirmed that the government officials refused to verify the disclosed payments and have told civil society to wait for Indonesia’s next EITI report.

- PWYP UK notified Petrofac about deficiencies in the company’s data on the valuation of production entitlements and the identity of recipient government entities in Tunisia. Petrofac responded by publishing a corrected payments report with the previously missing information. Despite infographics on Petrofac payments being shared by the Tunisian Coalition for Transparency in Energy and Mines at an open data workshop for Tunisian civil society and media organised by the Natural Resource Governance Institute, there is no evidence they were used to demand information by government. Similarly, efforts to work with the Iraqi Transparency Alliance for Extractive Industries on Shell’s mandatory disclosure data did not go far, despite their initial interest.

Programme contribution: UK based DE was inspired to use the DE programme to develop relationships and collaborate with other coalition members in efforts to use mandatory disclosure data to try and hold government to account. Used general knowledge shared and Piktochart for visual posters. The relationships were not terribly successful and the Extractor wondered whether PWYP partners had initially agreed to be polite.

5. **As in the Philippines example, PWYP Zimbabwe/ZELA** used mandatory data disclosed by Anglo American for its Unki platinum mine to enable citizens to demand data to assess whether they are getting a fair deal. Workshops enabled 20 representatives of the Marange and Shurugwi communities a) to develop their skills in assessing local mining tax revenue alongside local government budget and financial statements and b)
to make demands for data that could support their calls for better funding for local economic and social development from the proceeds of mineral extraction. Subsequently PWYP Zimbabwe has undertaken similar activities in eastern Zimbabwe and is using data and community demands in national budget consultations and dialogue with multi stakeholder groups. One key aspect of this approach is finding ways to communicate financial figures in terms that are meaningful to communities, such as loaves of bread.

*Programme contribution:* Extractor already had strong financial data analysis skills and a record of using this in advocacy. Chose not to use infographics or analytical skills because he preferred writing. Main contribution of programme was to *instil confidence to use simple killer facts to communicate financial data to communities, and to blog and engage with government and journalists in efforts to hold government to account.*

6. **PWYP US a** – Analysed mandatory disclosure data to answer the question are US mining companies paying their fair share in tax? Uncovered a lack of transparency by some companies and also demonstrated the difficulties associated with analysis of tax revenues. Though the DE was able to identify anomalies, her research raised more questions than she answered. She concluded that over-favourable tax laws were the real problem. There needs to be more research and requests for data publication to support further advocacy on tax issues including through use of data and tools published on [http://www.extractafact.org](http://www.extractafact.org), a portal that was developed as part of her DE project.

*Programme contribution:* demonstrated ability to use some of the cleaning tools *Tabula, GoogleScraper* plus visual tools and techniques introduced by the programme. But the Extractor’s real interest was the extractafact database, which was influenced by the Philippines DE sharing advice on the best software to use.

7. **PWYP US b** – set out to explore and use historical data to assess whether Americans were getting a fair deal for mining on federal land in Nevada? The DE discovered that royalty law and patent processes had reduced federal income. This generated useful lessons concerning the challenges of accessing and using historical extractives data as well as the potential benefits of combining analysis of lost revenue with assessments of regulatory frameworks.

*Programme contribution:* Not interviewed, but *time and space to test the utility of scraping tools like Tabula* is assumed, *even though they were not helpful in this case.*

8. **PWYP UK/Global Witness UK** - Developed a handbook to encourage and enable use of mandatory disclosure data with various examples. The Handbook is built around a set of 10 tests that are organised from the simplest to the most complex. The early tests require little additional information and can be run by anyone with a few hours to spare. Extractor did not manage to communicate the advantages of and engage as many Data Extractors in testing the handbook content as hoped. They appeared uninterested. My efforts to get them to respond to questions on the relevance of the handbook were similarly unsuccessful. Handbook still not completed at time of writing (July/Aug 2018).

*Programme contribution:* Unclear.
9. **PWYP Republic of Congo (Brazzaville)** succeeded in completing complicated analysis to answer the question: have commodity sales been valued correctly? The DE examined fiscal transfers from a state owned enterprise to the Treasury. She managed to establish information gaps and inadequate explanation of variances in sale prices and fees involving transfers to Chinese banks. The research generated targeted queries for state enterprises in Congo re pricing policies and a call for mandatory disclosure of state company trading data. At the time of the review, this data had not yet been communicated and used for advocacy. This was partly because of the political sensitivity involved, but also because of competing priorities within the DE’s employer organisation. Case showed challenge of comparing EITI data with other data because of different reporting periods.

*Programme contribution:* time carved out to pursue project of interest, increased methodological capacity to look more deeply at issues DE was already monitoring. Her research applied the following tools from the programme: Tabula to scrape, rawgraph for visuals. She is engaging with Open Oil to further develop her modelling skills.

10. **PWYP South Africa**’s project was driven by a request from a community activist for data on whether Sedibeng Iron Ore, a partly owned South African company was complying with its legal obligation to contribute to a South African Mines Social and Labour Plan. In other words it was to answer the community’s question – are we getting a fair deal in terms of existing legal frameworks? The DE extractor tried to finesse this into a comparative case study of the relative transparency of Sedibeng with an Anglo American mine that was reporting mandatory disclosure data. After discovering that the South African mine was not disclosing any data at all, she focused her energies on using Sedibeng as an exemplar in support of an ongoing campaign for mandatory disclosure legislation in respect of South African mines. The case has subsequently been presented at Mining Indabas and has played a role in a planned partnership between PWYP Australia and PWYP South Africa to support the campaign for Australian mandatory disclosure legislation. The DE reported she is also passing on learning about the importance of evidence based demands to other CSOs and community organisations.

*Programme contribution:* a ‘light’. The DE had no previous experience working on data, and even though she did not use data much in the case study, the process of searching for financial data and for beneficial ownership information gave her confidence in doing more evidence based advocacy and supporting communities in associated endeavours. Despite achievements she felt she would need more training and support to be confident in more difficult data analysis.

11. **PWYP Canada** – Engaged and collaborated with journalists in Alberta, equipping them to use an NRGI data portal to access mandatory disclosure data relevant to municipal taxes paid by oil and gas companies. The objective was to enable them to use such analysis to raise questions on whether payments reconcile with data on local tax receipts and thus whether communities were getting their just deserts. The focus was upon local newspapers because they act as a credible, recognizable, and accessible source of information for residents. Managed to communicate with and interest 4 of 8 journalists approached, but this did not lead to an immediate story or smoking gun. The

end-goal for the case study was recommendations for advocates and researchers who seek to discuss local extractives projects with journalists, particularly within small municipalities.

*Programme contribution:* Not interviewed, but case demonstrates ability to compare mandatory disclosure with other municipal tax data despite challenges accessing it.

12. **IndiaSpend:** Are communities getting a fair deal? Investigative human interest journalist piece on the failure of an Indian state to implement a law requiring mines to contribute to a social development fund based on investigate journalism research. Discovered low levels of transparency and awareness of the fund as well as weak institutional capacity to implement it. Stories tried to raise awareness of communities and local leaders concerning of amounts they were entitled to. They were picked up by media.

*Programme contribution:* knowledge of extractives sector and some technical support from Open Oil.

13. **PWYP Australia** curated and analysed data published on the Australian Stock Exchange concerning Australian mining interests in Africa. This analysis was picked up by and provided additional evidence for the Opposition’s emerging policy on extractives. The research was picked up by INGOs and media and presented at a Mining Indaba in South Africa.

*Programme contribution:* Used some of the visualisation tools introduced in the programme. But the biggest programme contributions were increased confidence and time to undertake a project the DE was interested in.

14. **Phandeeyar Myanmar:** The DE, who was also a School of Data fellow took a brokering approach to build relationships and assess the needs of different stakeholders involved or interested in the jade industry: the government who wanted to be more transparent, CSOs and journalists who wanted access to more information to hold the government to account and MPs who wanted to better understand the data. Having assessed their needs, he developed a segmented data base that aggregated and contextualised data on the on the jade industry. It combined visualisation tools, stories and data for different users. This article on how local communities in the jade mining regions are dealing with the boom in jade mining was written by one of the participating journalists. The project succeeded in engaging different users because it leveraged contextual incentives. These included senior government directives to improve transparency and also the desire to be part of a project that provided an opportunity to show what Myanmar, a country that has been cut off from the world for many years, could do.

*Programme contribution:* of DE training: Minimal, the DE had already been to School of Data and had established skills. Benefits for the DE and his CSO were learning about the extractives governance ecosystem and building relationships with global networks.
Annex 3 - References

Internal programme documents

- Data Extractors programme handover notes for the Director of Global Impact
- Data Extractors Jakarta workshop notes
- Data Extractors Harare workshop notes
- Data Extractors Palawan workshop notes
- Data Extractors Lagos workshop notes
- Open Oil 2018 - Summary document – Data Extractors projects: lessons learned and reflection
- Charlotte Boyer - Selling the state’s share of oil: how to improve transparency in the Republic of Congo
- Sasha Caldera - Harnessing outreach: connecting tax payment information to journalists within the small municipalities in the province of Alberta
- Jessie Cato - Using Australia stock exchange data to map Australian Extractive projects in Africa
- Dominic Eagleton - Developing a handbook for using project level data
- Tafadzwa Kuvheya - The iron from the town under the trees
- Miles Litvinoff - Using UK company data as an accountability tool
- Meliana Lumbantoruan - Why Mandatory disclosures matter for Indonesia
- Waseem Mardini - Investigating a fair return on U.S. mineral resources
- Jana Morgan - Is the United States getting good deal on its natural resources? A taxing question
- Yan Oak - Shedding light on Myanmar’s jade industry
- Quentin Parrinello - Sapin II: a very opaque transparency bill in France
- Mukasiri Sibanda - Community data literacy for demand driven change
- Shreya Shah - How not to use a development fund for mineral rich areas in India
- Marco Zaplan - Making DATA work for communities project

Other documents


- My Society (2017) Extracting value power point
- Roger, K. NRGI Open Knowledge International Fellowships to Support Data Literacy in Resource Governance, Final Narrative Report

Blogs

- Sibanda, M. Multiple blogs, [https://mukasirisibanda.wordpress.com](https://mukasirisibanda.wordpress.com) [Accessed 01/06/2018]
- Sibanda, M. Should we celebrate the Zimplats deal or worry? [Accessed 01/06/2018] http://www.extractafact.org/blog/should-we-celebrate-govt-zimplats-deal-or-worry

Websites visited

- Engine room – Matchbox programme [https://www.theengineerroom.org/matchbox-program/](https://www.theengineerroom.org/matchbox-program/)
- Open Knowledge Foundation School of Data [https://okfn.org/about/our-impact/school-of-data/](https://okfn.org/about/our-impact/school-of-data/)
- Open Oil- [http://openoil.net/about-openoil/](http://openoil.net/about-openoil/)
### Annex 4 – User case tool examples

#### Use-Cases Matrix

**Project-level Payments to Governments**

<table>
<thead>
<tr>
<th>Use-case 1</th>
<th>Use-case 2</th>
<th>Use-case 3</th>
<th>Use-case 4</th>
<th>Use-case 5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type of Use Case</strong></td>
<td>Analysis</td>
<td>Communication</td>
<td>Communication</td>
<td>Analysis</td>
</tr>
<tr>
<td><strong>Title</strong></td>
<td>Comparing EITI with Mandatory Disclosure Data</td>
<td>Government verification</td>
<td>Economic contribution: local vs central government</td>
<td>Assessing valuation</td>
</tr>
<tr>
<td><strong>Guiding question</strong></td>
<td>How do mandatory disclosures compare to EITI figures?</td>
<td>Can government verify receipt of payments, as stated by companies?</td>
<td>How do payments to central government relate to “known” local payments?</td>
<td>Have commodity sales been valued rightfully?</td>
</tr>
<tr>
<td><strong>Goal</strong></td>
<td>Finding irregularities / “missing million”</td>
<td>Finding irregularities / “missing million”</td>
<td>Fair deal for communities?</td>
<td>Reveal &quot;transfer mispricing&quot;</td>
</tr>
<tr>
<td><strong>Approach</strong></td>
<td>1) Identify matching EITI &amp; company data (same reporting year, same “project”)</td>
<td>1) Identify company disclosures on projects in your country (of interest)</td>
<td>1) Identify payments to communities in your country (e.g. EITI reports or Community Trust)</td>
<td>1) Compile production figures, royalty rates &amp; payments for several projects, in the same year</td>
</tr>
<tr>
<td><strong>Challenges</strong></td>
<td>2) Check EITI &amp; company report using same/similar reporting criteria (how were the payment figures put together? &gt; checklist)</td>
<td>2) Compile them into easily digestible format for governments to read (e.g. using infographics like pictogram)</td>
<td>2) Calculate the actual sales price (payments = royalty rate x production)</td>
<td>2) Search Annual Report for other details about production area</td>
</tr>
<tr>
<td><strong>Target group</strong></td>
<td>3) Check for material mis-matches. Consider to what extend reporting criteria can explain mis-match</td>
<td>3) Contact respective government offices and ask for confirmation of figures</td>
<td>3) Present contrasted figures to communities</td>
<td>3) Compare actual sales price to spot price at the time, and identify outliers</td>
</tr>
<tr>
<td></td>
<td>Governments will be reluctant to verify</td>
<td>Only relevant to countries with sub-national payments and legal framework</td>
<td>Not all companies provide information on production figures disaggregated per project</td>
<td>Contract details not always public</td>
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<tr>
<td><strong>Methodologies between EITI &amp; company disclosure data can vary</strong></td>
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<tr>
<td><strong>Differences in reporting cycles and time covered by reports (full comparisons probably only possible from 2017 on)</strong></td>
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