Enhancing data publication, access and use capacities in the private sector

Programme: CESP
Project ID: CESP2022-010
Project page: https://www.gbif.org/project/CESP2022-010/enhancing-data-publication-access-and-use-capacities-in-the-private-sector
Project lead organization: Sistema de Información sobre Biodiversidad de Colombia
GBIF Participant Represented: Colombia
Project implementation period: 1/8/2022 - 30/4/2024
Report approved: 29/1/2025

Narrative Final report

Executive Summary

The project partners have carried out different actions oriented to four proposed goals.

Transfer information, experience, and best practices to the CR, GT, and EC nodes for the construction of a national community of data publishers from the business sector: We held three online meetings. The first established the roadmap, the second involved the first mentoring, which was conducted in two sessions, and the third focused on follow-up and providing further guidance.

Create a virtual course for the business sector on publication, access, and use of shared data through GBIF: Two versions of the course were launched. The first was based on the needs and legislation of the Colombian business sector, and the second was oriented towards the LAC business community. The contents were adapted, and new materials were created for each course (the documents with the details for each course are shared). Additionally, 17 short videos were produced. The courses were announced and launched for Colombia and LAC countries. The courses already have more than 350 participants, and 479 certificates had been issued through the e-learning platform https://aprende.biodiversidad.co/ at the time of this report.

A total of 47 datasets and 242.897 occurrences were mobilized by the nodes involved in the project, 26 from Colombia, 17 from Guatemala, and 4 from Ecuador, and one dataset from Panamá, which shows interest after the invitation made to Colombian companies with subsidiaries in other Latin American countries.

A virtual training reference guide was created using the experience of the Colombian node, sharing examples and a set of best practices for planning, and developing virtual courses.

Report on Activities

Activity progress summary

Kick-off virtual meeting with project partners (2023-01-25): 100% - This meeting was held in January to establish the roadmap and new dates for the activities according to an adjustment made to the calendar.

Virtual meeting with the partners of the private sector (2022-08-16 & 2022-09-13): 100% - Two meetings were held with representatives of Geopark and ANDI to identify the thematic needs for a training program and subsequently validate the proposal designed by the Colombia node. ANDI has been Colombia's partner and strategic ally in building its business community, and Geopark has been one of the companies publishing and financing these actions. At this stage, it was not possible to involve the other nodes due to delays in the formalization of this project and the lack of knowledge of the business communities in their countries.

Course structure (2022-08 / 2024-01): 100% - Nine courses grouped in two training programs were defined and entitled

Program 1 - Gestión corporativa para la naturaleza: ruta de formación para movilizar datos sobre biodiversidad".
- Course 1. Business and biodiversity: fundamentals for publishing data with value.
- Course 2. Learning a new language: introduction to the Darwin Core.
- Course 3. Hands on! how to use the Darwin Core.
- Course 4. Data Metamorphosis: transforming a GDB to the Darwin Core.
- Course 5. Open data and collection permits.

Program 2 - Ruta de Formación en movilización de datos del sector empresarial LAC, which contain 4 courses:
- Course 1. GBIF Sector empresarial - ABC para publicar datos
- Course 2. GBIF Sector empresarial - Aprende sobre el Darwin Core
- Course 3. GBIF Sector empresarial - Uso del Darwin Core
- Course 4. GBIF Sector empresarial - Últimos clics

First Mentoring meeting (2023-04-11 & 2023-04-17): 100% - In this session with the nodes of Guatemala, Ecuador, and Costa Rica, the strategy and contents developed by the Colombian node to articulate the productive sector as a data publisher through GBIF were shared. The discussions were developed in three chapters:

- General overview of the strategy developed by Colombia (Dairo Escobar).
- The role of technical support in the publication of data for the participation of the business sector (Ricardo Ortiz).
- The role of communications in the consolidation of the business sector as a data publisher (Andrés Duarte).

Adaptation of existing contents (2022-09 / 2023-12): 100% - The contents of SiB Colombia laboratories were adapted for the first three courses of the training cycle. This material was updated and improved based on the needs identified in the business sector. Recording and production sessions were held for all classes and activities were designed to validate the knowledge acquired in each module. In addition, for the international version of the courses, material from the three courses was adjusted to be more general to the region and understandable to everyone within the GBIF Network.

New contents (2022-09 / 2024-01): 100% In parallel to the adaptation of content, specific content for the business sector was created to complement the training program. These were courses 4 and 5 for Colombia publishers, focused on Environmental Impact Assessments (EIA) published using a specific format legally binding in the country and fulfilling legal report requirements.

For the international version, new readings and contents were created for each course and a new course was assembled to summarize steps for publishing in an IPT and register resources in GBIF for other countries.

Short how-to videos (2022-09 / 2024-01): 100% - In parallel to the content adaptation, 17 short videos were made, all available on YouTube, divided into three tutorials.
- Tutorials for biodiversity data access and use
- Tutorials for publishing open data through SiB Colombia
- Tutorials for reporting data associated with harvesting permits

Virtual training reference guide (2023-09 / 2024-03): 100% - A virtual training reference guide was created using the experience of the Colombian node, sharing examples and a set of best practices for planning and developing virtual courses. It includes a guide to set and host virtual meetings in Zoom for different training activities. Additionally, it has information regarding the team and roles necessary to run a successful live presentation, including details on how to organize, and manage questions.

Course call and selection of candidates (2022-11 / 2024-01): 100% This activity had two stages. The first stage was held on November 30, 2022, at ANDI's facilities exclusively for companies in Colombia, with 602 users registered in the inscription form. The call remained open until January, and there was no selection process, as the methodology and platform allowed unlimited participation.

The second stage took place in January 2024 and involved participants from the LAC region. Again, there was no selection process. Colombian participants were directed to the content tailored for the Colombian version of the courses, while participants from the LAC region accessed the version adapted for international participants. In this second call, there were 499 applications representing 12 countries from the LAC region, including CESP participant partners: Colombia, Guatemala, Ecuador, and Costa Rica.

Second mentoring meeting (2023-12): 100% - A second mentoring meeting was held between the GBIF partners (Ecuador, Guatemala, Costa Rica, and Colombia). In this meeting the Colombian node shared information about a project extension that was requested and approved, a preview of the

courses was shown and a calendar for the launch of the new course was decided with the addition of four Q&A sessions for participants that would be held by the participant nodes. Moreover, the nodes shared their progress regarding business sector data mobilization, and some improvements were discussed.

Course execution (2023-02 / 2024-04): 100% - The course was executed in two stages: the first for Colombian participants beginning in February 2023, and the second for participants from the LAC region beginning in February 2024. There were over 350 active students, spending a total of 2400 hours on the platform. Participants from Colombia represented 114 organizations, while the international courses had participants from 42 organizations, with at least 75 participants directly from the private sector.

Although the training program is self-paced and open to everyone, we offered 9 Q&A sessions per course during a specific period to enhance the learning experience for both the national (2023-02) and international (2024-02) cohorts. Each session had an average of 20 participants and 10 questions answered.

Certificates of completion: 100% - Certificates were generated automatically by the platform upon request from participants in both the Colombian and LAC cohorts. A total of 479 certificates were issued: 410 for the national course and 69 for the international participants.

A total of 48 datasets and 242,936 records were mobilized by companies on behalf of this project. In Colombia, 26 datasets (225,775 records) were mobilized from 4 organizations, including an additional partner of this project, GeoPark. Guatemala mobilized 17 datasets (432 records) from 2 organizations; data from the Universidad del Valle de Guatemala came from studies co-authored with the business sector, and datasets from Enel Guatemala were structured between Guatemala and Colombia and are still in the publication process. Ecuador mobilized 4 datasets (16,690 records) from 2 organizations. In Costa Rica, conversations are ongoing to mobilize data from three organizations (Instituto Nacional de Electricidad, Fondo Nacional de Financiamiento Forestal, and Fondo de Biodiversidad Sostenible), but engagement and data mobilization are still under discussion. An additional resource of ENEL Panamá was mobilized with a coordinated effort of ENEL Colombia and node participants (39 records).

Completed activities

Activity name: Kick-off virtual meeting with project partners

Description: Online meeting with project partners to organize the roadmap.
Start Date - End Date: 25/1/2023 - 25/1/2023
Verification Sources: Minute: https://bit.ly/kickoff_2022-010

Activity name: Virtual meeting with the partners of the private sector

Description: Virtual meetings to clarify and identify additional needs that should be addressed on the course. We focus on the feedback of the two private sector partners of the project Geopark and ANDI.
Start Date - End Date: 16/8/2022 - 13/9/2022
Verification Sources: Minutes: https://bit.ly/virtual-meeting-business-sector-partners

Activity name: Definition of the course structure

Description: Definition of the topics of the course and the format of each content: written, practical guides, how-to videos, self-assessments etc.
Start Date - End Date: 1/8/2022 - 30/9/2022
Verification Sources: Document: https://bit.ly/courseStructure

Activity name: First Mentoring meeting

Description: Meeting with the four GBIF partners, Colombian node explained to Guatemala, Costa Rica and Ecuador their strategy to work with the business sector, the challenges and solutions found after more than 2 years working with ANDI. Together we built a road map for Guatemala. Costa Rica and Ecuador to start working with the private sector.

Start Date - End Date: 11/4/2023 - 17/4/2023
Verification Sources: Minutes: https://bit.ly/first-mentoring-meeting

Activity name: Adaptation of existing contents

Description: The contents of the SiB Colombia laboratories were adapted for the first three courses of the training cycle. This material was updated and improved based on the needs identified in the

business sector. Recording and production sessions were held for all classes and activities were designed to validate the knowledge acquired in each module.
For the international version of the courses, material from three courses was adjusted to be more general to the region and understandable to everyone within the GBIF Network.

Start Date - End Date: 1/9/2022 - 30/12/2023
Verification Sources: Documents: https://bit.ly/adaptation-of-contents

Activity name: Creation and editing of short how-to videos

Description: Creation and editing of 17 short (3-6 minutes) videos explaining data quality tools and how to search, download and use GBIF data.
Start Date - End Date: 1/9/2022 - 30/1/2024
Verification Sources: Document: https://bit.ly/short-how-to-videos

Activity name: Creation of new contents

Description: In parallel to the adaptation of content, specific content for the business sector was created to complement the training program. These were courses 4 and 5 for Colombia publishers, focused in EIA published using a specific format legally binding in the country and fulfilling legal report requirements. A new course for the international version was assembled to summarize steps for publishing in an IPT and register resources in GBIF for other countries.
Start Date - End Date: 1/9/2022 - 30/1/2024
Verification Sources: Document: https://bit.ly/creation-of-new-contents

Activity name: Course call and selection of candidates

Description: This activity was held on November 30, 2022 at ANDI's facilities only for companies in Colombia. The call was open until January. There was no selection process, taking into account that the methodology and platform allows unlimited participation.

A second course call for the LAC version was held in January of 2024, there was no selection process.

Start Date - End Date: 30/11/2022 - 31/1/2024
Verification Sources: Document: https://bit.ly/course-call-business-sector

Activity name: Mid-term report

Description: Narrative report with advances and details of the execution of the project. The financial report was not delivered on time, but the complete execution of financial resources is described in the final report.
Start Date - End Date: 15/5/2023 - 19/5/2023
Verification Sources: Document: https://bit.ly/CESP22-010_mid-term-report

Activity name: Second mentoring meeting

Description: Meeting of the four GBIF partners, Colombian node shared information about a project extension that was requested and approved. A calendar for the new course was decided, with Q&A sessions scheduled on friday, 4-5 pm Colombia time.
Ecuador, Guatemala and Costa Rica shared their progress for data mobilization, with advanced talks with several sectors.

Start Date - End Date: 5/12/2023 - 11/12/2023
Verification Sources: https://bit.ly/second-mentoring-meeting

Activity name: Course execution

Description: First version of the courses started in February 2023, only with participants from Colombia. Five sessions of Q&A were held from February to April, one for each course.

A second version of the courses started in February 2024, opening five courses for Colombian participants and four for international participants. Four sessions of Q&A were held from February to April, these were open to everyone and had participation from mentors of Guatemala, Ecuador and Costa Rica.

All courses are self-paced and do not have an end date, so students can continue learning.

Start Date - End Date: 6/2/2023 - 5/4/2024
Verification Sources: Course materials: https://aprende.biodiversidad.co/
Report course execution: https://bit.ly/course-execution

Activity name: Certificates of completion

Description: Official certificates were generated automatically in the platform Chamilo for students who successfully completed a course. All certificates have the logo of GBIF and international certificates have the logos of all node participants and are signed by the LAC representative.
Start Date - End Date: 6/2/2023 - 30/4/2024
Verification Sources: Summary of certificates:https://bit.ly/certificates-completion

Activity name: Data mobilization

Description: A total of 48 datasets and 242,936 records were mobilized by companies on behalf of this project. In Colombia, 26 datasets (225,775 records) were mobilized from 4 organizations. Guatemala mobilized 17 datasets (432 records) from 2 organizations. Ecuador mobilized 4 datasets (16,690 records) from 2 organizations. An additional resource of ENEL Panamá was mobilized with a coordinated effort of ENEL Colombia and node participants (39 records).

In Costa Rica, conversations are ongoing to mobilize data from three organizations (Instituto Nacional de Electricidad, Fondo Nacional de Financiamiento Forestal, and Fondo de Biodiversidad Sostenible), but engagement and data mobilization are still under discussion. Those datasets are expected to be published in the second part of the year.
Start Date - End Date: 2/1/2023 - 30/4/2024
Verification Sources: Summary of dataset mobilized:https://bit.ly/data-mobilization

Activity name: Creation of virtual training reference guide

Description: A virtual training reference guide was created using the experience of Colombia node. Sharing examples and a set of best practices for planning, creating and developing virtual courses. It includes a guide to set and host virtual meetings in Zoom for different training activities. Additionally it has information regarding the team and roles necessary to run a successful live presentation, including details on how to organize, and manage questions.
Start Date - End Date: 15/9/2023 - 31/3/2024
Verification Sources: Guide: https://bit.ly/virtual-training-reference-guide

Report on Deliverables

Deliverables progress summary
Kick-off virtual meeting with project partners (2023-01-25): 100% - This meeting was held in January to establish the roadmap and new dates for the activities according to an adjustment made to the calendar.

Virtual meeting with the partners of the private sector (2022-08-16 & 2022-09-13): 100% - Two meetings were held with representatives of Geopark and ANDI to identify the thematic needs for a training program and subsequently validate the proposal designed by the Colombia node. ANDI has been Colombia's partner and strategic ally in building its business community, and Geopark has been one of the companies publishing and financing these actions. At this stage, it was not possible to involve the other nodes due to delays in the formalization of this project and the lack of knowledge of the business communities in their countries.

Course structure (2022-08 / 2022-09): 100% - Nine courses grouped in two training programs were defined:

Program 1 - Gestión corporativa para la naturaleza: ruta de formación para movilizar datos sobre biodiversidad, which contain 5 courses:
- Course 1. Business and biodiversity: fundamentals for publishing data with value.
- Course 2. Learning a new language: introduction to the Darwin Core.
- Course 3. Hands on! how to use the Darwin Core.
- Course 4. Data Metamorphosis: transforming a GDB to the Darwin Core.
- Course 5. Open data and collection permits.

Program 2 - Ruta de Formación en movilización de datos del sector empresarial LAC, which contain 4 courses:
- Course 1. GBIF Sector empresarial - ABC para publicar datos
- Course 2. GBIF Sector empresarial - Aprende sobre el Darwin Core
- Course 3. GBIF Sector empresarial - Uso del Darwin Core
- Course 4. GBIF Sector empresarial - Últimos clics

First Mentoring meeting (2023-04-11 & 2023-04-17): 100% - In this session with the nodes of Guatemala, Ecuador and Costa Rica, the strategy and contents developed by the Colombian node to articulate the productive sector as a data publisher through GBIF were shared. The discussions were developed in three chapters:

- General overview of the strategy developed by Colombia (Dairo Escobar).

- The role of technical support in the publication of data for the participation of the business sector (Ricardo Ortiz).
- The role of communications in the consolidation of the business sector as a data publisher (Andrés Duarte).

Adaptation of existing contents (2022-09 / 2023-12): 100% - The contents of the SiB Colombia laboratories were adapted for the first three courses of both training cycles. This material was updated and improved based on the needs identified in the business sector. Recording and production sessions were held for all classes and activities were designed to validate the knowledge acquired in each module. For the international version of the courses, material from the three courses was adjusted to be more general to the region and understandable to everyone.

New contents (2022-09 / 2024-01): 100% In parallel to the adaptation of the content, specific content for the business sector was created to complement the training program. These were courses 4 and 5 for Colombian publishers focused on EIA published using a specific format legally binding in the country and fulfilling legal report requirements, and a new course for the international version that was assembled to summarize steps for publishing in an IPT and register resources in GBIF for other countries.

Short how-to videos (2022-09 / 2022-12): 100% - In parallel to the content adaptation, 17 short videos were made, all available on YouTube, divided into three tutorials.

- Tutorials for biodiversity data access and use
- Tutorials for publishing open data through SiB Colombia
- Tutorials for reporting data associated with harvesting permits

Virtual training reference guide (2023-09 / 2024-03): 100% - A document with some best practices, a guide for using a platform, and general steps to make a virtual training was built using Colombia's experience as a starting point. It follows all the steps taken and has a more detailed explanation for webinars and seminars held in Zoom and how to use them effectively for virtual training involving students from several countries.

Course call and selection of candidates (2022-11 / 2024-01): 100% - This activity was held on November 30, 2022, at ANDI's facilities only for companies in Colombia. The call was open until January. There was no selection process, taking into account that the methodology and platform allow unlimited participation. A second-course call for the international version was held virtually in January of 2024, all node participants shared the same graphic pieces in their social networks and it was shared with people from other LAC countries using mailing strategies. More than 1.000 people were reached and registered in both calls.

Second mentoring meeting (2023-12): 100% -This meeting was held in December to plan the international version of the courses, define dates for deliverables, and share progress for mentored nodes regarding data mobilization.

Course execution (2023-02 / 2023-06): 100% - Although the training program is self-paced and open to everyone, during a specific period we offered a tutorial per course to enhance the learning experience. There were over 350 active students, spending a total of 2400 hours on the platform. Participants from Colombia represented 114 organizations, while the international courses had participants from 42 organizations.

Certificates of completion (2023-02 / 2024-04): 100% - Certificates were generated automatically by the platform upon request from participants in both the Colombian and LAC cohorts. A total of 479 certificates were issued: 410 for the national course and 69 for the international participants.

Data mobilization (2023-05 / 2024-04): A total of 48 datasets and 242,936 occurrences were published, 26 from Colombia, 17 from Guatemala, 4 from Ecuador, and 1 from Panamá. Datasets from 3 organizations from Costa Rica are in process and expected to be published later this year.

Completed deliverables

Title: Kick-off virtual meeting with project partners

Type: Documentation
Description: Minutes of the meeting with the capacity needs identified.
Sources of verification: https://bit.ly/virtual-meeting-business-sector-partners

Title: Virtual meeting with the partners of the private sector

---

Type: Documentation
Description: Minutes of the meeting with the capacity needs identified.
Sources of verification: https://bit.ly/virtual-meeting-business-sector-partners

Title: Course structure

Type: Documentation
Description: Document with the detailed course structure, length, specific topics and activities for each topic.
Sources of verification: https://bit.ly/courseStructure

Title: First Mentoring meeting

Type: Documentation
Description: Minutes of the meeting with the topics addressed, and road map for Guatemala, Costa rica, and Ecuador.
Sources of verification: https://bit.ly/first-mentoring-meeting

Title: Adaptation of existing contents

Type: Documentation
Description: New version of the adapted contents based on the identified needs of the private sector
Sources of verification: https://bit.ly/adaptation-of-contents

Title: New contents

Type: Documentation
Description: New contents based on the identified needs of the business sector.
Sources of verification: https://bit.ly/creation-of-new-contents

Title: Short how-to videos

Type: Resources
Description: 17 short videos (3-6 minutes) about how to use data quality tools and how to search, download and use GBIF data. These videos are in Spanish, responding to a language need in our community.
Sources of verification: https://bit.ly/short-how-to-videos

Title: Course call and selection of candidates

Type: Documentation
Description: Document with the description of the selection process and its results.
Sources of verification: https://bit.ly/course-call-business-sector

Title: Virtual training reference guide

Type: Documentation
Description: Virtual training reference guide with a set of best practices for planning, creating and developing virtual courses that can initially be used by Spanish-speaking GBIF nodes.
Sources of verification: https://bit.ly/virtual-training-reference-guide

Title: Mid-term report

Type: Documentation
Description: Report with advances and details of the execution of the project.
Sources of verification: https://bit.ly/CESP22-010_mid-term-report

Title: Second mentoring meeting

Type: Documentation
Description: Report of Ecuador, Guatemala and Costa Rica working progress with the private sector and follow up of the project execution.
Sources of verification: https://bit.ly/second-mentoring-meeting

---

Title: Course execution

Type: Training Workshop
Description: Report of the course engagement, tutoring activities and results of self-assements.
Sources of verification: https://bit.ly/course-execution

Title: Certificates of completion

Type: Documentation
Description: Statistics of the certifications process and template of certificates generated
Sources of verification: https://bit.ly/certificates-completion

---

Title: Data mobilization

Type: Resources
Description: At least 200.000 new occurrences (10 datasets)
Sources of verification: https://bit.ly/data-mobilization

Events

Lanzamiento Ciclo de formación virtual para el sector empresarial

Dates: 30/11/2022 - 30/11/2022
Organizing institution: SiB Colombia, ANDI, Geopark, Instituto Humboldt
Country: Colombia
Number of participants: 107
Comments: Hybrid event: 35 participants on-site, 72 online.
Website or sources of verification: https://www.youtube.com/live/8SceS_l9ckk?feature=share

Events

Sesiones de Q&A sincrónicos - Gestión corporativa para la naturaleza: ruta de formación para movilizar datos sobre biodiversidad

Dates: 9/3/2023 - 8/6/2023
Organizing institution: SiB Colombia, ANDI, Geopark, Instituto Humboldt
Country: Colombia
Number of participants: 129
Comments: Virtual event: 129 participants total in five sessions held between 2023-03-09 and 2023-06-08.
Website or sources of verification: https://bit.ly/course-execution

Events

Sesiones de Q&A sincrónicos - Ruta de Formación en movilización de datos del sector empresarial LAC

Dates: 16/2/2024 - 5/4/2024
Organizing institution: SiB Colombia, SNIBgt (GBIF-GT), MAATE (GBIF-EC), Instituto Humboldt
Country: Colombia
Number of participants: 55
Comments: Virtual event: 55 participants total in four sessions held between 2024-02-16 and 2024-04-05.
Website or sources of verification: Report course execution: https://bit.ly/course-execution

---

Communications and visibility

The results of the project have been effectively communicated to stakeholders through a multi-faceted approach. The call for the courses has been shared via email and social media, and interactive webinars (Q&A) have been held with the participation of stakeholders in order to keep them well-

informed of progress and achievements. Key metrics, participant feedback, and success stories have been highlighted in this final report to showcase the impact and value of the training. Moving forward, this communication strategy will be maintained by highlighting updates in the future about new content for the courses and new inscription calls.

Stage 1: - Call for participants:
https://bit.ly/course-call-business-sector

Stage 2: Social media to amplify the content.
Source:https://bit.ly/course-execution

Videos
- https://youtu.be/DtwNBZe1aRc
- https://youtu.be/8SceS_l9ckk
- https://youtu.be/NmEXQJfDFfk?si=n2FqbPPWdWSo7pY8

Stage 3: Short How-to videos
https://bit.ly/short-how-to-videos

Monitoring and evaluation

Monitoring, evaluation and lessons learned
Final Evaluation:
Overall, we can say that we have a positive balance of the project. Most of the project time was dedicated to the design and structuring of the training cycle. This process started relatively quickly gathering the requirements on content needs, taking into account that the Colombia node had been understanding the needs of this community for about three years. However, the development and production of content at the level expected by this community was a challenge. The production involved many hours of recording and editing content to ensure a pedagogical scope. At this point of the Project, we are satisfied with the result, which hundreds of people interested in it can use.

Due to the setbacks presented with the formalization of the project and the commitments already acquired with one of the partners, the initial design of the courses was made with a scope oriented to the Colombian community. However, efforts were made to generate a version adapted for the LAC region that can be used by the project's partner nodes.

Best Practices and Lessons Learned:
Some main lessons learned about the development of the e-learning courses are shown below:

The importance of defining clear, measurable learning objectives facilitates the development of the content in a logical, sequential manner. In that order, splitting the courses into modules allowed us to break down information into more manageable sections that are more comfortable and easy to understand by the users.

Choosing a robust and user-friendly learning management system (LMS) that supports various multimedia formats and interactive tools facilitates the process. However, the maintenance of the platform requires technical support and also time, and resources to assist participants with any technological issues they might encounter. So, new responsibilities and functions come attached to these platforms. As administrators of this LMS, time and resources need to be considered for keeping the courses on air.

Once the courses are launched a further plan to keep the contents up to date is needed, so they don't get deprecated or become irrelevant to the audience. It could happen more often with content related to normative or administrative processes based on national regulations.

Short how-to videos are an easy-to-follow and attractive tool to keep the users enrolled and interested in the topics because the instructions to use tools, software, etc. are clear and concrete.

In order to encourage active participation in the courses, it could be necessary to fix deadlines or compromises, otherwise, incentivize participation through Q&A sessions, and forums could be needed. Another effective strategy is to make constant follow-ups using mailing.

Post Project Activity(ies):
The courses will be maintained open for current students. An assessment of the courses will be shared with the LAC participants to get their insights and make further enhancements to the content.

A meeting will be held with the project participants to share the main results and to follow up on the publication processes that are still open and that could lead to a more sustained mechanism of engaging the private sector.

Sustainability plans

New cohorts for the courses will be launched. In the future, we will look for an enhancement of the platform that facilitates the elaboration of reports based on student cohorts and also to add more needed information in the registration process, like the name of the organization. The contents will be updated according to the time and resources available to get to a broader audience with relevant topics like the use of data and further changes in the publication model. In that order, we expect to make new inscription calls in the future for both versions of the courses, national and for the LAC region.

Impact of COVID-19 pandemic on project implementation

This project has not been impacted by the COVID-19 pandemic.