



Rio Doce Panel – Annual Monitoring, Evaluation and Learning Report 2021

Contents

Executive Summary.....	3
Introduction.....	5
1. RDP 2021 – Monitoring results.....	6
1.1. General RDP work, product design, and delivery.....	6
2021 – <i>Changes in the RDP modus operandi</i>	6
<i>Product design and delivery</i>	7
1.2. Product quality.....	7
1.3. Communication and engagement results.....	9
<i>General Outreach Results</i>	9
<i>Engagement with stakeholders</i>	12
1.4. Uptake of RDP recommendations.....	13
<i>Official feedback from Renova</i>	13
<i>Assessment of possible evidence for implementation</i>	14
<i>Evaluating implementation</i>	15
1.5. RDP influences and outcomes.....	15
<i>Influence in the reparation process</i>	15
<i>Citations of RDP work in scientific articles and technical studies</i>	15
<i>Described outcomes</i>	15
1.6. RDP member’s feedback.....	16
1.7. Overview of RDP results – Communication and knowledge log frame.....	16
2. Insights regarding MEL key questions and next steps for MEL.....	18
2.1. How can these results help to answer the MEL key questions?.....	18
2.2. What are the priorities for the MEL work in 2022?.....	19
Annexes20	
Annex 1. Criteria used for themes selection from September 2020 on.....	20
Annex 2. Survey responses – stakeholders' evaluation of the presented recommendations.....	21
Annex 3. Citations of RDP's knowledge products in technical and scientific studies in 2021.....	24
Annex 4. Summary of the results of the analysis with secondary data to identify evidence of implementation.....	26
Annex 5. Assessment of the results according to the progress markers defined in the Communication and Knowledge log frame.	29

Executive Summary

i. Product design, delivery, and quality

In 2021 the RDP published Thematic Report 03 and Thematic Report 04. Both are publicly available, in Portuguese and English, on the Rio Doce Panel website.

In surveys done after the in-depth meetings of both Thematic Reports (TRs), all Renova Foundation (RF) respondents agreed that the studies are useful for the RF's work in the reparation, the programs' resilience, and the long-term ecosystem health and sustainability of the Basin.

In negotiation with the RF, the RDP will not work to develop new topics. Instead, the Panel is helping Renova build a methodology for the Impact assessment of coastal and marine zones in close relationship with RF's teams.

ii. Communication and engagement results

There is constant interest in the RDP knowledge products, which reached almost 4,000 downloads in 2021 (12,000 in the RDP's lifespan). TR03 and TR04, launched in 2021, had 977 and 438 downloads, respectively. The access to the RDP website has remained constant (~10,800 total annual views), with a solid international audience (more than 56% of the visitors in 2021).

The RDP participated in 20 external meetings with more than 200 attendees, mainly with Renova Foundation – RDP's primary stakeholder. There were presentations of the launched TRs to the Inter-federative Committee (CIF), the Rio Doce Basin Committee (CBH-Doce), and the scientific community in the Rio Doce Integrated Seminar. The Panel and IUCN also presented the Panel's work at international events (World Conservation Congress – WCC, and the International Association for Impact Assessment - IAIA Conference). An opinion article about the Rio Doce reparation governance written by Panel members was published by Nexô, a national online newspaper.

iii. Uptake of RDP recommendations

The Renova Foundation declares to completely agree with 14 of the 24 recommendations for which official feedback was given (almost 60%), and secondary data analyses showed that many aspects of the recommendations were implemented in the reparation process. Nevertheless, analyses also revealed gaps in implementation, such as the lack of integrated and strategic use of the recommendations, difficulties related to governance issues, and poor communication.

Stakeholders that participated in presentations of TR03 and TR04 acknowledge the usefulness and importance of the recommendations, despite sometimes being uncertain about the likelihood of implementation.

iv. Influences and Outcomes of RDP work

We found clear evidence of RDP's contribution to the RF's work on Impact Assessment. The RDP work also influenced the strategic and methodological approaches used in the Paraopeba's Basin Recovery Plan after the Córrego do Feijão tailings' dam collapse.

v. Panel members' evaluation

Panel members continue to be overall satisfied with the way the Panel operates, how the Panel Chair performs her role, the interactions among members, and IUCN support.

vi. Overview - progress markers

Four of the twelve progress markers used to monitor the project evolution against predefined goals exceeded expectations. Six progress markers show expected results, and three expected results were not reached. One indicator was not assessed.

Examples of successes include the national and international outreach of RDP work and the fact that RDP papers are being used as a reference in the context of the Rio Doce Basin and beyond. Renova's official responses to the recommendations were another good result, although tangible impacts were not explicit at operational and decision-making levels.

vii. Next steps for MEL

There are many expectations on continuing the Panel's work on evaluating implementation, and the conclusion of the evaluations started in 2021 will be an important achievement for 2022. The results will be essential for communications activities, the overall RDP evaluation, and institutional learning since the Project is entering its last year.

The MEL Officer will also have an essential role in the follow-up of the final external evaluation work and providing inputs for the Stories of Influence document and the RDP's Legacy Paper.

Introduction

This report presents the progress made by the Rio Doce Panel (RDP) in 2021 against the objectives and targets set up in the project result framework. The current MEL Strategy defines five result areas for the monitoring of RDP performance: i) Product design; ii) Product delivery and quality; iii) Outreach and uptake or recommendations; iv) Influence effects of RDP recommendations, and v) Knock-on effects.

The strategy also defines a set of tools to monitor predefined indicators for each of those result areas. The objective is to provide evidence to assess how the Rio Doce Panel is performing and help to respond to the key MEL questions:

- Is the Panel informing and influencing target audiences in the way it anticipated? If not, then how?
- Are the Panel and IUCN performing as expected in the planning phase?
- What impact has the Panel had on how its audience undertake their core activities, and how lasting are these change likely to be?
- Are there any unintended consequences of Panel actions?
- What does the Panel know that could enhance other ISTAP-related processes?

In the first part of the report, we present the assessment of the indicators designed to evaluate the performance in the result areas. Part two discusses how those results can help respond to the MEL key questions and discuss MEL expectations for 2022.

1. RDP 2021 – Monitoring results

1.1. General RDP work, product design, and delivery

2021 – Changes in the RDP modus operandi

All parties involved in the Project (the Renova Foundation - RF, the RDP, and IUCN) agreed, at the beginning of 2021, that **the Panel would stop the production of studies on new topics and focus its work on supporting Renova in finding ways to implement selected recommendations.** This shift in the RDP’s modus operandi was an adaptive measure taken to guarantee that the Project would continue to be relevant given the reparation dynamics at the time.

The whole reparation process and its governance were (and still are) at stake. Therefore, the continuation of the Renova Foundation and its role in the recovery of the Rio Doce was uncertain. Much of the reparation process has gone under judicialization, changing the decision-making schemes in place.

Renova decided to focus on implementing the Terms of Transaction and Conduct Adjustment (TTAC in the Portuguese acronym) and wanted the Panel to support the Foundation in this task.

The RDP 8 virtual meeting focused on the arrangements between Renova, the IUCN and the Panel on moving forward, guaranteeing that the RDP work would add value to Renova in the current scenario but maintain its long-term view and independence. The agreed solution was that the RDP would work closer to RF teams to implement some of the RDP’s recommendations.

The data and preliminary research conducted on the implementation of the RDP recommendations managed by the MEL officer¹ allowed the identification of i) which of the Panel recommendations could best help Renova address the TTAC commitments ii) early signs of implementation iii) whether the subject of the recommendation was under judicialization iv) if the recommendation was still valid, under the given context.

Table 1. Studies foresaw by the Rio Doce Panel to be delivered in 2021

DELIVERABLE	SUBJECT	Initial Expected date	Status	Selection criteria met
Thematic Report 03	Source-to-sea and landscape approaches	2020 Q3 (RDP7)	Launched 2021 Q2	10
Thematic Report 04	From restoration to responsive governance	2020 Q4	Launched 2021 Q3	10

¹ See item “Assessment of possible evidence of implementation” of section 1.4.

After that analysis, the Panel and RF decided to work on five recommendations, focusing on impact assessment and information management and sharing. After consultations with RF teams, the proposal was refined, and only the impact assessment recommendations provided in TR 01 and IP04 were retained for the new modality.

Product design and delivery

Two Thematic Reports (TR) that were already under elaboration in 2020 were published in 2021, in both Portuguese and English versions:

- TR03 - “Source-to-sea and landscape approaches - Integrating water quality and biodiversity conservation towards the restoration of Rio Doce watershed.”
- TR04 - “From restoration to responsive governance: Rio Doce after the Fundão Dam failure.”

The RDP uses a **set of 10 criteria**² to decide the issues/themes of the papers to be developed. The subjects of TR03 and TR04 observed all ten predefined criteria for themes selection designed to guarantee that the knowledge products have high technical quality, are adherent to the RDP’s vision, relevant and timely. **Table 1** shows the deliverables foreseen by the work plan, with their expected and actual launch date.

We can see that both studies were launched with a significant delay. Similar or greater delays have been verified previously in the RDP papers launches, and the identified reasons for the delays are:

- i) At the beginning of the Panel, the capacity to produce IPs and TRs was overestimated. The panel could not deliver the annual products foresaw in the work plans.

- ii) The time needed for elaborating the studies – writing phase, interactions with Renova and other stakeholders, elaboration of maps – was underestimated, causing delays to the agreed timelines.
- iii) Another cause is the extended time needed for the IUCN editorial process, mainly for TRs (approval from the Editorial Board required);
- iv) Specifically, about TR03: the Panel decided to adjust the text language after the editing phase to consider the changes in the reparation’s decision-making process going on at the time with consequent limitations to the RF capacity to act.

Acknowledging the usual delays for the public launches, the RDP decided to **publish the TR04 Executive summary as an advanced release for key stakeholders (Renova and the CIF executive secretariat)**. At the same time, the entire paper went through IUCN’s editorial procedure. The advanced release aimed at increasing the possibility of timely contributions and consequent influence of the TR04 recommendations on the Rio Doce reparation renegotiation process, given that the Rio Doce reparation governance structure was under debate in 2021.

1.2. Product quality

All RDP studies go through a **rigorous editorial and peer review process to ensure the quality of the publications**. The IUCN Editorial Board approves the Thematic Reports, to which ISBNs and DOIs are allocated.

Surveys conducted after launches or in-depth meetings provide insights about the first impressions of key stakeholders regarding the meeting, the **quality of the study presented**, and the **applicability of the RDP recommendations**. Unfortunately, we have witnessed limited participation of the

² Results showed in the table use the reformulated criteria adopted in 2020 in response to the Mid-term review. The criteria are in Annex 1.

attendees in the surveys. Nevertheless, the results can still give us elements to evaluate how the recommendations are received by the RDP's audience and their expectations about the implementation.

Annex 2 shows the results of the Surveys. **In general, respondents from Renova, the CIF and CBH Doce agree that the studies are of high quality and essential for the restoration process.** Some other insights are:

- Renova teams generally agree with the **quality and relevance of IP04.**
- Regarding TR03: CIF members are less convinced than RF teams about the usefulness of the recommendations to the reparation process and long-term resilience of the Basin.
- **TR04 was unanimously well received by the Renova Foundation, the CBH Doce, and the Rio Doce and Brumadinho Committees** (Minas Gerais and Espírito Santo officials of both committees attended to the presentation).

The advanced release of TR04 was presented to some CIF representatives. The attendees had some critics of the paper that, according to them, was aligned with an RF narrative that tries to blame the governance system and exempt RF's responsibilities in the delays in delivering the TTAC programs. They were also concerned about the "post-Renova era" term used in TR04, arguing that the end of Renova is conditioned to the accomplishment of the TTAC commitments, which are far from completion. The full paper was not presented, and therefore representatives did not answer the survey regarding TR04.

Responses are **less positive regarding the stakeholders' perception of the probability of the recommendations being implemented** or influencing their work (Annex 2).

1.3. Communication and engagement results

General Outreach Results

The RDP web pages had **10,886 accesses in 2021, similar to the total number of page views in 2020 (10,868)**. Figure 1 illustrates the evolution of page access since the launch of the RDP dedicated website, pointing out **some events that could have influenced traffic**.

Since the RDP website was launched, we have witnessed a gradual increase in relative international audiences.

In 2021, 56.2% of the visitors were from outside Brazil versus 52,1% in 2020 and 38% in 2019. International viewers were mainly from the US (12,4%), Japan (7,8%), France, and India (both with around 3% of the audience). The bounce rate average for all RDP pages was about 41%, much lower than the 53% rate of 2020.

The RDP has a LinkedIn³ page and a Twitter account⁴. The LinkedIn page shows good engagement and has followers representing some of the key RDP stakeholders' groups. The number of followers went from 249 to 521 in 2021.

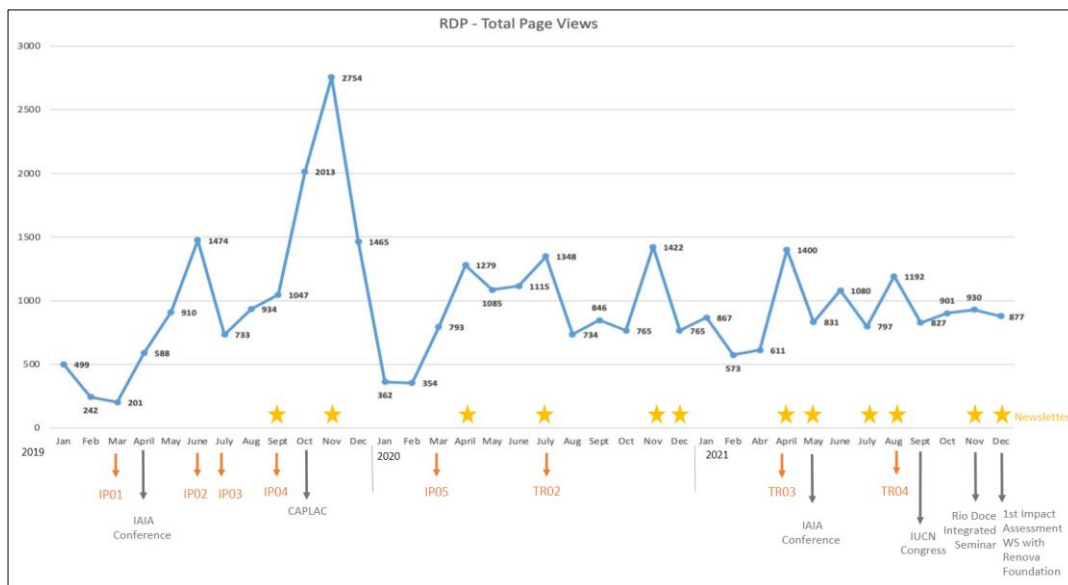


Figure 1. Total pageviews of the RDP website. After peaking in late 2019, accesses remain relatively constant in 2020 and 2021.

³ <https://www.linkedin.com/showcase/rio-doce-panel>. The RDP LinkedIn account accumulated 249 followers in 2020.

⁴ <https://twitter.com/RioDocePanel>

The Twitter account shows less engagement, and the Communication team is evaluating the relevance of keeping the RDP account on this platform. Figure 2 shows the downloads of RDP knowledge products per year since 2018: a total of 12,611 downloads.

TR03 and TR04, launched in 2021, had 977 and 438 downloads, respectively (PT and EN versions). **TR01 is the most downloaded study** (around 8,000 total unique downloads, 1,563 only in 2021).

This fact reinforces the importance of TR01, which is also the most cited RDP paper in scientific articles and studies (see item *Citations of RDP work in scientific articles and technical studies* in Section 1.5).

Also, TR01 and IP04 are the basis of the new modality of the RDP work with Renova, which can explain the excellent download numbers even after 2-3 years of the studies' launches (2018 and 2019, respectively).

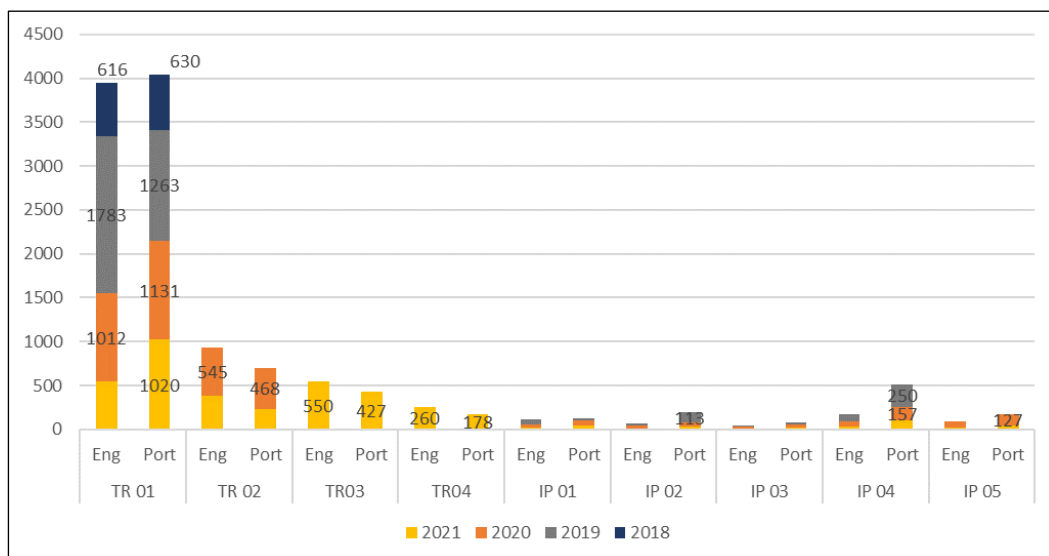


Figure 2. Total downloads of the RDP papers by year.

Six newsletters were elaborated and distributed in 2021 to approximately 1,300 subscribed recipients each⁵, in Portuguese and English. Figure 3 shows the number of deliveries and openings and the ‘Click-through’ metrics – the number of times the recipients of the Newsletters clicked in any of its links. **The number of recipients and openings remained relatively constant** compared to 2020.

The Panel **produced an opinion article published in the Nexo⁶** online newspaper, calling attention to the importance of a solid and participatory governance system for the success of the reparation process.

Five online media channels divulgated TR03, focusing on water quality issues. One of them interviewed a Panel member, and two were Italian.

The communication plans for the release of each TR include contacts with traditional media channels (radios and newspapers) to get space for the divulgation of the papers. The TRs launched in 2021 were considered too technical and not of interest to a broad audience despite the efforts. A Panel member gave an interview about TR04 to a radio station (BandNews), but the topic was dropped in favour of other subjects.

The RDP Project coordinator and one Panel member gave **interviews about the challenges the mining sector will face** to guarantee **sustainability and risk control** while meeting the world’s increasing demand for metals for batteries. The resulting article was **published in *Estadão*⁷**, one of the Brazilian most important newspapers.

Finally, the presence of the RDP in the World Conservation Congress was mentioned in 2 online news portals.

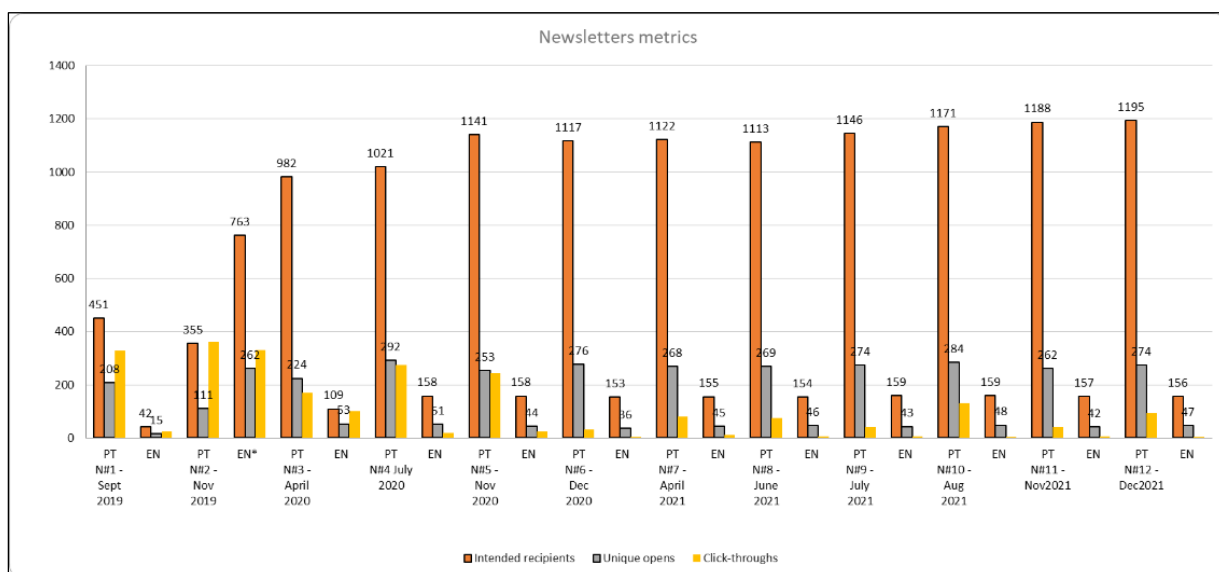


Figure 3. Newsletter’s metrics

⁵ The distribution list was built with IUCN contacts (including Brazil’s members), CIF members, and other stakeholders indicated by Renova. Among recipients are the mayors of the 39 municipalities affected, state-level government agencies, and members of the academia.

⁶ Access through this [link](#).

⁷ <https://www.estadao.com.br/infograficos/economia.base-da-economia-carbono-zero-mineracao-enfrenta-desafio-de-aumentar-producao-sem-causar-danos-ambientais.1198718>

Engagement with stakeholders

The RDP members participated in 20 meetings and presentations with external stakeholders in 2021, with more than 200 attendees. Three of the meetings were in person during the RDP 9th face-to-face meeting. **Figure 4** shows the number of interactions with each group of stakeholders. Most of the meetings were with RF teams.

TR03 and TR04 were launched in private events to Renova teams. Additional presentations of TR03 were made to the CIF, to the Rio Doce Basin Committee, and in the Rio Doce Integrated Seminar event, promoted by Univalle University.

TR04 advanced release was also presented to the CIF, and the final report was presented to CBH Doce and Pró Rio-Doce and pró-Brumadinho Committees.

IUCN teams and RDP members also featured in international events to showcase the RDP experience and lessons learned in the process:

- The work of the Panel (TR01 and IP04) was presented at the conference of the International Association for Impact Assessment (IAIA), held virtually (May).

The Panel Chair participated in a session dedicated to IUCN's Independent Scientific and Technical Advisory Panels (ISTAPs) during the World Conservation Congress held in Marseille (September).

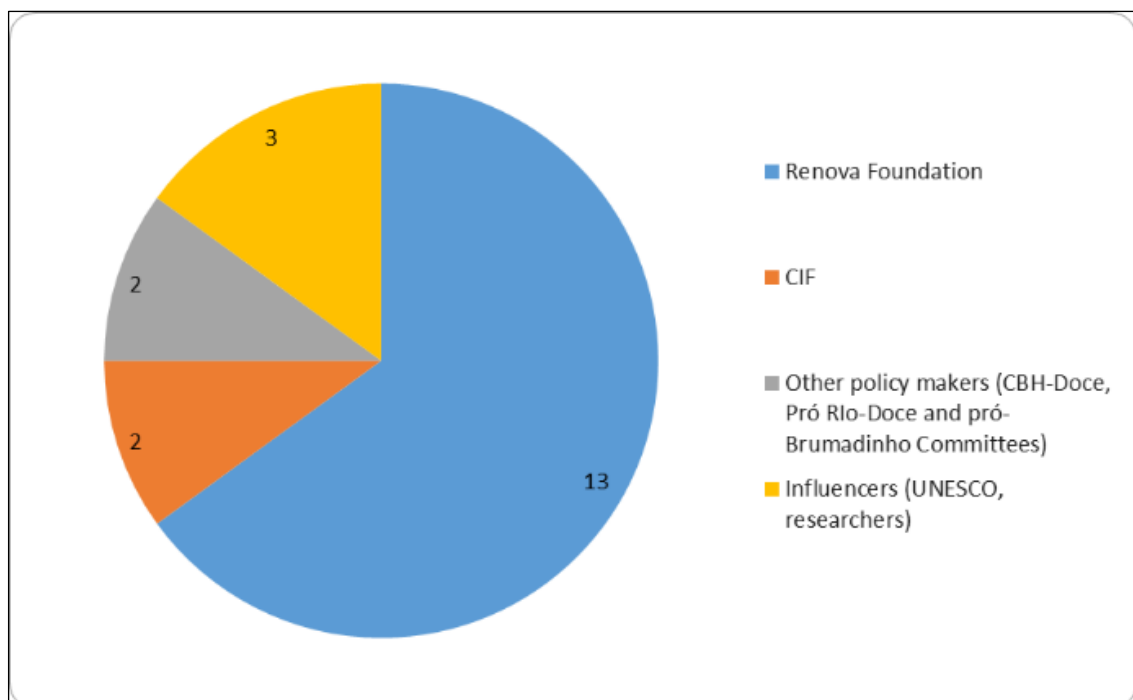


Figure 4. The different groups of stakeholders that interacted directly

1.4. Uptake of RDP recommendations

Official feedback from Renova

By the end of 2021, the RDP had made a total of **thirty-three recommendations** to Renova and other stakeholders as part of the five Issue Papers and four Thematic reports published since the beginning of RDP work.

After receiving each paper with recommendations, Renova is supposed to give formal feedback to the RDP using an agreed feedback form built jointly by RF technical teams and IUCN. The document allows for the categorisation of the recommendations as follows:

A1 - The recommendation reinforces current practices of Renova Foundation that will be continued, supported by the recommendation

A2 - The recommendation addresses a gap, and Renova Foundation will work to implement what is under its competence

B. Renova foundation partially agrees with the recommendation. In consequence, only some aspects of it will be implemented.

C. This recommendation will not be implemented by Renova Foundation.

In 2021, RF gave official feedback to the IP04 and TR02 recommendations. The Foundation declared to agree completely and to be implementing the IP04 recommendation and recommendation 3 of TR02 (Category A1). On the other hand, Renova said it would not implement the three other TR02 recommendations (Category C), alleging they were not under the Foundation's competence.

By the end of 2021, Renova had given formal feedback for a total of twenty-four of the thirty-three delivered recommendations, **declaring to agree with 14 recommendations** and to be **currently implementing 12 of them**.

Figure 5 shows the number of recommendations in each of the feedback categories. RDP is waiting for official responses to the recommendations of IP04 and TR02.

In 2021, the RDP MEL work focused on investigating to what level the implementation was happening on the ground, as discussed in the next topic.

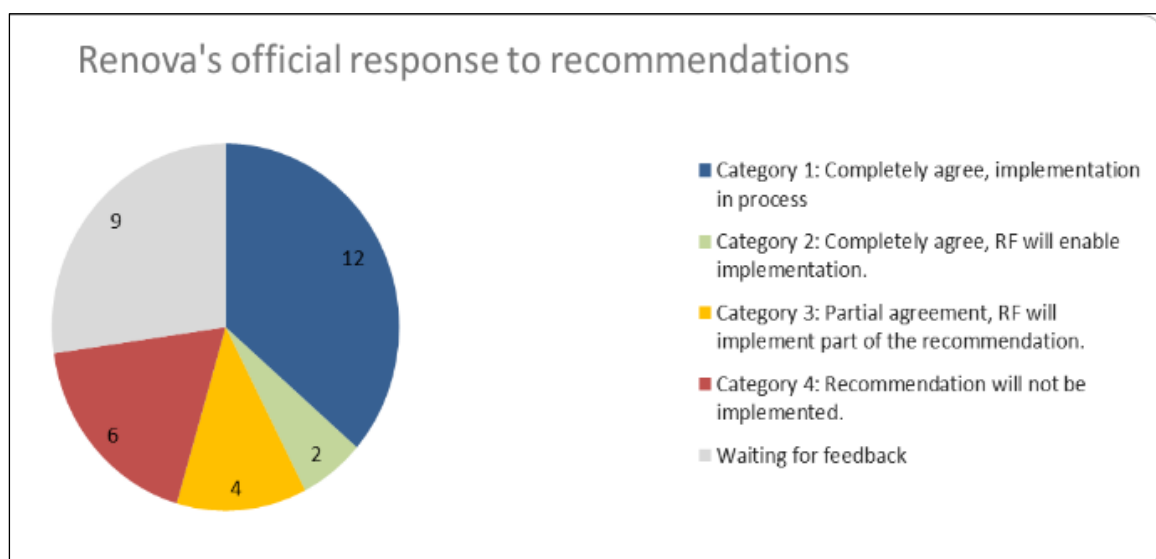


Figure 5. Renova's official response to the recommendations

Assessment of possible evidence for implementation

In an ideal situation, after the first formal feedback from RF described in the previous topic, **IUCN would constantly interact with the Foundation's teams to assess how the recommendations were being implemented** and understand the challenges for implementation. Nevertheless, **RF teams have been unable to provide timely feedback** as the priority for their activities has been the tasks directly linked to the reparation process.

In addition, the RDP has been addressing recommendations not only to the Renova Foundation but also to other stakeholders who seldom interact with the RDP. Finally, the RDP knowledge products can unexpectedly influence many topics in the Rio Doce Basin and beyond.

To overcome this bottleneck, **IUCN put a research scheme to capture elements about utilising RDP knowledge and recommendations from a comprehensive set of documents produced and published by key stakeholders.**

This approach uses a qualitative research tool (NVivo) to filter, organise, and explore the massive amount of data and categorise evidence of behavioural changes that match the RDP recommendations. The results allow IUCN to plan targeted primary data collection, e.g., interviews, to explore the influence of the Panel on behavioural change and to work around the low availability of preliminary data and to i) identify where the knowledge produced by the RDP was accessed and used (i.e., the RDP influenced the creation of a dedicated area for impact assessment within the Renova Foundation); ii) understand the knowledge uptake pathways; iii) understand the reasons for failure in knowledge uptake. An abstract on secondary data was submitted to the 2022 IAIA Conference call for papers and was accepted for presentation during the Conference to be held in Vancouver in May 2022.

The analysis (summary in Annex 4) shows that **RF's programs addressed some aspects of the recommendations**, mainly in promoting alternative livelihoods (related to IP01) and working in the disaster's impact assessment (related primarily to TR01 and IP04).

Nevertheless, we identified **significant gaps** in the implementation, even for recommendations classified by Renova in their official feedback as 'Category 1' (full agreement, currently being implemented). The analysis also evidenced the role of other important stakeholders in promoting or impeding the implementation of the recommendations. For instance, the public prosecutors have had an important role in commissioning studies that are important for the disaster's impact assessment; on the other hand, the 12th court judge has ruled against RF's ongoing actions that could advance the safe removal of the fishing bans.

The results of this secondary data analysis were **shared with Renova and have stimulated their feedback** and efforts to provide more information on implementation, which will help the Panel evaluate the implementation (see next section).

The direct or indirect **influence of RDP recommendations is still not clear** in many cases where some aspects of the recommendations were identified. Changes that evidence RDP influence is registered as Outcome descriptions (see section 1.5)

Evaluating implementation

In 2021, the analysis on the state of implementation served as a **basis for creating a framework for the Panel to evaluate the implementation of the recommendations**. After several discussions to capture the main impressions from Panel members on the analysis, four main dimensions emerged as essential aspects to take into consideration:

- **How aligned** are the stakeholders' actions or behavioural changes with the RDP recommendation?
- **Who acted?** Was it the stakeholder directly addressed by the recommendation or another actor?
- **About timing:** did action occur in the timeframe expected by the Panel?
- What are the **main reasons** for gaps in implementation? Internal or external factors? Lack of integration of all relevant aspects? Lack of a strategic view?

These four main questions were piloted in 2021, using TR01's recommendation 1. An open-ended field allows the Panel to describe the rationale behind their evaluation. The result was shared with Renova teams during RDP9, who, in general, agreed with the assessment and provided more details that were used to adjust the Panel's narrative.

1.5. RDP influences and outcomes

Influence in the reparation process

The **influence log** used to register any perceived or potential influences of the RDP work **had 15 entries in 2021**. Most of them were linked to the influences of TR01 and IP04 on RF's efforts on impact assessment, and there was also relevant evidence for TR01 and TR02 influence on the Paraopeba's river restoration plan after the *Córrego do Feijão* dam disaster. The registered influence on the Paraopeba's recovery plan based further investigation that originated two outcome

descriptions (see section *Described outcomes*, below).

Other stakeholders also showed interest in the work of RDP:

- **The RDP had a meeting with the Stockholm International Water Institute (SIWI) to present TR03**. The RDP paper was then included in the Source to Sea (S2S) platform newsletter.
- The RDP was **presented to BHP's Vice President for Non-Operated Joint Ventures** in Brazil.

Citations of RDP work in scientific articles and technical studies

Since 2020, the work of the Rio Doce Panel has been frequently used as a **reference for information** on the Rio Doce Basin and the impacts of the Fundão tailings dam failure. In 2021, **seven scientific articles cited RDP knowledge products** (TR01, TR02, and TR03), and a technical study cited IP01.

The table in Annex 3 **shows all citations** of RDP papers in 2021 with hyperlinks to the studies.

Described outcomes

In 2021, **we identified two main instances where the Panel's work influenced and contributed to an actual and relevant change in the Rio Doce reparation process or beyond it**. Those changes and contributions were registered as outcome descriptions which detail:

- The influence of RDP TR01 and IP4 on how the Renova Foundation tackles the impact assessment. The Foundation teams acknowledge that TR01 was fundamental to leverage the organisational action towards creating the Impact curatorship area in the Foundation. Currently, TR01 and IP04 are forming the basis of the RDP work on supporting Renova in establishing the methodology for the impact assessment in coastal areas, which will be the core of the RDP-RF partnership in 2022.

- The Panel's work in TR01 and TR02 has influenced the methodological and strategic approaches of the Paraopeba's river Recovery Plan regarding impact assessment and climate change. The first version of the Plan was presented in 2019, and after considerations of the public authorities, a new version was prepared, delivered in 2020, and approved in 2021. The Plan is guiding the reparation actions in the Brumadinho basin. This outcome highlights the importance of the Panel's work beyond the Rio Doce and its potential to contribute to other post-disaster recovery works.

The second of the outcomes above was described with the help of **semi-structured interviews with three people** as a direct follow-up of instances in the influence log.

1.6. RDP member's feedback

Every year, the Rio Doce Panel members answer a survey about their perceptions of their work as a team, the Panel coordination by the Chair, IUCN support, and impressions about the face-to-face meetings.

The 2021 responses are **overall positive, showing that Panel Members are primarily happy with how the Project is functioning**. There was an increase in positive responses regarding the amount of members' dedication to the Project's activities and its alignment with their contract and the responses about teamwork and adequate time for discussions. However, panel members are less convinced that the RDP understands and takes advantage of the opportunities of its work for Rio Doce's future (~30% decrease in positive responses).

Regarding the RDP 9 face-to-face meeting, there was a significant **dissatisfaction about field visits**. It is relevant to point out that many foreseen visits were cancelled at the last minute because of the rain and had to be replaced by other activities without adequate time for preparation. Members had also expressed dissatisfaction with visits to the coastal protected areas in Espírito Santo, as ICMBio (federal agency charged with protected

areas management) staff who accompanied the Panel were not well-positioned or briefed to inform the Panel about the possible impacts in the region.

1.7. Overview of RDP results – Communication and knowledge log frame

The results presented in this report were compared to the indicators and progress markers designed to monitor the Project's development. As shown in Annex 5, **four progress markers exceeded expectations**. Six progress markers show expected results, and **three expected results were not reached**. One indicator, about the awareness and support from local leaders, was not assessed.

Examples of successes include the **national and international outreach of RDP work**, with RDP papers being used as a **reference in the context of the Rio Doce Basin** and the impacts of the disaster. **Renova's official responses to the recommendations** were another good result - although concrete impacts at operational and decision-making levels were not explicit.

The indicators that **did not reach expected results** were:

- The number of media articles mentioning the published TRs. The subjects of the TRs were not considered attractive for the big media and competed for other stories. Also, the "expect to see" level is too ambitious (10 media articles published for each TR).
- The number of RDP's participation in external events.
- The improvement of RDP internal Survey responses in 2020 compared to 2019. There was an improvement in answers for 23% of the questions, a lower level than the 30% defined by the "expect to see" marker. Nevertheless, we consider that results are positive and show general satisfaction.

There was a willingness from the IUCN team to **review the Communication and**

knowledge log frame in 2021 to adjust some expectations and priorities following the reviewed ToC. Nevertheless, given the uncertainties about the modus operandi of the new modality and even about project continuation in 2022, this task was delayed. Although a review of the log frame would be beneficial, IUCN needs to decide if the efforts to review it are worthy as the Project enters its final phase.

2. Insights regarding MEL key questions and next steps for MEL

2.1. How can these results help to answer the MEL key questions?

I. Is the Panel informing and influencing target audiences in the way it anticipated? If not, then how?

Renova Foundation is the main interlocutor of the Panel as defined by the Project's Theory of Change (ToC). As shown in **Figure 4**, the Panel has prioritised its interactions with this stakeholder.

Interactions with other stakeholders identified as of great importance in the ToC, as the CIF and the Rio Doce Basin Committee (CBH-Doce), could have been more frequent (only two interactions with each in 2021), especially thinking about their central role for the implementation of TR03 and TR04 recommendations.

Representants of these stakeholders attended papers' presentations, but more strong previous engagement (e.g., coordination meetings) could have favoured a higher perceived likelihood of implementation.

As a specific good result in outreach, we highlight the Panel's work as a reference to inform academic research about the Rio Doce Basin. Media has shown to be interested only in some subjects (e.g., climate change), and therefore it may be risky to concentrate efforts on divulgation through traditional media channels.

The RDP has had a crucial role in how Renova is tackling impact assessment, having a substantial contribution to building a science-based and systematic approach in the context of the reparation.

II. Are the Panel and IUCN performing as expected in the planning phase?

The year 2021 witnessed **significant changes in the way the RDP operates**. The

Panel stopped working on new subjects and will focus on helping the RF find the best way to implement a comprehensive and systematic assessment of the impacts in the coastal and marine zones. The decision to change the modus operandi was driven by the major changes in the reparation context. **The choice of the recommendations to be addressed in the new format was informed by the information collected and organised by the MEL work.**

The RDP delivered the two Thematic Reports expected by the work plan and started supporting Renova's teams in the new modality of work. In December, after some months of adjusting the expectations of RF and the RDP about the outcomes of this work, a specific workshop with Renova's teams working on impact assessment was held in person during RDP9.

The RDP internal survey reveals that Panel members are satisfied with their teamwork and the support of IUCN.

III. What impact has the Panel on how its audience undertake their core activities, and how lasting are these changes likely to be?

We identified actions linked to RDP's recommendations in RF's activities, with explicit contribution from the Panel regarding Impact assessment (recommendations from TR01 and IP04).

The limited impact of the Panel's work verified so far has to be interpreted using the results shown in this MEL report and under the light of the ToC narrative. The ToC assumptions and external drivers can be examined for clues on how to explain this.

IV. Are there any unintended consequences of Panel actions?

Yes. In 2021, we identified an influence of the Panel on the strategic level of the Paraopeba's basin reparation process after the *Córrego do Feijão's* dam failure, showing that the Panel has built knowledge that is useful not

only in the Rio Doce but in other similar contexts.

In previous years, we found that the work of the Panel had:

- Promoted the integration of RF's teams and an opportunity to reflect on alternatives for the restoration programs.
- Influenced a global forum discussing best practices on mining.

V. What does the Panel know that could enhance other ISTAP-related processes?

According to an extensive survey done with the Panel in 2020, Panel members highlighted the importance of being aware and responding to the situation's specificities and complexities, involving key stakeholders in the process, and adding value for them. The capacity to adapt was also considered important in dynamic contexts.

In 2022, the RDP Project will dedicate considerable efforts to assess and register the success and challenges of its work. A Stories of Influence document will register how the Panel influenced the reparation work in the Basin, based on the MEL results and other sources. The Panel plans to work on a Legacy Paper, and the Final External Review is supposed to assess and register the

institutional learnings derived from the Panel's, IUCN's, and Renova's participation in this process.

2.2. What are the priorities for the MEL work in 2022?

The analysis of secondary data to identify evidence of implementation provided an important basis for further work that can i) guide the MEL work on **tracking the actual RDP contribution** to the verified changes; ii) **stimulate RF to share information** with the Panel more constantly and consistently and iii) **support the Panel's evaluation on the implementation** of the recommendations, using the framework built during 2021.

It will be interesting to use the available tools (interviews, surveys) to **investigate RF's teams' evaluation of the RDP work on the "new modality"**, where Panel members are working very closely with Renova's staff on building a methodology for an impact assessment on the coastal and marine zones.

The Final External Review is an opportunity to capture evidence on gaps in the knowledge about the RDP and its impact, and this review process should be followed closely by the MEL officer. Finally, the MEL work will provide the basis for the Stories of Influence communication piece.

Annexes

Annex 1. Criteria used for themes selection from September 2020 on.

(After a reformulation suggested by the projects' Midterm review.)

2020 Review - "Themes selection indicators."

- RDP is able to provide useful and informed scientific responses to the issue/theme. (YES is mandatory to ALL – 1 to 4)
- 1. Does the Panel have the **expertise and capacity** to lead the elaboration of the product?
- 2. Does the Panel have enough **clarity about what will be the final product**?
- 3. Is there **publicly available technical and scientific information** about the issue/theme to support the product construction?
- 4. Does the issue/theme **align with the RDP's Terms of Reference and Scope**?
 - Contribution to RDP vision⁸ (YES is mandatory to at least one of the items – 5 or 6)
- 5. Does the issue/theme address long-term, Basin-wide solutions?
- 6. Does the issue/theme directly contribute to improve social and environmental health and resilience?
 - Other:
- 7. Can the RDP address the issue/theme and deliver the product in time for stakeholders to act upon the recommendations?
- 8. Will responding to the issue/theme contribute to conflict management?
- 9. Was the issue/theme suggested or mentioned by Renova or other stakeholders?
- 10. Does responding to the issue/theme help setting the Rio Doce as a sustainable development model for other basins?

High weight: Meet all criteria from 1 to 6 (ability and vision) + 3 or 4 other

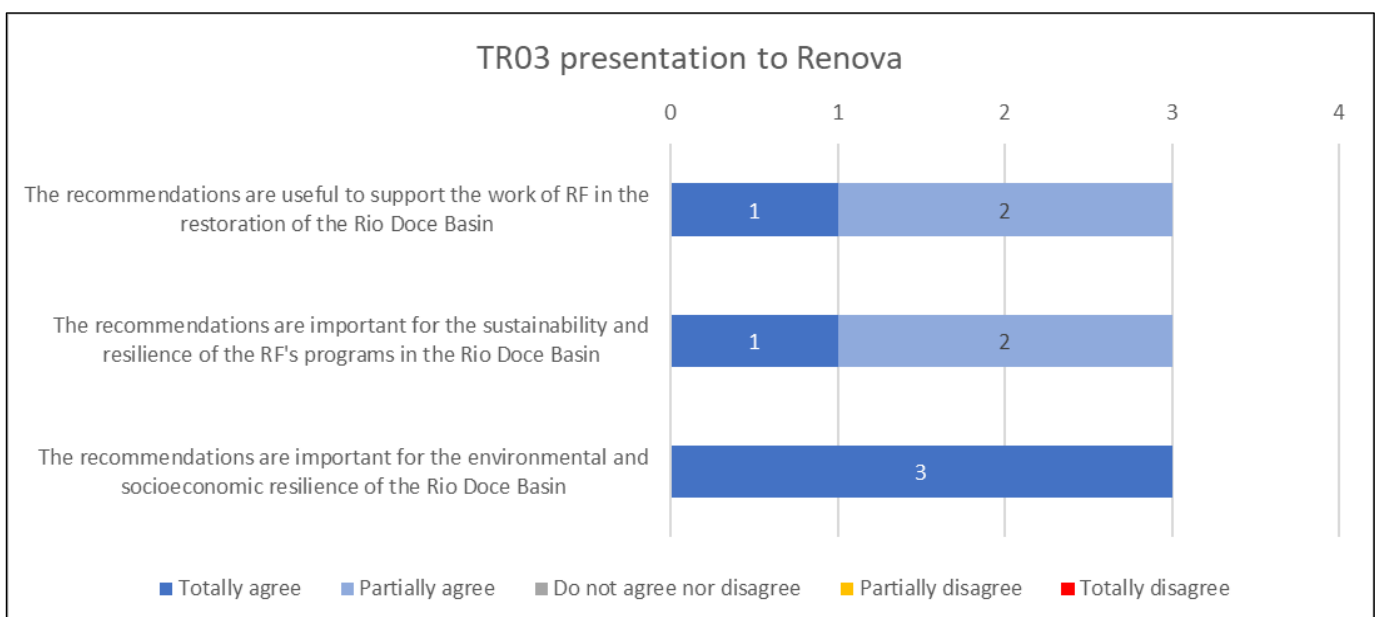
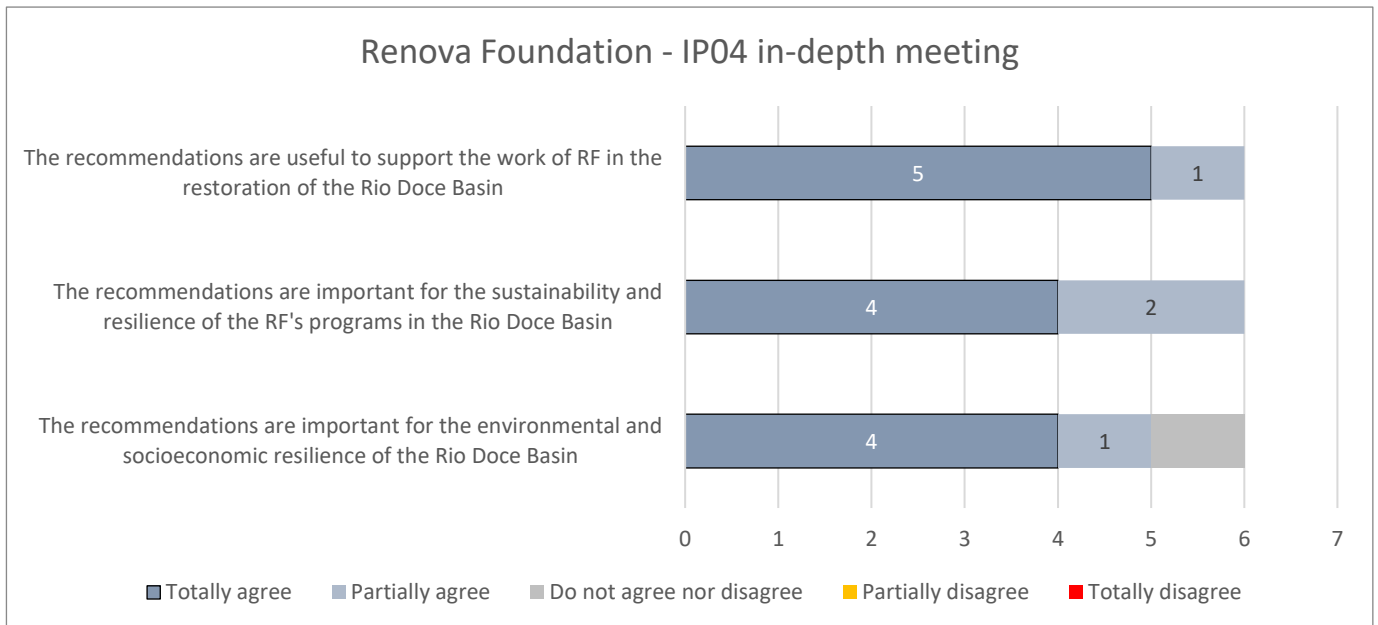
Medium weight: Meet mandatory criteria + 1 or 2 other

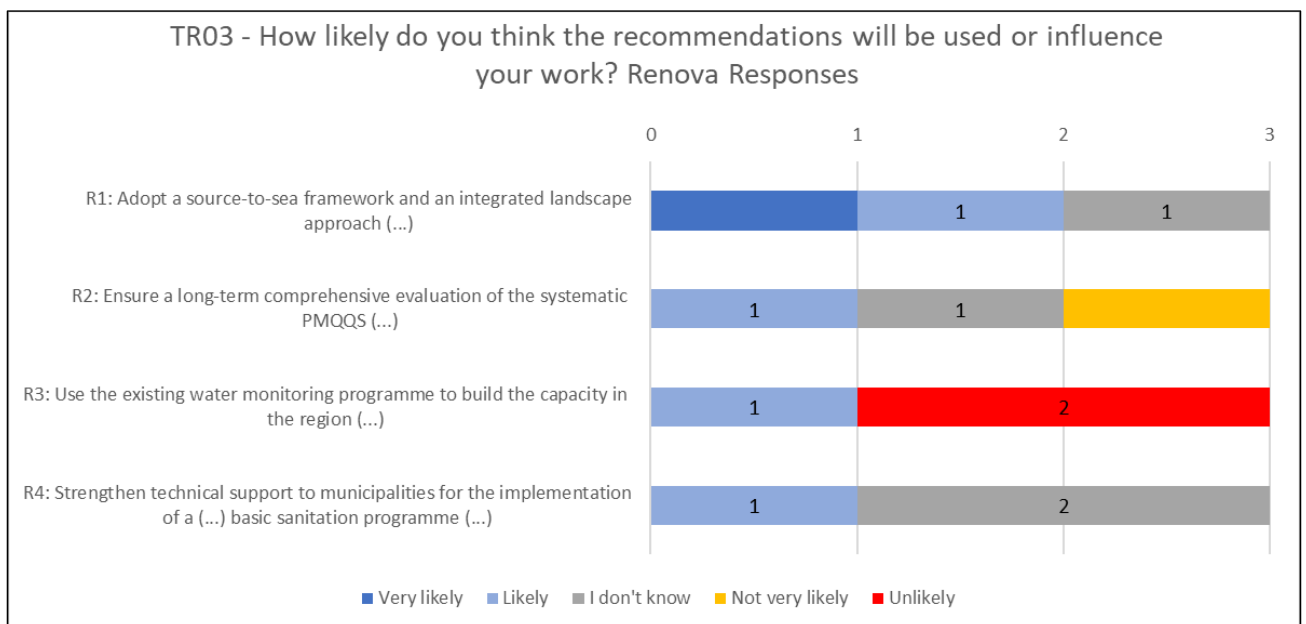
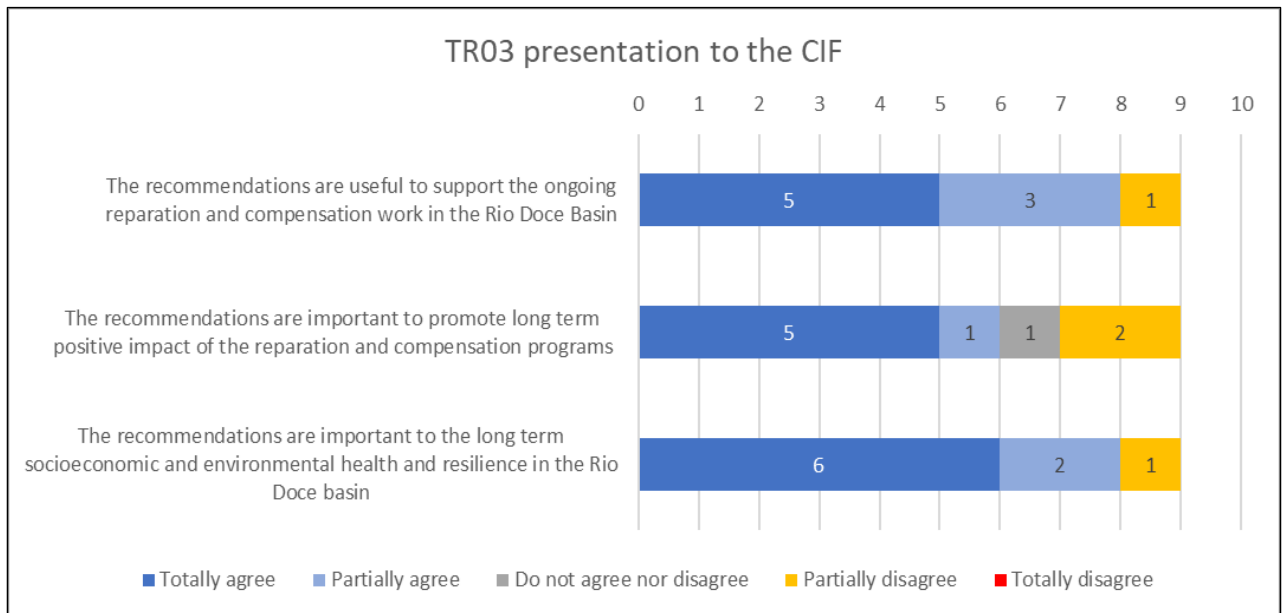
Low weight: Meet all mandatory criteria

⁸ Long term environmental and socioeconomic health and resilience for the Rio Doce Basin and adjoining coastal zone

Annex 2. Survey responses – stakeholders' evaluation of the presented recommendations.

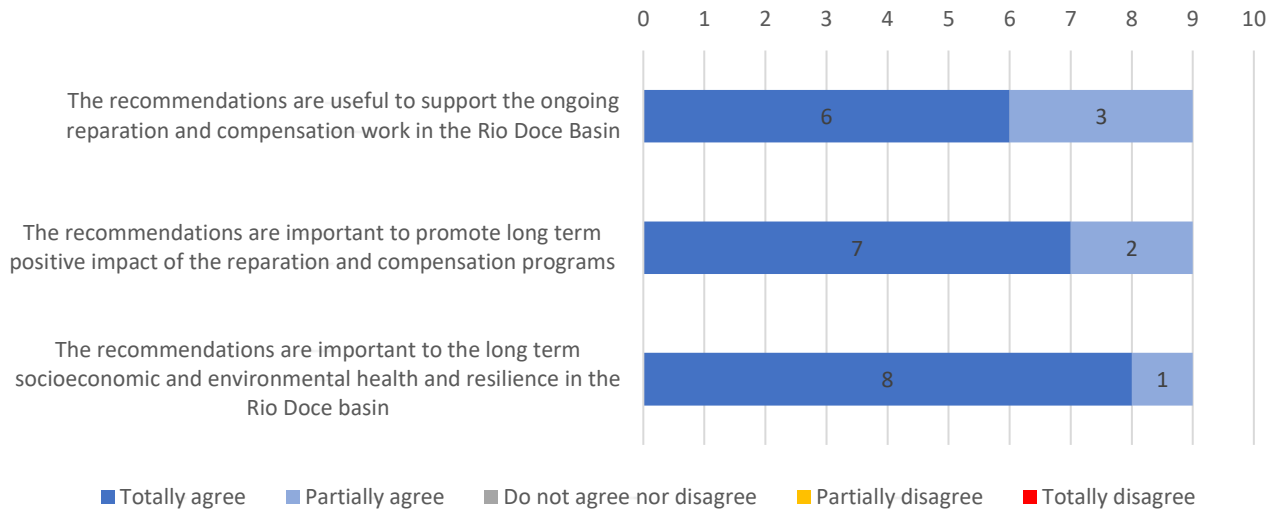
The X-axis represents the number of respondents, and the Y-axis is the survey questions. For TR03, we present the responses disaggregated by stakeholders as there was a significant difference in evaluations.



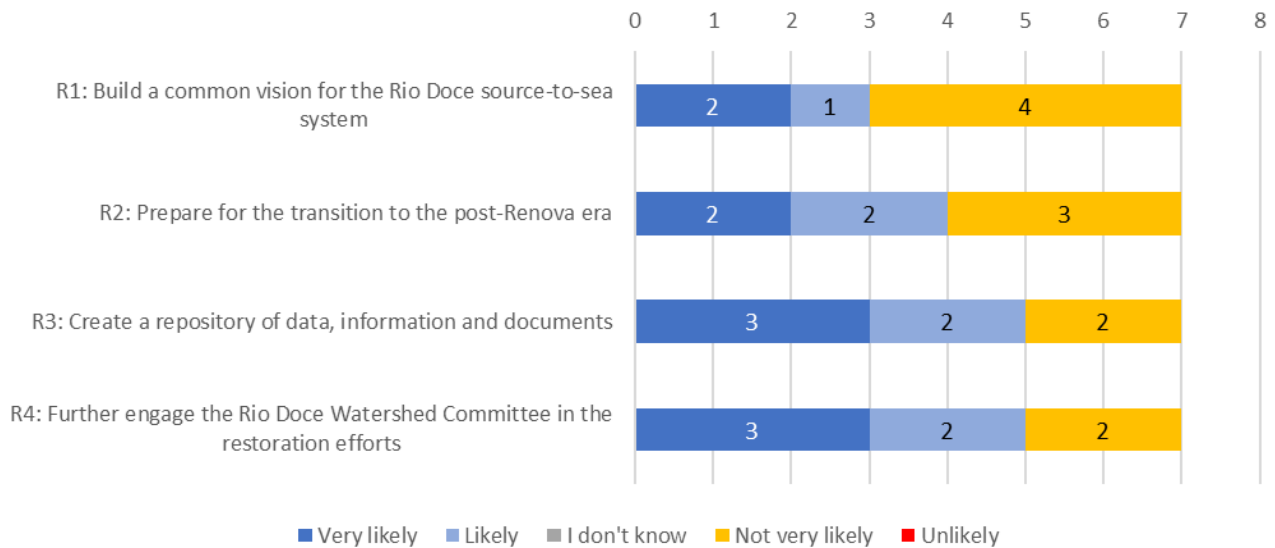


Due to an error in the survey, Recommendation 5 was not shown to RF respondents.

TR04 - presentations to Renova, CBH Doce and Rio Doce/Brumadinho Committee



TR04 - Renova, CBHDoce, Pró-rio Doce/Brumadinho Committees



Only one respondent from Pró-Rio Doce and Pró-Brumadinho Committee and two from CBH-Doce, so those responses were aggregated to those from Renova's teams.

Annex 3. Citations of RDP's knowledge products in technical and scientific studies in 2021

Date	Name	Journal Institution	Type	Type of citation	Link	
Jan-21	(RE) PENSANDO O DESENVOLVIMENTO RURAL SUSTENTÁVEL A PARTIR DA AGRICULTURA FAMILIAR: UM DIAGNÓSTICO SOCIOTERRITORIAL DO ALTO RIO DOCE, MINAS GERAIS	UFV, Proater and Renova Foundation	Technical Study	Cites RDP (IP01) as an important source of information regarding the socio-economic relations in the Basin	https://www.fundacaorenova.org/wp-content/uploads/2021/01/livro-proater-diagnostico.pdf	IP01
Mar-21	Impacts of exposure to mine tailings on zooplankton hatching from a resting egg bank	Aquatic Ecology	Scientific Journal	Cites TR01 to describe impacts of Fundão's dam failure	https://link.springer.com/article/10.1007/s10452-021-09844-7	TR01
May-21	Hydraulic and auto-depurative characteristics of the Gualaxo do Norte River after the Fundão dam rupture	Environmental Science and Pollution Research	Scientific Journal	Cites TR01 to describe the previous conditions in the Basin and the impacts of Fundão's dam failure	https://link.springer.com/article/10.1007/s11356-021-14317-3	TR01
Aug-21	What misguides environmental risk perceptions in corporations? Explaining the failure of Vale to prevent the two largest mining disasters in Brazil	Resources Policy	Scientific Journal	Cites TR01 to describe impacts of Fundão's dam failure	https://doi.org/10.1016/j.resourpol.2021.102022	TR01
Sep-21	Long-term contamination of the Rio Doce estuary as a result of Brazil's largest environmental disaster	Perspectives in Ecology and Conservation	Scientific Journal	Cites TR03, endorsing the source-to-sea and landscape approaches for the restoration	https://www.sciencedirect.com/science/article/pii/S2530064421000766?via%3Dihub	TR03
oct-21	Climate change and web archives: an Ibero-American study based on the Portuguese and Brazilian contexts	Records Management Journal	Scientific Journal	Cites TR02 to emphasise the impact on climate change from environmental damage linked to these events	https://www.emerald.com/insight/content/doi/10.1108/RMJ-11-2020-0039/full/html	TR02
nov-21	Classification of mining waste landfills according to legislation in Serbia	Tehnika	Scientific Journal	Language barrier	https://scindeks.ceon.rs/article.aspx?artid=0040-21762105575N&lang=en	TR01



21	dez.- Resiliência (?) Das agências receptivas da cidade histórica de Ouro Preto (MG)	Ateliê do Turismo	Scientific Journal	Cites TR01 to exemplify the impacts on tourism in Ouro Preto due to the dam failure	https://desafioonline.ufms.br/index.php/adturismo/article/view/14515/9931	TR01
----	---	-------------------	-----------------------	--	---	------

Annex 4. Summary of the results of the analysis with secondary data to identify evidence of implementation.

Themes and recommendations	IMPLEMENTATION	GAPS
<p>Comprehensive impact assessment</p> <p>TR01R01; TR01R02; IP04R01; TR03R05</p>	<p>- RF created an Impact Curatorship area in early 2020. In early 2021, concrete actions were in place to design and pilot a system to gather and organise information produced by different programs, including information about the disaster's impact and the outcomes of the reparation actions.</p> <p>- RF and other stakeholders (Public prosecutors, technical advisories to affected people, the judge of the 12th Court) commissioned studies and assessments on specific impacts of the dam's failure. In some cases, the assessments used participatory approaches.</p>	<p>- The assessments' results are not compiled or available in a common repository nor analysed in an integrated way to foster a comprehensive understanding of the impacts' extension and dimensions.</p> <p>- Although there are recent efforts in communicating the concrete outcomes of some programs, the lack of systematised public information hinders the understanding of Renova's achievements by the broad public.</p>
<p>High level governance / institutional relations</p> <p>TR02R01;TR02R02;TR02R04;IP02R01</p>	<p>- Evidence shows that fishing has been constantly debated in several CIF Technical Chambers, but with no agreement on a framework for removing the fishing bans. The removal (or maintenance) of fishing bans is one of the issues currently under the judiciary's control.</p>	<p>- There is no evidence of efforts from Renova or other stakeholders to mainstream climate change mitigation or adaptation in the reparation programs or long-term plans for the Basin, despite some positive impacts on carbon sequestration being reported by RF as a side-effect of some programs.</p> <p>- There is no evidence of CBH Doce's actions to mainstream Climate Change.</p>

<p>Knowledge communication, sharing</p> <p>TR01R06; IP02R03;IP05R02</p> <p>management, information</p> <p>TR01R07;</p>	<p>The evidence suggest that Renova has recently invested in new tools and partnerships for communication and information sharing. Some examples:</p> <ul style="list-style-type: none"> - Program 38 - Monitoring of the Rio Doce Basin – outstands in a matter of making data available to both national or state’s agencies and society in general through the automatic integration of databases and a dedicated online geospatial portal. - A recently launched communication product (“Boletim das Águas”) makes advances in the way information about water quality is presented to broader audiences. - Regarding the sharing of knowledge about the restoration process, Renova participated in events to debate lessons learned, in areas like governance and water security. The Foundation is also forging partnerships in specific areas (e.g. reforestation) to share data and experiences. 	<ul style="list-style-type: none"> - We found no evidence for integrated plans and actions for sharing data. RF’s website displays a large number of reports, but the structure and level of detail of available information is not uniform among programs. - We could not find evidence of systematic plans for gathering, organising and disseminating knowledge from the different programs. -We could find no evidence of consistent and robust institutional communication about impacts on freshwater biodiversity or fish toxicity, nor partnerships for data sharing regarding human health issues.
<p>Alternative socioeconomic development</p> <p>IP01R01; IP01R02; IP01R03</p> <p>livelihoods,</p>	<p>There is evidence that Renova Foundation is implementing several elements of IP01 recommendations:</p> <ul style="list-style-type: none"> • Partnerships with several stakeholders in the Basin (SEBRAE, ‘S’ system, NGOs and other Civil Society organisations, Technical assistance institution – EMATER) for professional training and capacity building; • Partnerships with governmental bodies to articulate stimulus to more sustainable land uses (e.g. PES projects) • Creation of funds and calls for projects to stimulate economic development and entrepreneurship; • Conduction of diagnostic studies about socioeconomic contexts and opportunities; • Stimuli for forest restoration and agroforestry 	<ul style="list-style-type: none"> • Apparently, there is integrated planning for the PG17 - Resumption of agricultural activities, including articulation with governments and other organisations in the Basin. Nevertheless, there is a perceived need for improved integration and jointly planning efforts with other programmes, specifically PG 15 - Promotion of Innovation and 18 - Economic Development and Diversification. • The publicly available information does not always allow a deeper evaluation of the distribution of actions in the territory.

<p>Ecosystem and Human Health TR02R03;IP05R01;IP02R02;IP03R01;IP05R03; TR03R01; TR03R02; TR03R03; TR03R04</p>	<ul style="list-style-type: none"> • Monitoring/ Participative monitoring: <ul style="list-style-type: none"> o Renova Foundation mentions a partnership with UNESCO to build capacity among local communities and municipal governments' staff on water monitoring since 2019. We found no information on the activities executed so far or other results. We found a few other examples of local communities involved in monitoring activities. o The Juparanã lagoon is included in the overall RF monitoring programs (water and sediments; aquatic and terrestrial biodiversity). In addition, specific monitoring schemes for the lagoon were implemented in 2020 following a judicial decision. o There is no evidence of local capacity building for integrative monitoring of impacts on human health or the environment. • Nature-based solutions (NbS): <ul style="list-style-type: none"> o There are examples of NbS use by RF in the Gualaxo do Norte river and rural areas, mainly upstream from Candonga. o The reforestation program is reported to be an NbS that contributes to carbon sequestration. 	<ul style="list-style-type: none"> • Monitoring/ Participative monitoring: <ul style="list-style-type: none"> o We found no information on the activities executed or results obtained so far in the scope of the RF's partnership with UNESCO. We found very few other examples of local communities involved in monitoring activities. • Nature-based solutions (NbS): <ul style="list-style-type: none"> o NbS haven't been integrated or adopted as a priority in the reparation process.
<p>Rio Pequeno Dam (Juparanã lake) IP03R02;IP03R03</p>	<ul style="list-style-type: none"> • Natural flows (Rio Pequeno Dam) <ul style="list-style-type: none"> o A cofferdam was built in the Rio Pequeno after a judicial decision, allowing the natural water flows from the Juparanã lagoon to the Rio Doce, but avoiding eventually contaminated waters to make the inverse way. 	<p>Alternative technologies to substitute the cofferdam - including the viability of a dam with floodgates - are still under discussion, involving the judiciary and the CIF.</p>
<p>Risk assessment, adaptive management TR01R03; TR01R04; TR01R05</p>	<ul style="list-style-type: none"> • Renova Foundation has a systematic tool and procedures for identifying and monitoring strategic risks. 	<ul style="list-style-type: none"> • Threats to the sustainability of mitigation and compensation programs or the resilience of outcomes are not systematically identified and addressed. • Although some specific areas report adaptive management initiatives, there is no evidence for an adaptive management plan covering all programs.

Annex 5. Assessment of the results according to the progress markers defined in the Communication and Knowledge log frame.

The "Results" column: White: achieved as indicated in progress markers. Orange: indicators that did not reach the "expect to see" marker. Grey: indicators not fully assessed.

Goal and Outcomes		Progress Markers for each Indicator		
OUTCOME 1		EXPECT TO SEE	LIKE TO SEE	LOVE TO SEE
Rio Doce ISTAP established and working with independence, transparency, responsibility and commitment, supported by IUCN Secretariat	TR03 and TR4 covered all 10 criteria	Topic selected cover at least 6 priority criteria	Topic selected cover at least 8 priority criteria	Topic selected cover at least 10 priority criteria
	All Panel members have signed COI statement	All Panel members have signed Conflict of interest statement and are independent		
	The two foreseen Thematic Reports were delivered	80% of products foreseen at annual work plan are delivered	100% of products foreseen at annual work plan are delivered in time	Products delivered outpass the number foreseen at annual workplan
	There was 23% of improvement.	There is improvement in the results of 30% of the questions in the survey compared to the year before	There is improvement in the results of 50% of the questions in the survey compared to the year before	There is improvement in the results of 80% of the questions in the survey compared to the year before
OUTCOME 2		EXPECT TO SEE	LIKE TO SEE	LOVE TO SEE
Recommendations and knowledge generated by RDP adopted in Renova Foundation programmes	According to Renova Foundaton's official feedback, 18 of the 33 recommendations are or will be totally or partially implemented	At least 50% of recommendations are adopted and/or reflected in RF operational decision	50 to 75% of recommendations are adopted and/or reflected in RF operational decision	More than 75% of recommendations are adopted and/or reflected in RF operational decision
OUTCOME 3		EXPECT TO SEE	LIKE TO SEE	LOVE TO SEE
Recommendations and knowledge generated by RDP reflected in government policies and regulatory frameworks	Half of the government representatives from CIF and CBH Doce that responded to surveys agree the RDP work is important for the reparation process	At least 50% of decision makers consulted are aware and supportive of RDP's work.	50 to 75% of decision makers consulted are aware and supportive of RDP's work.	More than 75% of decision makers consulted are aware and supportive of RDP's work.
	The RDP met the CIF	RDP members meet CIF executive secretary and other CIF members at least once a year	RDP recommendations are taken to CIFs comissions and general meetings	CIF meetings minutes and/or statements with supportive mention to RDP's recommendations.
	In the meetings with stakeholders from the MG and ES governments the work of the Panel was clearly endorsed (refer to the meeting minutes)	From 1- 3 reports and/or statements from the public sector actors positively mentioning the work of RDP and recommendations.	More than 3 reports and/or statements from the public sector actors positively mentioning the work of RDP and recommendations.	Existing laws for waterbasin conservation enforced, and new programs to support their implementation established related to RDP recommendations.
OUTCOME 4		EXPECT TO SEE	LIKE TO SEE	LOVE TO SEE
Communication and information about the work of RDP disseminated among Do-ers (affected population, farm cooperatives, fishers association, traditional communities, steel and mining companies, traders and tourism)	All RDP communication content is available in PT and EN	All reports, meeting summaries, communications materials and <u>main</u> website pages translated to Portuguese.	All reports, meeting summaries, communications materials and <u>all</u> website pages translated to Portuguese.	All reports, meeting summaries, communications materials translated to Portuguese and Portuguese version of RDP website.
	Not assessed	At least 50% of local leaders consulted are aware and supportive of RDP's work.	50 to 75% of local leaders consulted are aware and supportive of RDP's work.	More than 75% of local leaders consulted are aware and supportive of RDP's work.
OUTCOME 5		EXPECT TO SEE	LIKE TO SEE	LOVE TO SEE
Scientific findings, knowledge, and lessons from RDP process shared and taken up by influencers (media, social movements, NGOs, universities and international agencies)	The RDP/IUCN presented the work in three events: WCC, SIRD and IAIA conference.	Panel members and/or IUCN presented RDP's work in at least 5 events.	Panel members and/or IUCN presented RDP's work in at least 10 events.	Panel members and/or IUCN presented RDP's work in at least 15 events.
	One Op-Ed about TR04 in Nexo	At least 10 media articles or interviews released by Thematic Report and at least 5 by Issue Paper.	At least 15 media articles or interviews released by Thematic Report and at least 10 by Issue Paper.	More than 15 media articles or interviews released by Thematic Report and more than 10 by Issue Paper.
	Twitter + LinkedIn mentions/reposts reach the "expect to see" progress marker.	At least 5 influencers replicated RDP's work (on social media) and engaged in activities promoted by RDP	At least 10 influencers replicated RDP's work (on social media) and engaged in activities promoted by RDP	At least 10 influencers replicated RDP's work and engage in activities promoted by RDP; Academic papers, reports and publications referenced RDP's reports and/or papers and/or recommendations
	Page views and dowlad metrics show access from national and international audiences	Thematic reports and issue papers are accessed by municipal and state level audience.	Thematic reports and issue papers are accessed by national level audience.	Thematic reports and issue papers are accessed by international level audience.