Analysis of barriers, incentives and capacity building activities for knowledge holders to engage with IPBES and IPCC in target countries and regions

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Summary

The RESPIN project aims to support the integrated provision and use of processes and outputs of the Intergovernmental Science-Policy Platform for Biodiversity and Ecosystem Services (IPBES) and the Intergovernmental Panel on Climate Change (IPCC). This report looks in depth what are the barriers and incentives to the engagement of knowledge holders in IPBES and IPCC processes. Knowledge holders are people who have contributed, who are contributing or who could be contributing to IPBES and/or IPCC processes. It can include scientists, other experts, National Focal Points (NFPs), Indigenous Peoples and local communities (IPLCs), trainers, and more.

This report evaluates the engagement of experts in IPBES and IPCC processes and activities in target countries and regions (Western Europe, Eastern Europe, Central Asia, Colombia and Democratic Republic of Congo) on two levels: first by analyzing the existing capacity building activities for knowledge holders to engage with IPBES and IPCC and second, by analyzing past and ongoing engagement in IPBES and IPCC processes, including the scale of engagement, the profile of knowledge holders engaged, the challenges and motivation to engagement, and interconnectedness between IPBES and IPCC knowledge holders.

From the landscape analysis of existing capacity-building activities we note that **more countries are members of IPCC than of IPBES** which means that it can be easier for knowledge holders to contribute to IPCC processes compare to IPBES processes. We also note that there are **more capacity-building activities related to IPBES than IPCC** and still make the assumption that climate experts are more aware of IPCC than biodiversity experts of IPBES because more IPCC's NFPS are hosted by government agencies compared to IPBES's NFPs (and thus may be better implemented in the research community), IPCC has been operational 25 years before IPBES and is more present in the media.

From the survey analysis, we provide recommendations for capacity-building activities that national and regional platforms, science-policy interface organizations and secretariat from both IPBES and IPCC can take into consideration.

For most experts, the **lack of time and funding are the biggest challenges to the engagement in IPBES and IPCC**. RESPIN can thus focus in the next capacity building activities in empowering knowledge holders to convince their institutions to support them to engage in IPBES and IPCC processes.

The report also makes **regional recommendations.** For capacity-building activities in Western-Europe, we recommend to focus on overcoming challenges related to gender imbalance and related to the general lack of confidence in their expertise from biodiversity experts compared to climate experts. For capacity-building activities in Eastern Europe, Central Asia, Colombia and DRC, we recommend to focus on overcoming challenges related to language barriers to facilitate contributions to both platforms and on the motivations of "building networks among scientists" and "academic outreach".

Moreover, still based on the survey's results, the report suggests to develop different capacity-building material depending on the age of the target audience.

Finally, we propose to foster collaboration between climate and biodiversity knowledge holders and knowledge users by focusing on activities with a **common goal** (e.g., ocean sustainability, One Health), inclusivity (e.g., diverse knowledge, gender) and mutual authorship (i.e., climate experts can participate to IPBES assessments as authors or reviewers and biodiversity experts can participate to IPCC reports as authors or reviewers).

List of abbreviations

AR6, AR7	Sixth Assessment Report, Seventh Assessment Report
CDB	Convention on Biological Diversity
CGIAR	Consultative Group on International Agricultural Research
DoA	Description of Action
DRC	Democratic Republic of the Congo
EC	European Commission
EECA	Eastern Europe and Central Asia
EU	European Union
FAO	Food and Agriculture Organization
GBF	Kunming-Montreal Global Biodiversity Framework
ILK	Indigenous and Local Knowledge
IPBES	Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services
IPCC	Intergovernmental Panel on Climate Change
IPLC	Indigenous Peoples, and local communities
NA	Non Applicable
NBSAP	National Biodiversity Strategies and Action Plans
NDC	Nationally Determined Contributions
NFP	National Focal Point
SPI	Science Policy Interface
TSU	Technical Support Unit
UNESCO	United Nations Educational, Scientific and Cultural Organization
WE	Western Europe

1. INTRODUCTION

Climate change and biodiversity loss are one of the major challenges of our time that policy making across scales is facing. Strengthening the targeted provision of knowledge to inform policies and increasing the dialogue and shared understanding between actors in the policy arenas is key to achieving the global biodiversity goals of the Kunming-Montreal Global Biodiversity Framework (GBF) and the climate goals of the Paris Agreement. The Intergovernmental Science-Policy Platform for Biodiversity and Ecosystem Services (IPBES) and the Intergovernmental Panel on Climate Change (IPCC) were created to synthesize the best available knowledge in biodiversity and climate change, and inform decision makers on implications and risks related to these environmental problems. While these institutions were created to synthesize existing information on these highly interlinked challenges, their outputs and processes remain isolated from each other, falling short in mobilizing inputs from underrepresented regions, scientific disciplines and non-scientific knowledge holders. IPBES, IPCC and other related Science-Policy Interfaces (SPI) often operate in parallel, reinforcing the fragmentation between biodiversity and climate governance. The missing translation of existing information hinders the uptake of knowledge at European, national and local levels and the connection between knowledge needs and provision.

The RESPIN project (RESPIN for REinforcing Science-Policy INterfaces for integrated biodiversity and climate knowledge and policies) aims to support the integrated provision and use of IPBES and IPCC processes and outputs. RESPIN also supports the development of capacities to incorporate IPBES and IPCC findings into decision making at EU level. Additionally, the project identifies gaps in knowledge provision and develops strategies to address them, improving the engagement of diverse knowledge holders, with particular support for underrepresented regions in Central Africa, Central Asia, and Latin America.

RESPIN has five main functions:

• Function 1 enhances the participation of diverse knowledge holders in IPBES and IPCC by assessing engagement levels and improving capacity-building activities.

• Function 2 identifies gaps and barriers in using IPBES and IPCC findings, aiming to improve data integration, policy coherence, and collaboration between climate and biodiversity efforts.

• Function 3 integrates IPBES and IPCC findings into EU decision-making and supports EU delegations in international negotiations.

• Function 4 raises awareness of IPBES and IPCC processes by translating findings into accessible resources, developing training courses and fostering strategic partnerships for effective outreach and dissemination.

• Function 5 ensures coordination and synergy among project activities.

This report is part of the first phase of Function 1: identifying gaps and barriers to the engagement of knowledge holders in IPBES and IPCC processes.

Knowledge holders in this report are defined as people who have contributed, who are contributing or who could be contributing to IPBES and/or IPCC processes (e.g., participation to a webinar, contribution as an author). It differs from knowledge users which are defined as people who have benefited, who are benefiting or who could be benefiting from IPBES assessments or IPCC reports (e.g., using a report in national policies or to do a national assessment). Both categories can include scientists, experts, National Focal Points (NFPs), Indigenous People and Local Communities (IPLCs), trainers, and more.

This report evaluates the engagement of knowledge holders in IPBES and IPCC process and activities in target countries and regions (Western Europe, Eastern Europe, Central Asia,

Colombia and Democratic Republic of Congo) on two levels: first by analyzing the existing capacity building activities for knowledge holders to engage with IPBES and IPCC and second, by analyzing past and ongoing engagement in IPBES and IPCC processes, including the scale of engagement, the profile of knowledge holders engaged, the incentives and barriers to engagement, and interconnectedness between IPBES and IPCC knowledge holders.

This report also identifies possible course of action to improve the engagement of knowledge holders in both processes with targeted capacity-building activities, taking also into consideration regional capacities, primary expertise, age and gender.

2. METHODOLOGY

2.1. Existing capacity-building for knowledge holders

For all countries in Western Europe (WE), Eastern Europe and Central Asia (EECA), Colombia and Democratic Republic of Congo (DRC) were analyzed (Table 1):

- membership in IPBES and IPCC: member, observer, unknown or Non Applicable (NA, for example for Kosovo),
- if there was a National Focal Point,
- which structure hosted the National Focal Point: Ministry, Government agency, Research agency or university, Unknown and NA,
- existing capacity building activities developed by National Platforms.

We used Google Search, a fully-automated search engine that uses software known as web crawlers that explore the web regularly to find pages to add to its index.

Table 1: Searched items for the landscape analysis of existing capacity building activities for knowledge holders.

Item	Website and search terms (when applicable)
IPBES members and observers	https://www.ipbes.net/members-observers
IPCC members	• https://www.ipcc.ch/apps/contact/interface/focalpoints.php • https://www.ipcc.ch/apps/contact/interface/organizationall.php
IPBES NFPs and hosting structure	https://www.ipbes.net/national-focal-points
IPCC NFPs and hosting structure	https://www.ipcc.ch/apps/contact/interface/focalpoints.php
IPBES Capacity building activities	• https://www.ipbes.net/national-regional-platforms-networks • http://www.ipbes.eu • Google search of the first 2 pages typing in the search bar "capacity building + IPBES + country"
IPCC Capacity building activities	Google search of the first 2 pages typing in the search bar "capacity building + IPCC + country"

Data can be found in Annex I.

Countries were classified using the list of countries from the Technical Guideline Series developed by IPBES Technical Support Unit of Knowledge and Data on "Preparing and

Mapping Data to IPBES Regions and Sub-regions"[1], and the geographical classification established by EuroVoc[2] (Figure 1).

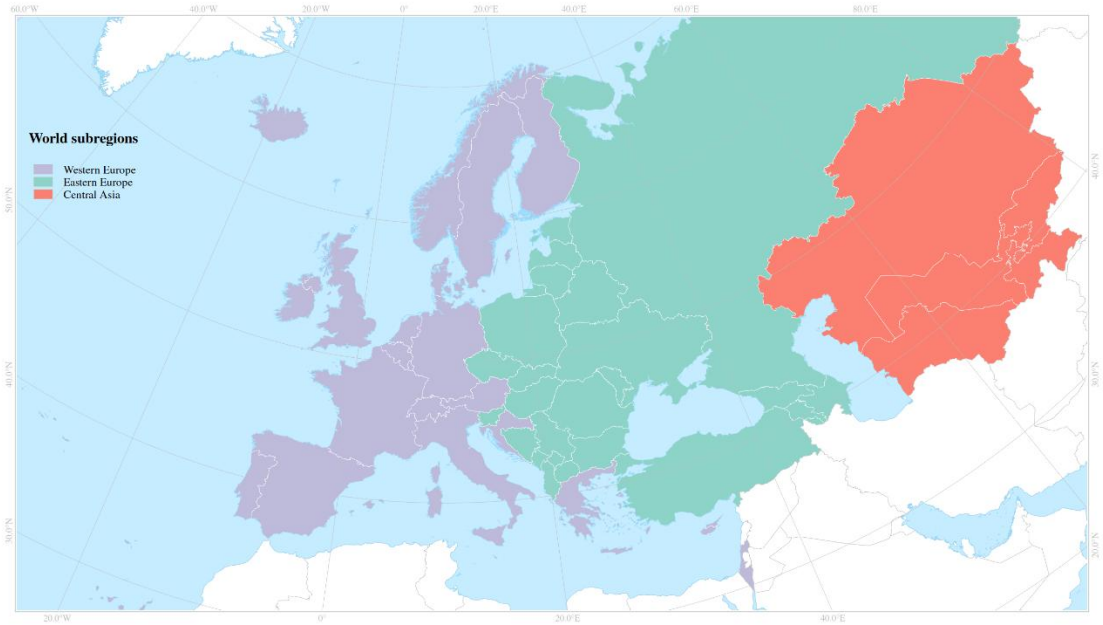


Figure 1: Subregions analyzed in this deliverable. Colombia and DRC are not represented but were also analyzed.

Maps were made using the statistical software R[3]. The excel file with the coded dataset and the R code used to make the figures are available in the github repository https://github.com/FRBCesab/respin.

2.2. Survey on barriers and incentives for knowledge's holders engagement in IPBES and IPCC processes

We developed a survey to understand barriers and incentives to the engagement of knowledge holders in IPBES and IPCC processes, using the online survey development SurveyMonkey[4]. We invited contributors / potential contributors to / end users of IPBES or IPCC to fill the survey - including individual scientist, indigenous people and local communities, representative of an institution, organization and group working in the field of biodiversity and/or climate.

A pilot version of the questionnaire was first designed and sent in July 2024 to a poll of 55 identified experts from Western Europe, Eastern Europe, Central Asia, Colombia and DRC. The poll included experts in biodiversity and climate that had never been part of IPBES or IPCC reports, current or previous IPBES or IPCC authors, as well as NFPs and initiatives. 35 experts were able to give feedback on the questionnaire which greatly improved it to a final version that was translated in French, Spanish and Russian before being sent out at the end of October 2024. The final survey was designed as indicated in Figure 2. Most questions allowed participants to indicate multiple options.

[1] Joy Kumagai, Aidin Niamir, & IPBES task force on knowledge and data. (2022). IPBES Technical Guideline Series - Part 2: Preparing and Mapping Data to IPBES Regions and Sub-regions (2.3). Zenodo. https://doi.org/10.5281/zenodo.6992546
[2] https://en.wikipedia.org/wiki/EuroVoc
[3] R Core Team (2021). R: A language and environment for statistical computing. R Foundation for Statistical Computing, Vienna, Austria. https://www.R-project.org/
[4] SurveyMonkey Inc., San Mateo, California, USA, www.surveymonkey.com

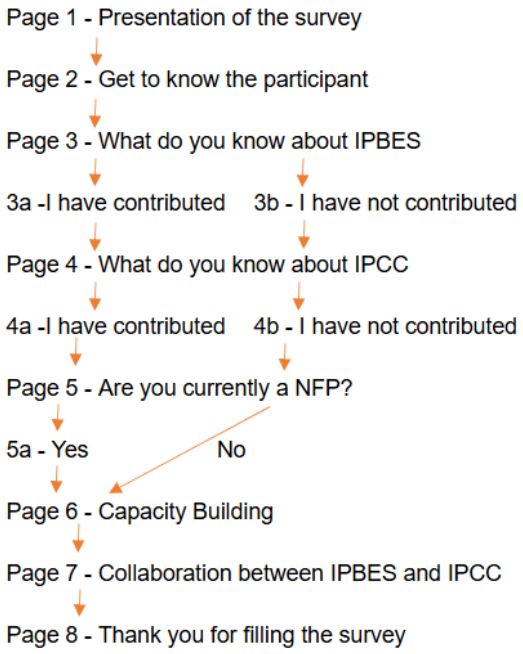


Figure 2: Design of the survey on barriers and incentives to the engagement of knowledge holders in IPBES and IPCC processes.

We used snowball sampling to get participants, which is a recruitment technique in which the participants are asked to assist the survey's designer in identifying other potential subjects. The initial participants/snowballs we reached out to were composed of:

- RESPN consortium's professional network
- RESPIN partners' organizations' network
- People following RESPIN social media
- Participants attending RESPIN workshops (including Colombian sub-national workshop on October 2025, PESC-RESPIN joint meeting (see D1.2), French workshop for IPBES and IPCC experts in September 2024)
- Europe and Central Asia NFPs of IPBES and IPCC (via their invitation to the PESC-RESPIN event)
- IPBES and IPCC secretariats (including IPBES ILK and Capacity-building TSUs)
- Participants of IPBES Stakeholder Day at IPBES 11 Plenary in December 2024

Numbers of participants were regularly checked (Figure 3), reminders were regularly sent and a preliminary analysis of the results was done in December 2024 and in March 2025 to ensure a good representation of regions, gender and expertise. The survey was closed on April 1st 2025 and results extracted on the same day.

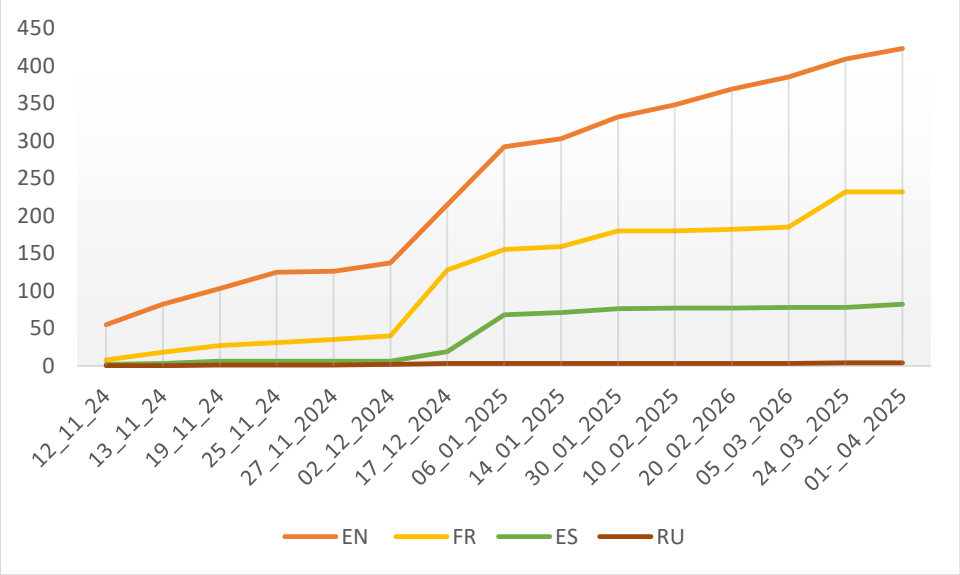


Figure 3: Number of participants filling the survey over time. EN: English, FR: French, ES: Spanish, RU: Russian.

There was a total of 741 participants: 423 filled the English version, 232 the French version, 82 the Spanish version and 4 the Russian version. Not all the participants filled the full survey and they were able to answer the questions they were the most interested in.

Results were analyzed using the SurveyMonkey tool and Microsoft Excel. Data were exported from SurveyMonkey for all the languages and merged together for each of the 63 questions. Open-Ended questions in French, Spanish and Russian were translated in English using the website DeepL[5] and when relevant, were analyzed by coding the answers into a single word and visualized with a wordcloud using a free online wordcloud generator[6].

Responses were also analyzed by comparing participants age, gender, expertise (climate or biodiversity) and region (Western Europe, Eastern Europe and Central Asia, Colombia, DRC).

The full dataset with the survey's responses will be made available at a later date when the survey results will be published in a peer-reviewed scientific journal.

3. LANDSCAPE ANALYSIS OF EXISTING CAPACITY BUILDING ACTIVITIES FOR KNOWLEDGE HOLDERS

We first looked at the engagement of knowledge holders in IPBES and IPCC at the country level in Western Europe, Eastern Europe, Central Asia, Colombia and DRC: if the country was a member, an observer and if it had a National Focal Point (Figure 4). Engagement of National Focal Points can inform us on the possible engagement of knowledge holders at the country level in both processes.

For Colombia and DRC, both countries were members with a dedicated NFP for both platforms.

The maps clearly show that more countries are members of IPCC compared to IPBES. Cyprus, Liechtenstein, Malta, San Marino, Slovenia, Turkmenistan and Ukraine are currently not members of IPBES but are listed as observers. Andorra, Iceland and Kazakhstan are

[5] https://www.deepl.com/en/translator
[6] https://www.freewordcloudgenerator.com/generatewordcloud

members of IPBES but there are no indications of a National Focal Points that experts could contact via IPBES website.

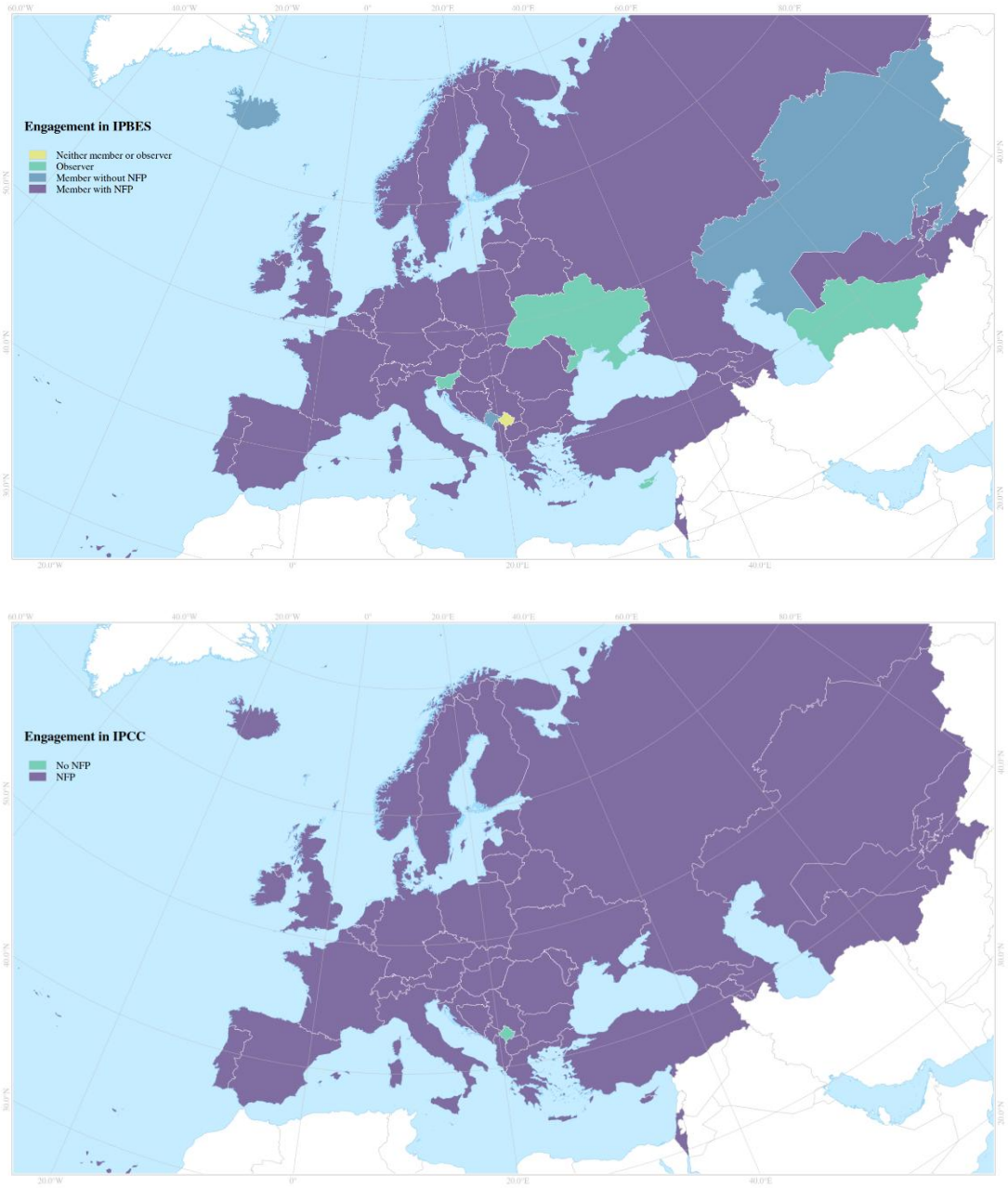


Figure 4: Engagement in IPBES (top) and IPCC (bottom) in Europe and Central Asia. Data for the figure are available in Annex I and at https://github.com/FRBCesab/respin.

We then looked at the hosting organization of the NFP, whether it was at the level of the Ministry, a government agency or a research institution (Figure 5). This was based on the idea that a research institution or a government agency was more likely to communicate about IPBES and IPCC with the research community in the country (for the call for experts, for the report's review but also for discussing the reports in Plenaries) compare to Ministries.

In Colombia, IPBES's NFP is hosted by research institution and IPPC's NFP by a government agency. In DRC, it is unclear who is hosting the IPBES's NFP and the IPCC's NFP is hosted by a government agency.

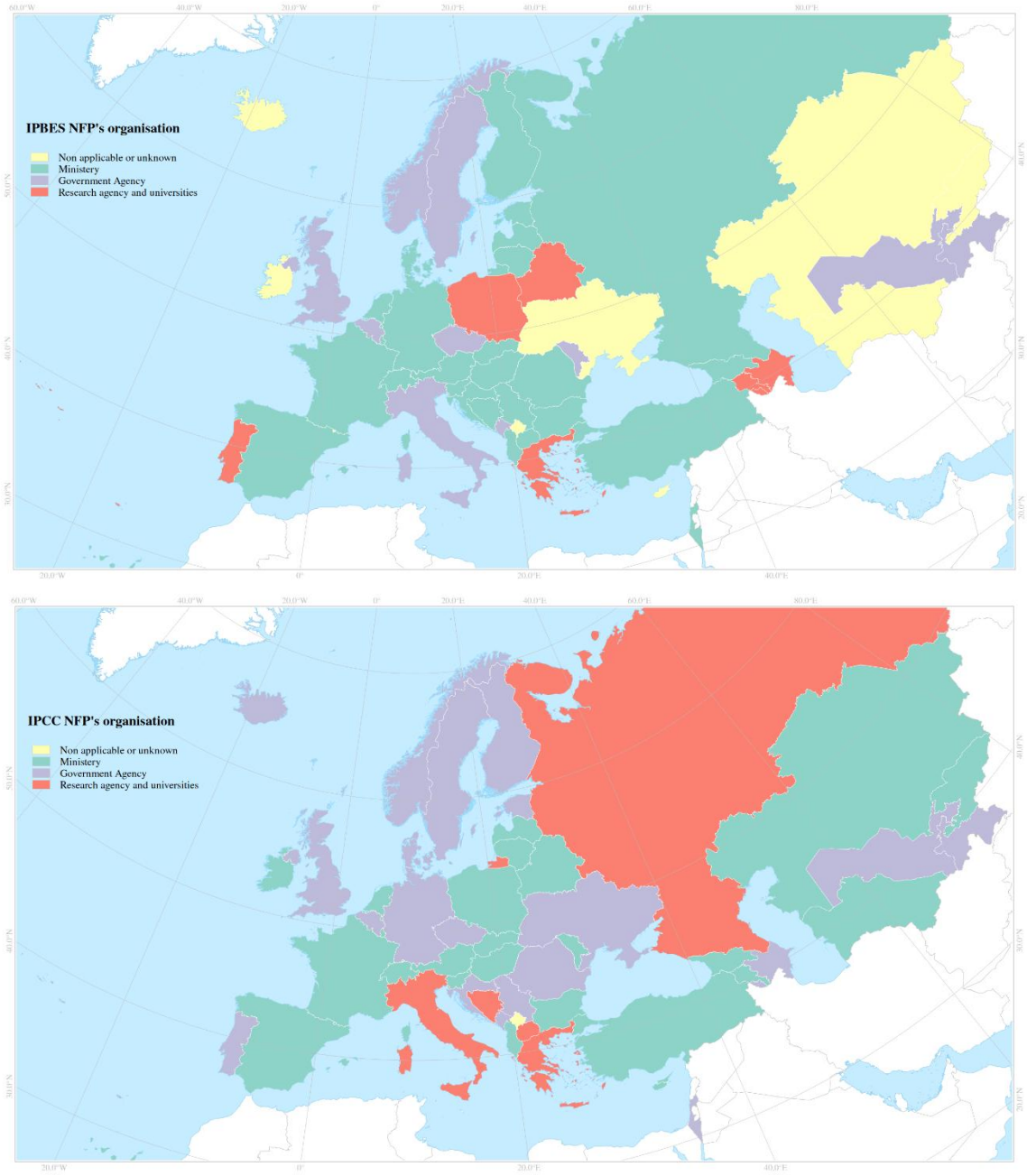


Figure 5: Hosting institutions of the National Focal Points for IPBES (top) and IPCC (bottom) in Europe and Central Asia. Data for the figure are available in Annex I and at https://github.com/FRBCesab/respin.

IPCC NFPs are mostly hosted by a Ministry (26 countries) or a government agency (23) and 6 NFPs are hosted by a research institution. It is less clear for IPBES NFPs as for 14 of them we did not find information about their hosting organization or it was not relevant. 27 IPBES NFPs are hosted by Ministries, 10 by government agencies and 7 by research institutions.

It is interesting to note that in the same country IPBES and IPCC are more often hosted by a different institution (Figure 6). NFPs for IPBES and IPCC are hosted by the same organization in Slovenia, Albania, Belgium, Bulgaria, Georgia, Lithuania, Monaco, Norway, Slovakia, Spain and Switzerland.

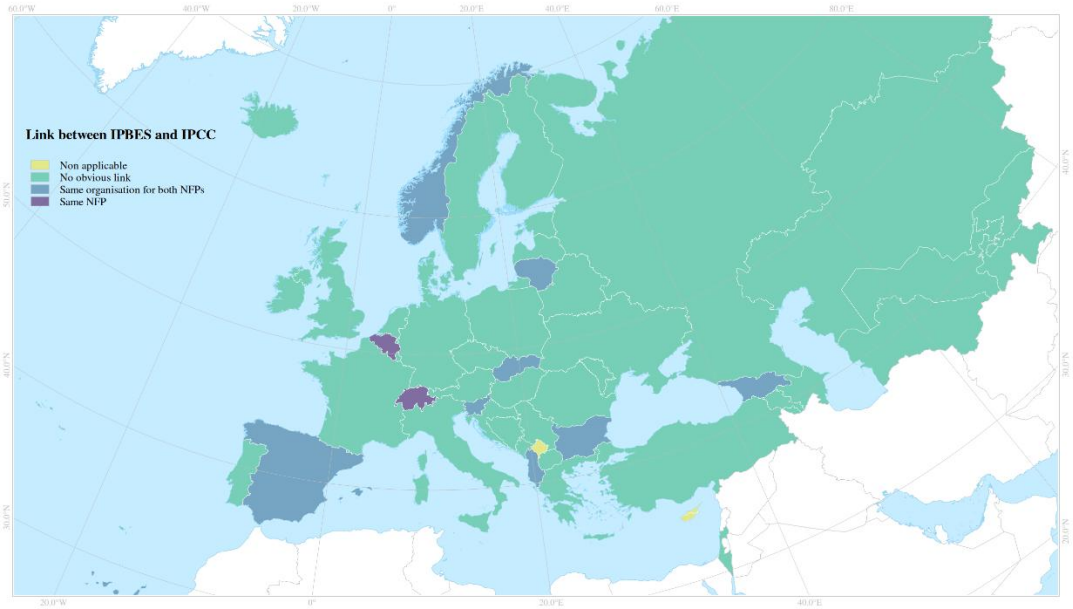


Figure 6: Link between IPBES and IPCC NFPs and observers in Europe and Central Asia. Data for the figure are available in Annex I at https://github.com/FRBCesab/respin.

Hosting NFPs or the observers' organization in different institutions can be a limitation to collaboration between both platforms. Moreover, we note that only a few NFPs are hosted by research institutions which can limit researchers to know about IPBES and/or IPCC and thus limit their engagement in both processes.

We also note that more IPCC's NFPS are hosted by government agencies (23) compared to IPBES (10).

We then looked for capacity building activities for experts to engage in IPBES and IPCC processes and found most to be in Western Europe (Figure 7) and related to IPBES (Table 2).

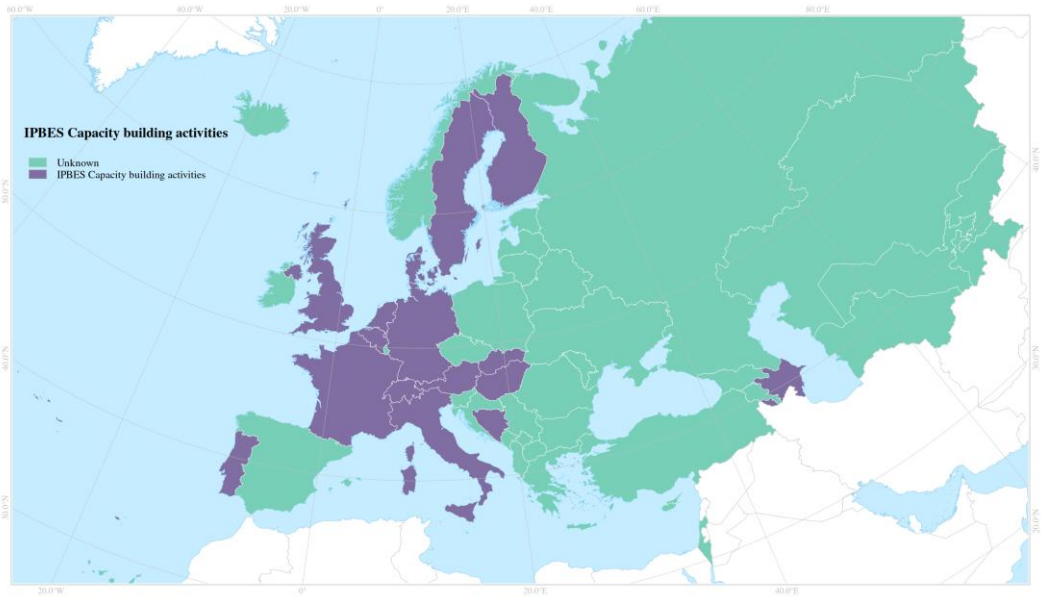


Figure 7: Capacity Building activities for experts to engage in IPBES processes in Europe and Central Asia. Data for the figure are available in Table 2 and at https://github.com/FRBCesab/respin.

Table 2: Non-exhaustive list of organizations providing capacity building activities in Europe, Central Asia, Colombia and DRC.

Country	Platform	Name of the organization	Activities that we could find
Belgium	IPCC	Walloon Platform for the IPCC	Facilitates the understanding of the issues at stake and the implementation of solutions to climate change.
International	IPCC	IPCC Project (1994)	Capacity Building and Infrastructure: Participation in the Assessment, Methodology Development, and other Activities of IPCC
International	IPCC	IPCC secretariat	Outreach events that communicate its findings, methodologies and explains the way the organization works.
International	IPCC	Climate Fresk	Encourages the rapid and spread of an understanding of climate issues.
Austria	IPBES	Biodiversity Austria	Webinars on IPBES processes
Azerbaijan	IPBES	Azerbaijan National Biodiversity Platform	Unknown
Belgium	IPBES	Belgian Biodiversity Platform (BBPf)	Recruits experts to participate in activities in IPBES work programme, prepares Belgian review of (draft) reports and other deliverables, prepares Belgian for IPBES Plenaries, organizes uptake activities and promotes use of IPBES findings and outputs in Belgium
Bosnia and Herzegovina	IPBES	Federal Ministry of Environment and Tourism	Projects "Supporting Decision Making and Capacity Building to Support IPBES through National Ecosystem Assessment" and "Contributing to IPBES Capcity-Building efforts: collaboration by IbN and NES-Net with German support"
Colombia	IPBES	IPBES National Committee from Colombia	Reviews IPBES evaluations, promotes assessment's findings in the country, prepares the country positions for the IPBES Plenaries.
Denmark	IPBES	IPBES in Denmark	Provides technical assistance in IPBES plenaries, communicates relevant IPBES outputs to the stakeholders and decision makers, engages Danish scientists to the review processes and to become experts, engagement of young scientists and experts in the various IPBES networks and outputs, implements IPBES workshops on biodiversity-related themes.
Finland	IPBES	Finnish National IPBES Working Group	Recruits and selects experts to activities in IPBES work programme, follow-up of (draft) reports and deliverables, prepares Finnish comments on IPBES reports and SPMs, prepares Finnish and EU positions for IPBES Plenaries, organizes awareness activities.
France	IPBES	French Committee for IPBES	Capacity-building focusing on French-speaking countries to enhances participation to reviews and call for experts, reflects on IPBES key messages and outcomes.
Germany	IPBES	German IPBES Coordination Office	Advertises experts calls, supports in preparation of national positions for IPBES Plenaries, identification of additional needs for research, organization and coordination of national IPBES expert meetings.
Hungary	IPBES	IPBES Hungarian Platform	Awareness raising events to disseminate information about the work and outcome of IPBES.

Italy	IPBES	Italian Institute for Environmental Protection and Research	Translation of SPMs into Italian, coordination and support with the review of IPBES's assessments, seminars with stakeholders (e.g. institutions, research centers, NGOs) to assess different options and products/deliverables, dissemination of information on call for experts.
Netherlands (Kingdom of the)	IPBES	Platform for Biodiversity and Ecosystem Services Netherlands (PBES NL)	Disseminates (Dutch) information on IPBES reports and, together with experts, provides state-of-the-art knowledge for the upcoming reports.
Portugal	IPBES	Portuguese platform	Organizes meetings and newsletters about IPBES.
Slovakia	IPBES	State Nature Conservancy of the Slovak Republic (SNC)	Translation of SPMs into the Slovak language, follow-up of the assessments results.
Sweden	IPBES	Swedish Environmental Protection Agency	Interdisciplinary seminars for stakeholders to provide information of IPBES and to share experience related to biodiversity research and indigenous knowledge.
Switzerland	IPBES	IPBES-CH	IPBES National information meetings with stakeholders to raise awareness about opportunities and ways of participating in IPBES, newsletters, valorization of IPBES product at the national level: communications with the media, info meetings, website.
United Kingdom of Great Britain and Northern Ireland	IPBES	Joint Nature Conservation Committee	Workshops for UK stakeholders and experts with information on the structure and processes of IPBES, communication on opportunities to engage and outputs from IPBES.
Regional	IPBES	ECA (Europe and Central Asia) Network	Connect the NFPs/national platforms in Europe and Central Asia to contribute to the development of a European-wide network working on IPBES-related topics; and to provide a common space for sharing knowledge, resources, opinions, and lessons learned regarding IPBES.
Regional	IPBES	Institute for Biodiversity - Network	German financed project "Strengthening the World Biodiversity Council IPBES by capacity building in the EECCA region"
Regional	IPBES	Capacity Development for Biodiversity and Ecosystem Services (CABES)	Develop and strengthen the capacity of professionals in biodiversity-related fields in West, Central, and East Africa to engage in IPBES.
Regional	IPBES	Biodiversa+	Communication and webinars to engage European experts in call for experts and call for reviews, communication on approved assessments.
Regional	IPBES	West African Biodiversity and Ecosystem Services (WABES)	Facilitates networking and capacity-building across West Africa to support the scientific assessments of IPBES
International	IPBES	BES-Net	Build capacity and commitment for biodiversity action across the world by translating the latest IPBES products into action for biodiversity and conservation on the ground (support National Ecosystem Assessments, organize national and regional trialogues, funding, etc.)
International	IPBES	Onet	Fosters communication between stakeholders and IPBES and helps disseminate IPBES products and achievements.

International	IPBES	IPBES Function on Capacity building	Enhance knowledge and skills of institutions and individuals to enable and facilitate engagement in the production and use of IPBES products.

When answering the survey, participants were asked if they had participated in capacity-building activities and to cite the ones they knew. Participants cited most of the platforms that we had found already in Table 2 but also cited organizations that presented IPBES or IPCC in their activities and that brought awareness on their processes or outputs to the experts. Participants cited: The Intergovernmental Oceanographic Commission of the United Nations Educational, Scientific and Cultural Organization (UNESCO), the Convention on Biological Diversity (CBD), the Food and Agriculture Organization (FAO), the Consultative Group on International Agricultural Research (CGIAR), Geneva Summer School on Science & Policy for Environmental Action, Natura 2000, Alternet and the EU-funded projects COOP4CBD and RESPIN.

Table 2 clearly shows that there are more IPBES capacity-building activities in the European landscape than there are IPCC activities but when asked in the survey if they participated to capacity-building activities, most participants said that they did not, regardless of them being rather biodiversity or climate experts (Figures 8a, 8b).

Figure 7 shows that Western Europe benefits from more IPBES related activities than Eastern European countries. However, that does not mean that Eastern European experts do not have access to capacity-building activities as shown in Figure 8c, possibly because some benefit from specific funding from Western European countries (e.g., Germany support in Bosnia-Herzegovinia, ECA Network meetings funding for Eastern European experts). Experts from Eastern Europe do not seem to be lacking access to capacity-building activities to get engaged in IPBES processes.

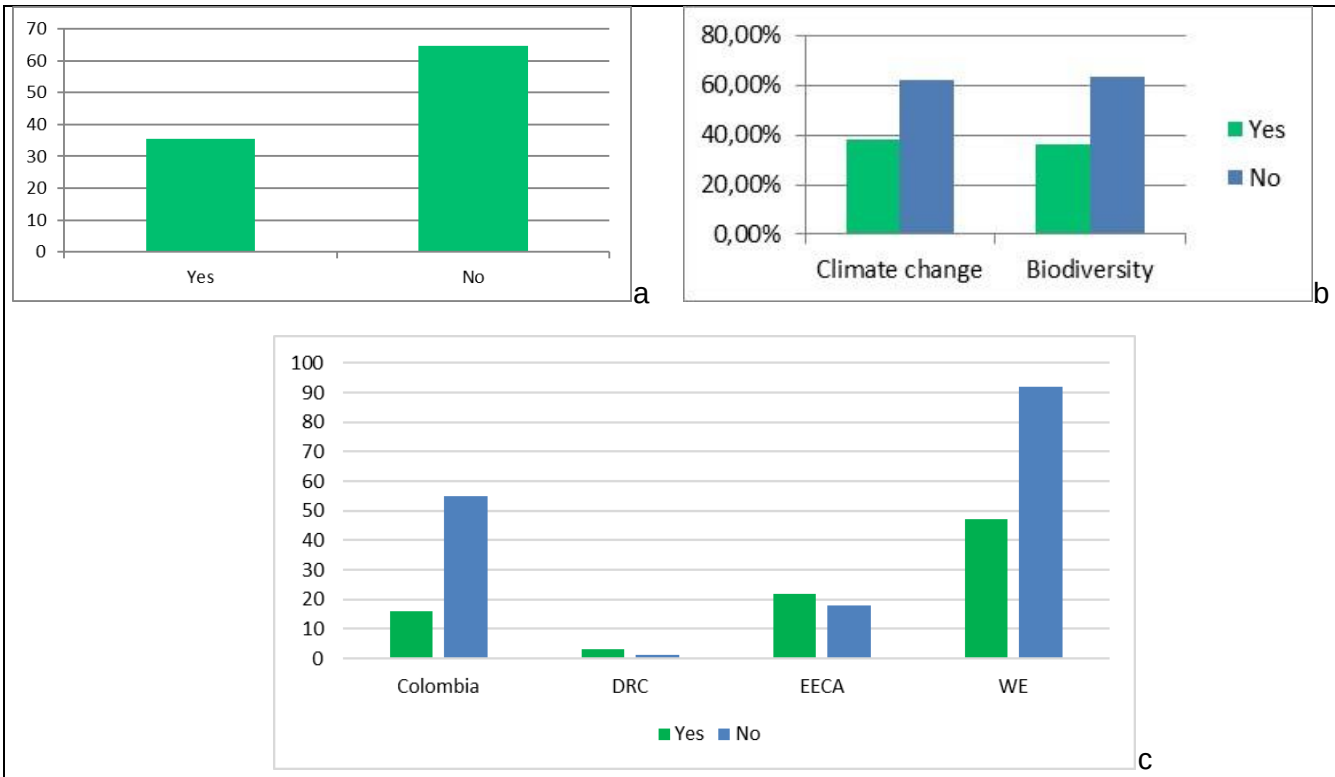


Figure 8. Have you ever participated in any training or capacity building activities? a. all participants (N=427), b. comparing climate and biodiversity experts (N=207), c.

comparing experts' regions. EECA: Eastern Europe and Central Asia, WE: Western Europe (N=254).

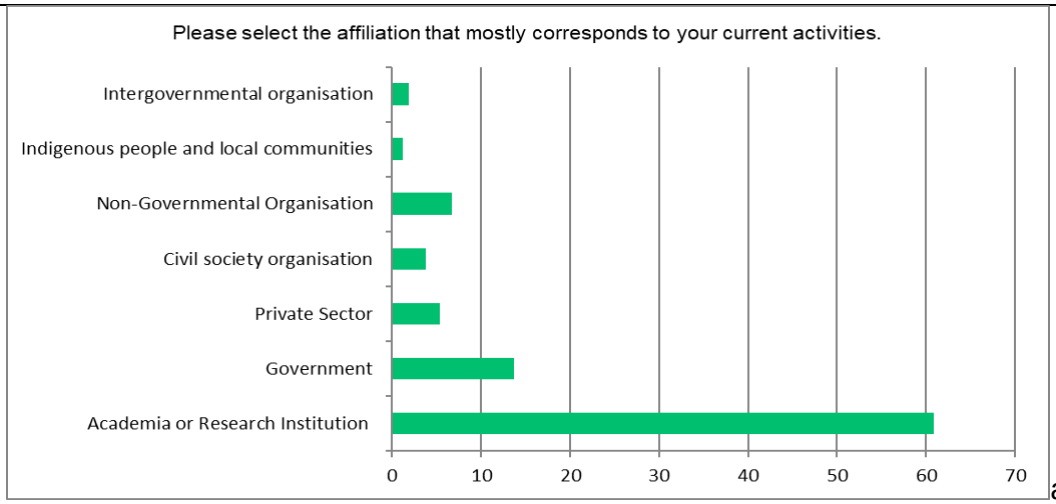
Access to capacity-building activities does not seem to be what is limiting the engagement of knowledge holders in IPBES and IPCC processes. This report will therefore take a closer look at other barriers and incentives by thoroughly analyzing the survey results.

4. ANALYSIS OF KNOWLEDGE HOLDER'S ENGAGEMENT IN IPBES AND IPCC

4.1. Participants' background

61% of the participants were from Academia or a Research Institution (Figure 9a). Within this category, 15% designated themselves as "First Stage Researcher (up to the point of PhD)", 9% as "Recognized Researcher (PhD holders or equivalent who are not yet fully independent)", 19% as "Established Researcher (researchers who have developed a level of independence)" and 18% as "Leading Researcher (researchers leading their research area or field)". More than 40% of the participants identified themselves as knowledge holders (Figure 9b).

When asked about their main expertise (Figure 9c), the majority of participants indicated working on biodiversity (44%), then climate change (18%), Science Policy Interface and Human and social sciences (both 13%). When replying to others, participants mostly indicated an expertise in the field of Ecology (10), Agronomy (10), Forestry (9), Environmental science (8) or Biology (6) – less than 5 answers are not cited.



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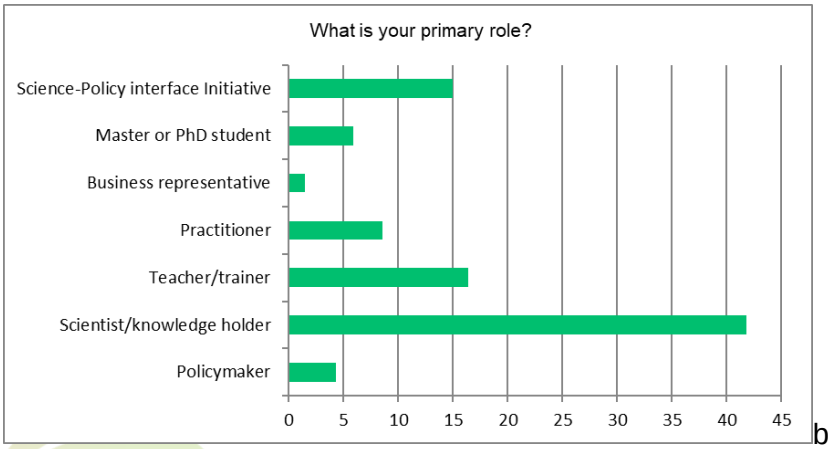

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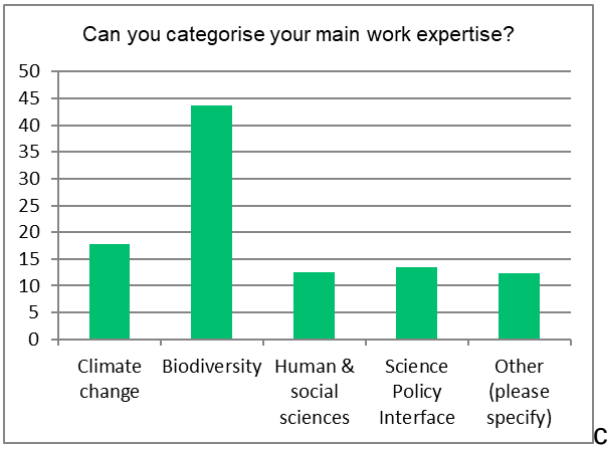

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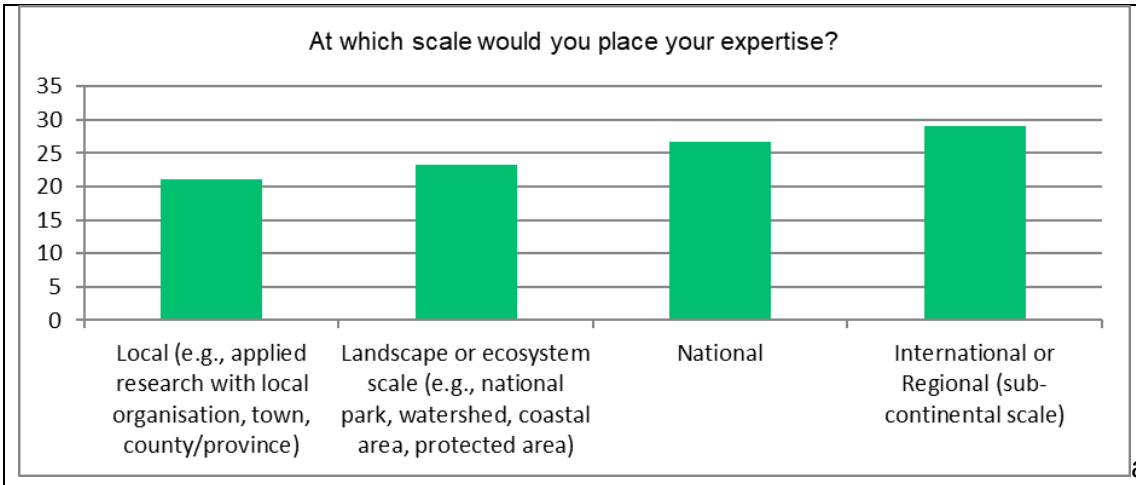
Figure 9. Participants background. All the questions allowed for multiple options. a. Affiliation (N=583), b. Primary role (N=732), c. Work expertise (N=846).

21% of participants placed their expertise at the local scale (e.g., applied research with local organization, town, county/province), 23% at the landscape or ecosystem scale (e.g., national park, watershed, coastal area, protected area), 27% at the national scale and 29% at the international scale (Figure 10a). And when asked if they had interactions with decision-makers, it is interesting to note that many participants (85%) indicated that they had, 24% at local scale, 15% at the ecosystem scale, 29% at the national scale and 17% at the international scale (Figure 10b).



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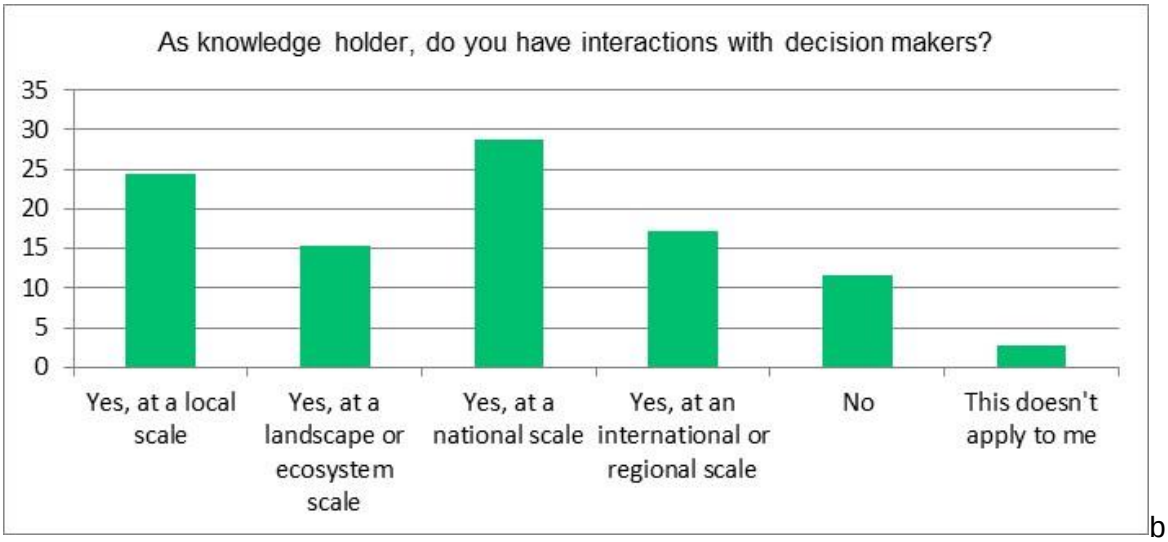

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Figure 10. Scale of expertise (a, N=905) and scale of interactions with decision makers (b, N=855). Both were multiple options questions.

Most participants indicated that they were originated from Western Europe and Other Groups (285), then the Latin American and Caribbean Group (112), Africa (59), Eastern Europe (42) and Asia Pacific (22).

The average age of participants was 40 to 50 years old (Figure 11a) and there was a good gender representation (Figure 11b).

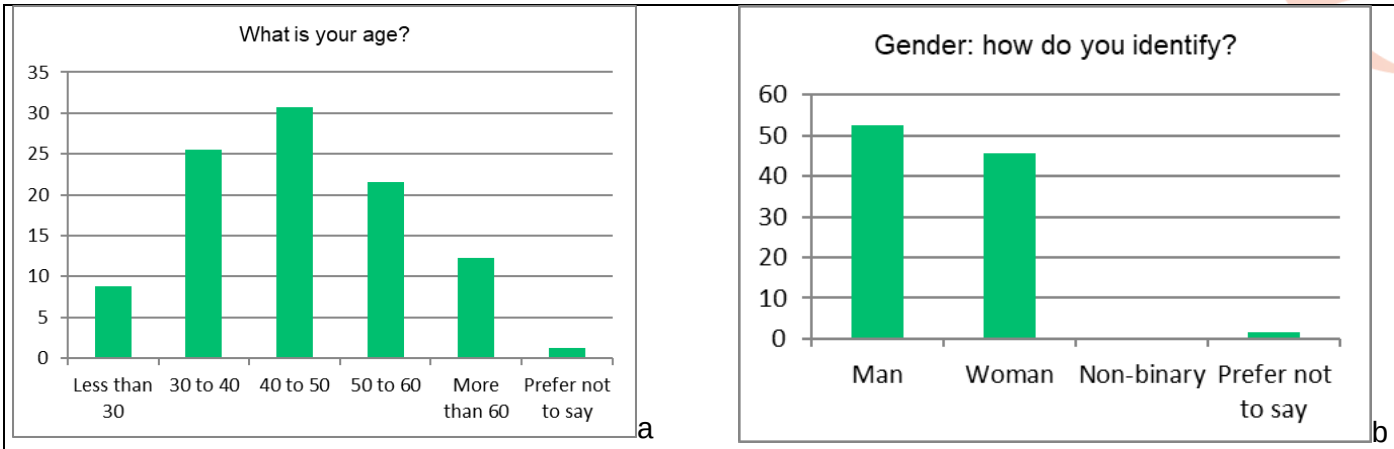


Figure 11. Participants age (a, N=479) and gender (b, N=475).

Finally, we chose 11 images that were representing different ideas and feelings around biodiversity and climate and asked the participants to select four images maximum, that speak for how they feel about climate and biodiversity (see Annex II). Most participants chose images related to the words "Biodiversity", "International", "Future/hope" and "climate", followed by "Cooperation" and "Peace" before "Challenge" (Figure 12). We can therefore assume that most participants who filled the survey were already aware of the need for global collaboration on climate and biodiversity issues and we can classify most participants as positive (choosing "hope" over "complicated").

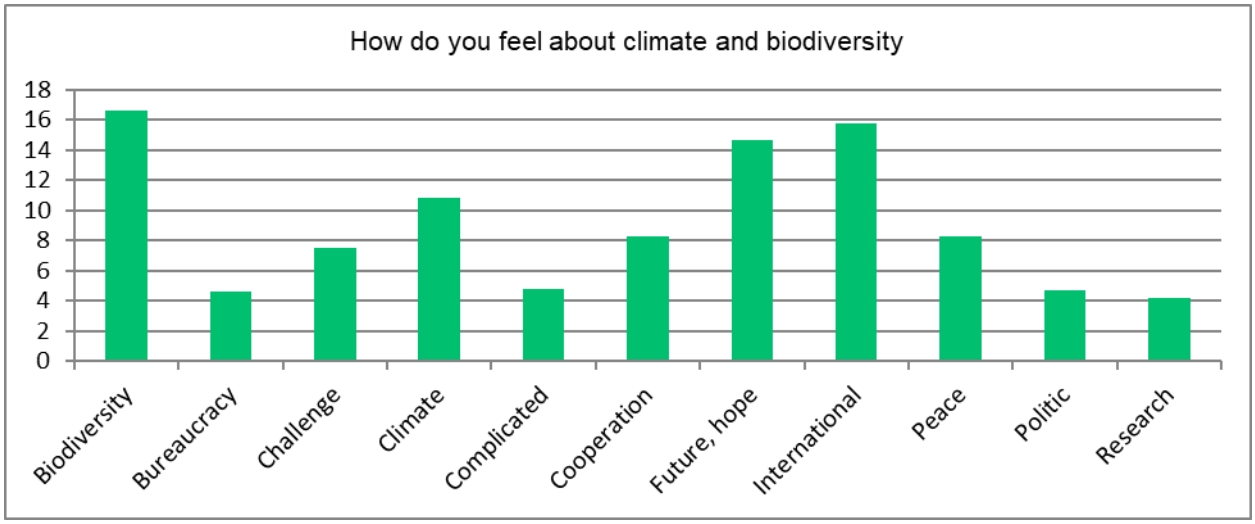


Figure 12. Words associated with the images that participants selected to convey their feelings about climate and biodiversity (N=1534). See images in Annex II.

4.2. Participation to IPBES processes

32% of participants have contributed to IPBES processes (Figure 13a). We did not see any major difference to this question when comparing gender, expertise and age but noted that more participants from Eastern Europe and Central Asia had contributed to IPBES compared to participants from Western Europe, Colombia and DRC (Figure 13b). This may due to the fact that the questionnaire was more broadly circulated in Western Europe whereas for Eastern Europe and Central Asia, we had reached targeted participants that had participated or who were participating in capacity building activities (such as participants of the PESC-RESPIN meeting).

We also looked specifically if participants who had participated in IPCC processes also had participated in IPBES processes and 60% answered that they did.

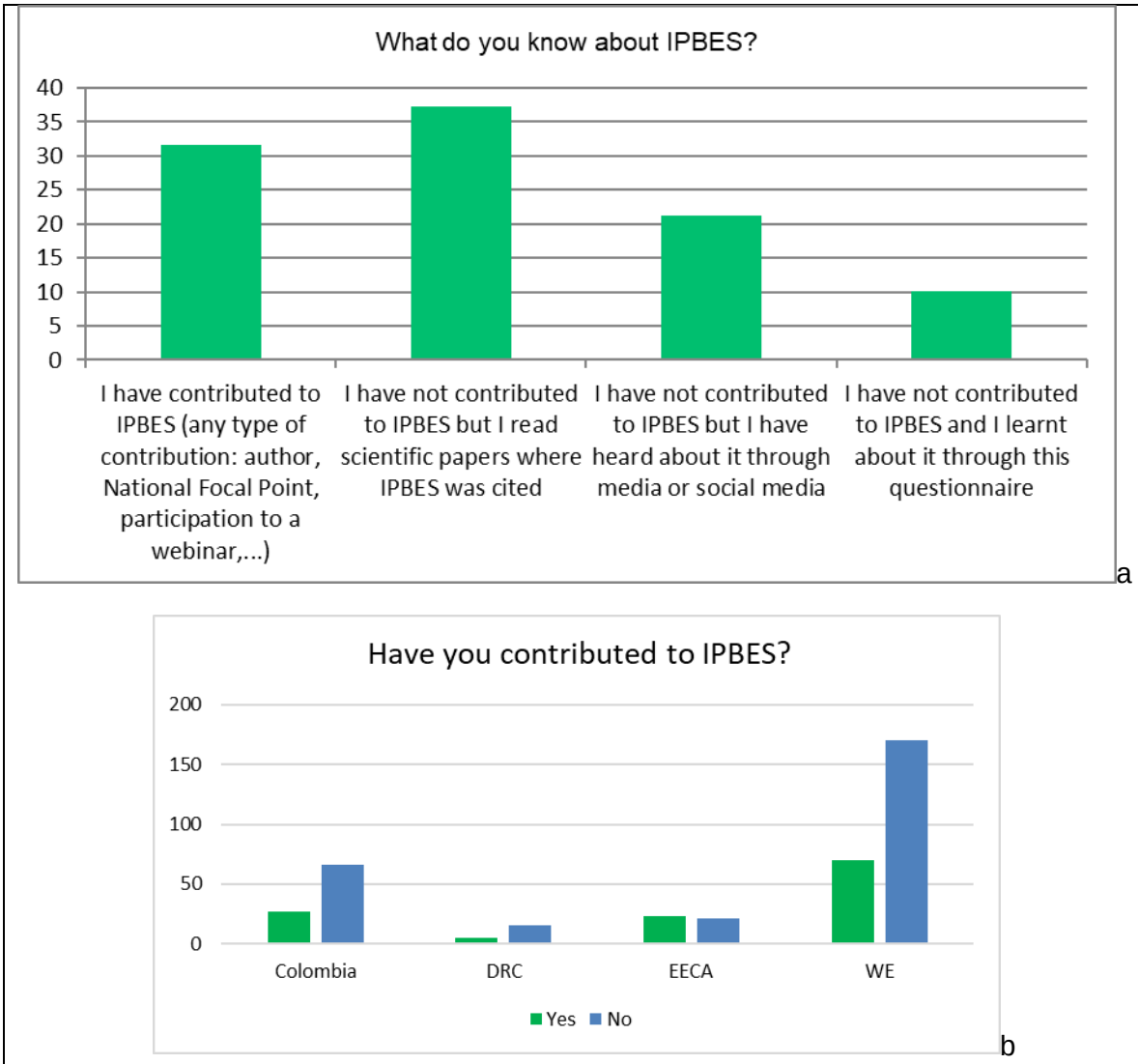


Figure 13. Contribution to IPBES a. for all participants (N=577), b. comparing specific regions and countries (N=398).

4.2.1. Participants who have contributed to IPBES processes

Participants who answered that they participated to IPBES processes:

- indicated that they used IPBES for their work (summary for policymakers, report, figure, knowledge gaps, etc.) (92%),
- indicated that their institution or organization has been involved with IPBES (76%),
- pointed out that they had the chance to connect with their NFP (84%) via meetings (32%), workshops (23%), or writing sessions (7%),
- indicated that they were involved in IPBES as authors (20% all together) and then mostly via webinars (16%), as reviewer (15%), participant in Plenary (15%) or dialogue workshops (13%) (Figure 14).

To the same question, IPCC contributors that also contributed to IPBES indicated that they were mostly involved in IPBES as reviewers (17%), via webinars (16%), as lead authors (12%)

or participants in Plenary (12%). There were differences when comparing ages of the participants, due to the experience needed for some of the authors role, but there were no differences in the participant's involvement in IPBES that was due to gender.

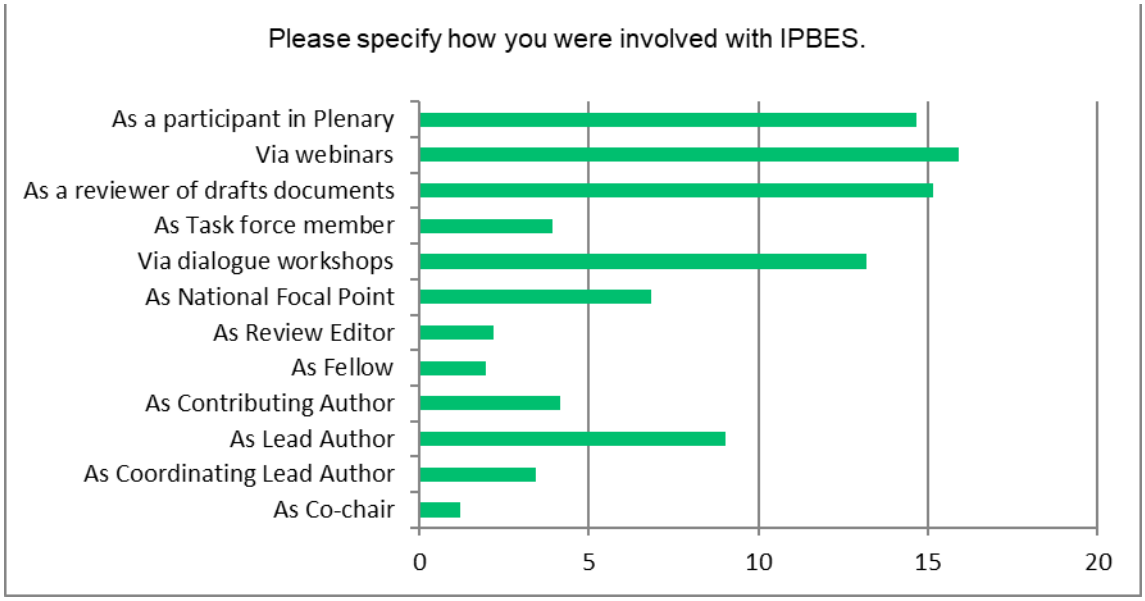
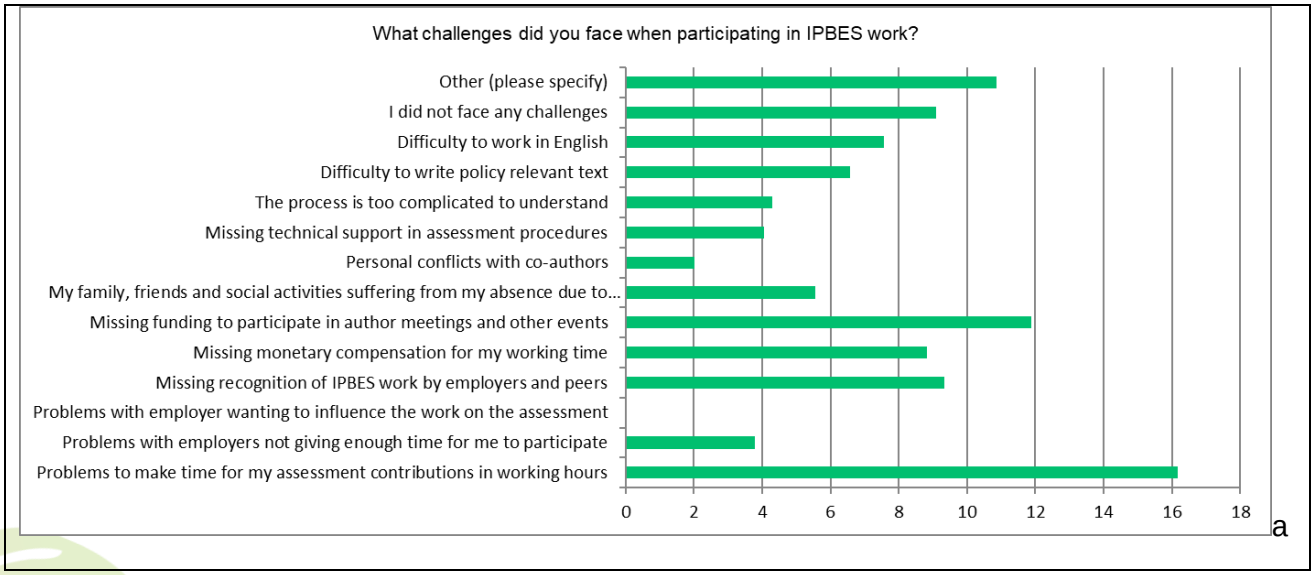


Figure 14. IPBES contribution for all participants (multiple options possible, N=409)

Participants who contributed to IPBES processes were then asked what challenges they faced and what motivated them to participate.

Making time (16%) and missing funding (12%) were the two main challenges for all participants (Figure 15a). When replying to others, participants mostly pointed out the complicated and rigid process, the heavy workload and the lack of funding (Figure 15b). Power imbalance was also pointed out including priority to western countries for meetings time. When comparing between regions, there were no strong differences when it came to find the time and money but "Difficulty to work in English" was more indicated by participants from Colombia and EECA compared to participants from WE.

Participants who had been involved with IPCC and IPBES also pointed out the lack of time but after that, mostly indicated that they did not face any challenges.



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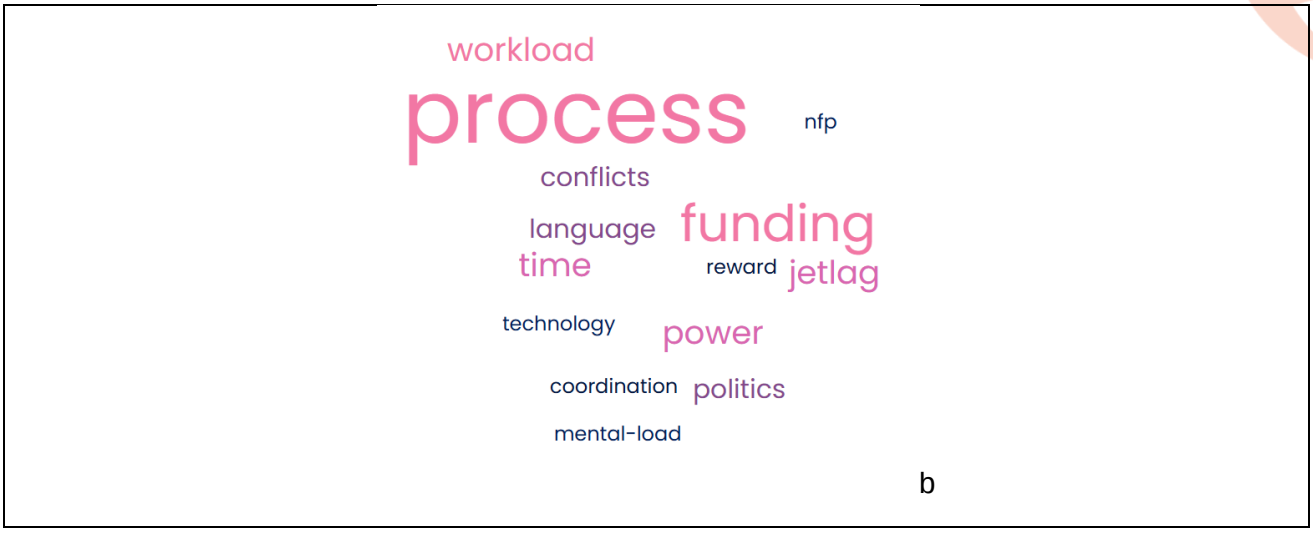


Figure 15. a. What challenges did participants face when contributing to IPBES process (multiple options possible, N=396). b. Wordcloud of the single word coded for the responses in "Others".

When comparing ages, it is clear that missing monetary compensation for the working time affected more the younger participants while participants over 40 were more affected by their family and friends suffering from their absence due to IPBES work.

When comparing genders, we can see that women globally faced the same challenges as men but in bigger proportion, especially about finding the time to contribute (Figure 16). Missing recognition from employees and peers and conflicts with other authors also affects more women than men.

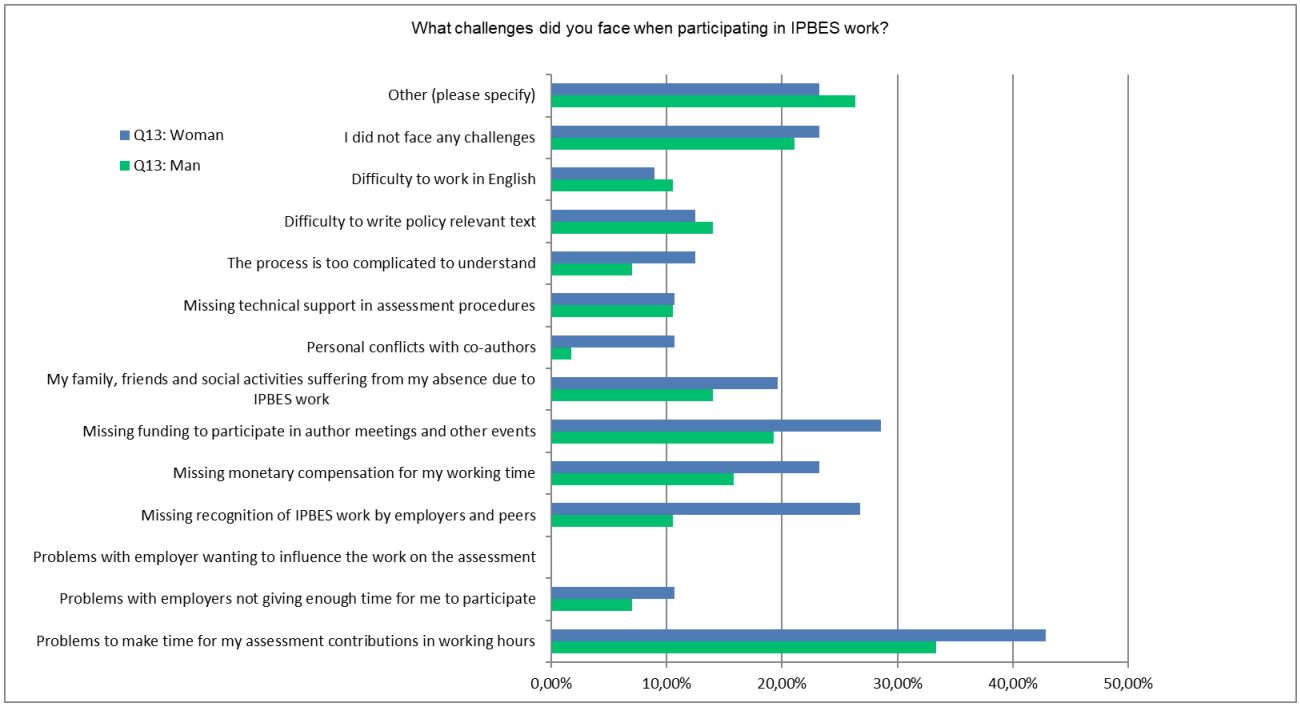


Figure 16. Gender issues related to the challenges faced when contributing to IPBES process (multiple options possible).

The motivation to engage in IPBES was mostly about the impact of policy-making around biodiversity (20%) and building networks among scientists (17%) (Figure 17a). Answers in

"Other" were very specific, from simple curiosity, to contributing to the preservation of life on the planet. There was no difference in the answers when comparing gender or expertise but when comparing regions, we could see that building network amongst scientist was more important for participants from EECA (Figure 17b).

When comparing participants' ages, we could also point out slight differences in the first motivations:

- Less than 30: impact of policy making > network > work with renowned scientists
- 30 to 40: network = impact of policy making > relevant expertise
- 40 to 50: impact of policy making > network > relevant expertise
- 50 to 60: impact of policy making > relevant expertise > network

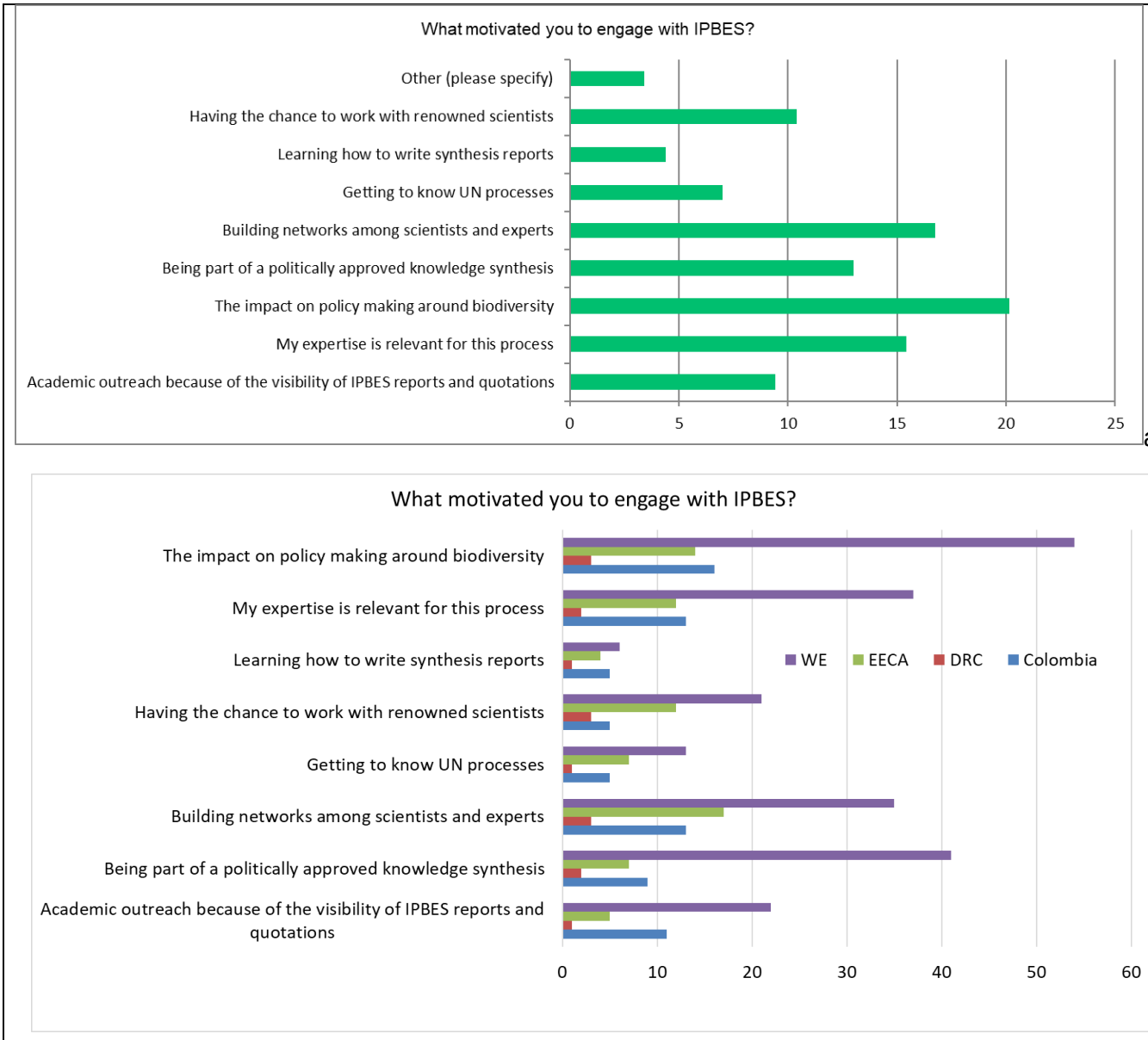


Figure 17. What motivated participants to take part in IPBES process (multiple options possible, N=615). a. all participants, b. comparing regions.

When asked if the previous or current experience with IPBES would make the participant want to continue to get involved with it, an overwhelming 79% declared yes.

4.2.2. Participants who have not contributed to IPBES processes

Participants who answered that they did not participate to IPBES processes:

- indicated that they used IPBES for their work (summary for policymakers, report, figure, knowledge gaps, etc.) (53%),
- indicated that their institution or organization has been involved with IPBES (42%) or did not know about it (31%),
- pointed out that they did not have the chance to connect with their NFP (77%).

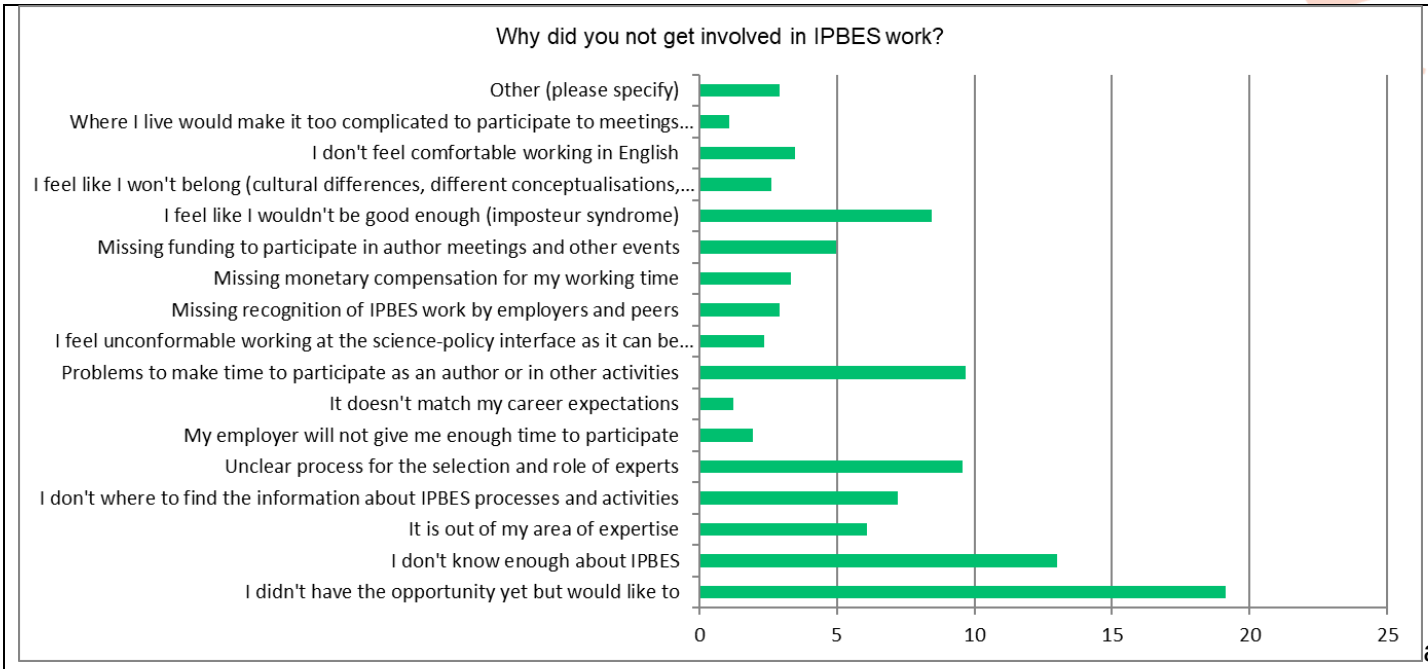
When asked about the reasons why they did not get involved in IPBES process, most replied that they did not have the opportunity yet but would like to (19%) or that they did not know enough about IPBES (13%) (Figure 18a). Problems to make time was also still one of the main challenges (10%) and a lot of participants indicated that they did not feel good enough to be part of it (8%). Both of these last answers were detailed in "Others": "I do not find the time", "Feeling that IPBES does not need me and is too institutional", "Uncertain whether my participation would make any valuable contribution in final reports and decisions.", etc.

The unclear process for participation in IPBES process was more noted by participants in the field of biodiversity (38%) compared to climate (19%) (Figure 18b). Problems to make time to participate in IPBES processes was also higher for biodiversity experts (32%) compared to climate experts (21%) and the impostor syndrome was stronger for participants working in the field of biodiversity (23%) compared to climate (12%).

When comparing genders, responses indicated that men have more difficulty finding the information about IPBES (21%) compared to women (14%) and the impostor syndrome was stronger in women (25%) then in men (14%) (Figure 18c).

When comparing between regions, after "not having the opportunity to get involved yet", barriers to involvement were different between regions (Figure 18d):

- main barriers for participants from Western Europe: time, unclear process and impostor syndrome,
- main barrier for participants from EECA: not knowing enough about IPBES
- main barriers for participants from DRC: where to find the information, working in English,
- main barriers for participants from Colombia: not knowing enough about IPBES, where to find the information.


Why did you not get involved in IPBES work?
Other (please specify)
Where I live would make it too complicated to participate to meetings...
I don't feel comfortable working in English
I feel like I won't belong (cultural differences, different conceptualisations,...
I feel like I wouldn't be good enough (imposteur syndrome)
Missing funding to participate in author meetings and other events
Missing monetary compensation for my working time
Missing recognition of IPBES work by employers and peers
I feel unconformable working at the science-policy interface as it can be...
Problems to make time to participate as an author or in other activities
It doesn't match my career expectations
My employer will not give me enough time to participate
Unclear process for the selection and role of experts
I don't where to find the information about IPBES processes and activities
It is out of my area of expertise
I don't know enough about IPBES
I didn't have the opportunity yet but would like to
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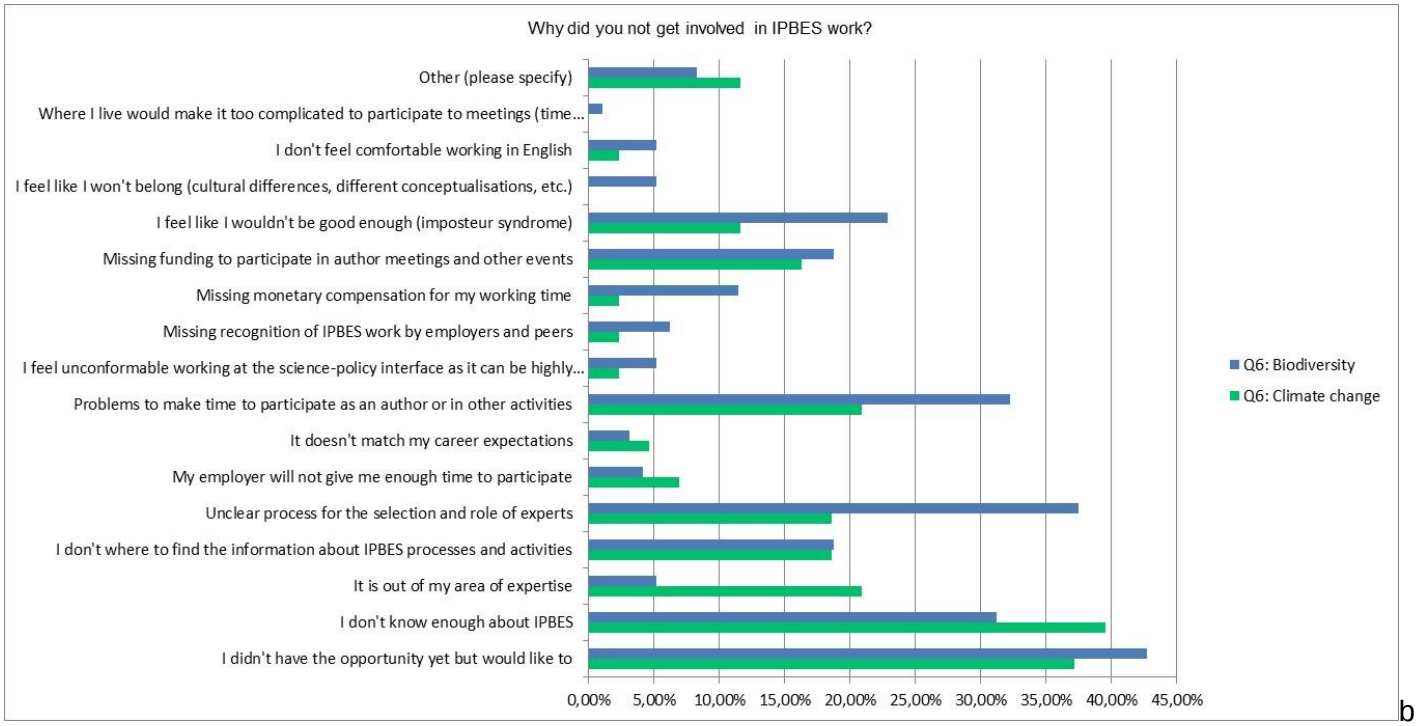
Why did you not get involved in IPBES work?
Other (please specify)
Where I live would make it too complicated to participate to meetings (time...
I don't feel comfortable working in English
I feel like I won't belong (cultural differences, different conceptualisations, etc.)
I feel like I wouldn't be good enough (imposteur syndrome)
Missing funding to participate in author meetings and other events
Missing monetary compensation for my working time
Missing recognition of IPBES work by employers and peers
I feel unconformable working at the science-policy interface as it can be highly...
Problems to make time to participate as an author or in other activities
It doesn't match my career expectations
My employer will not give me enough time to participate
Unclear process for the selection and role of experts
I don't where to find the information about IPBES processes and activities
It is out of my area of expertise
I don't know enough about IPBES
I didn't have the opportunity yet but would like to
0,00%
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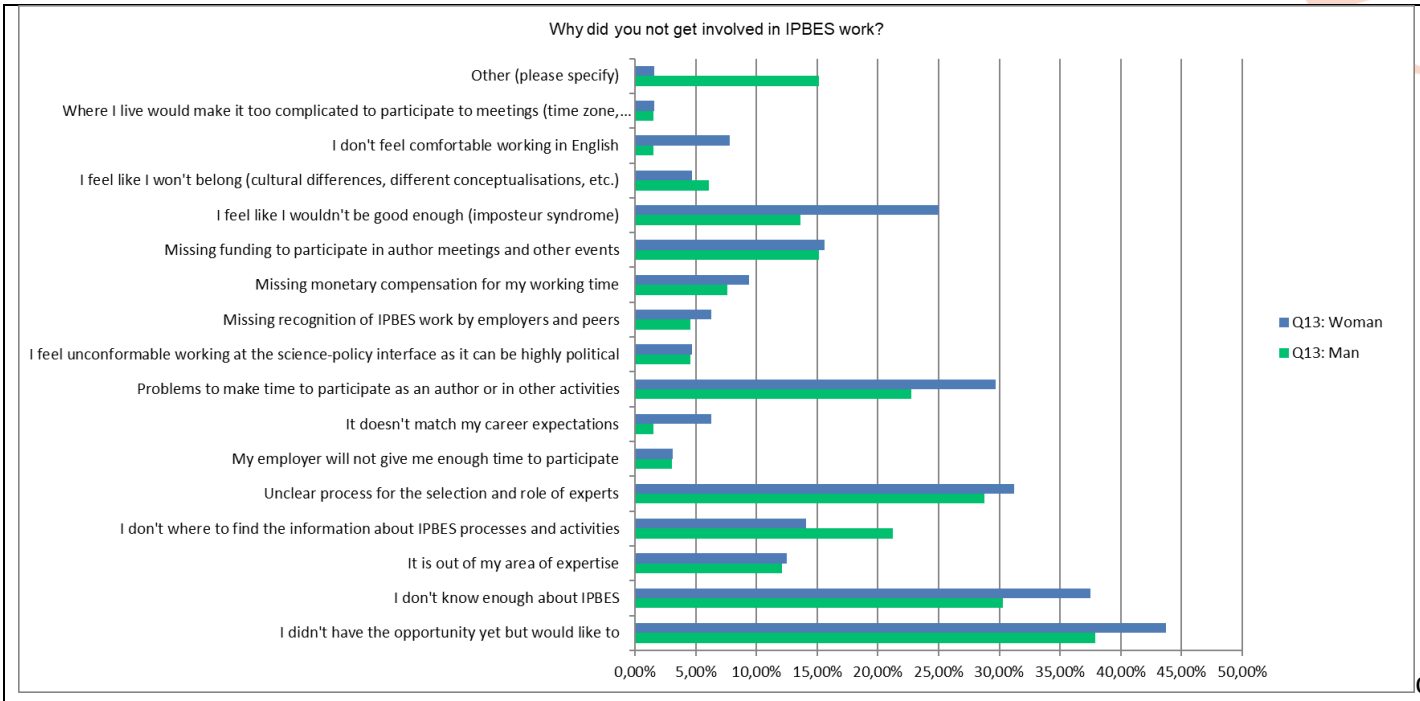
45,00%
Q6: Biodiversity
Q6: Climate change

b



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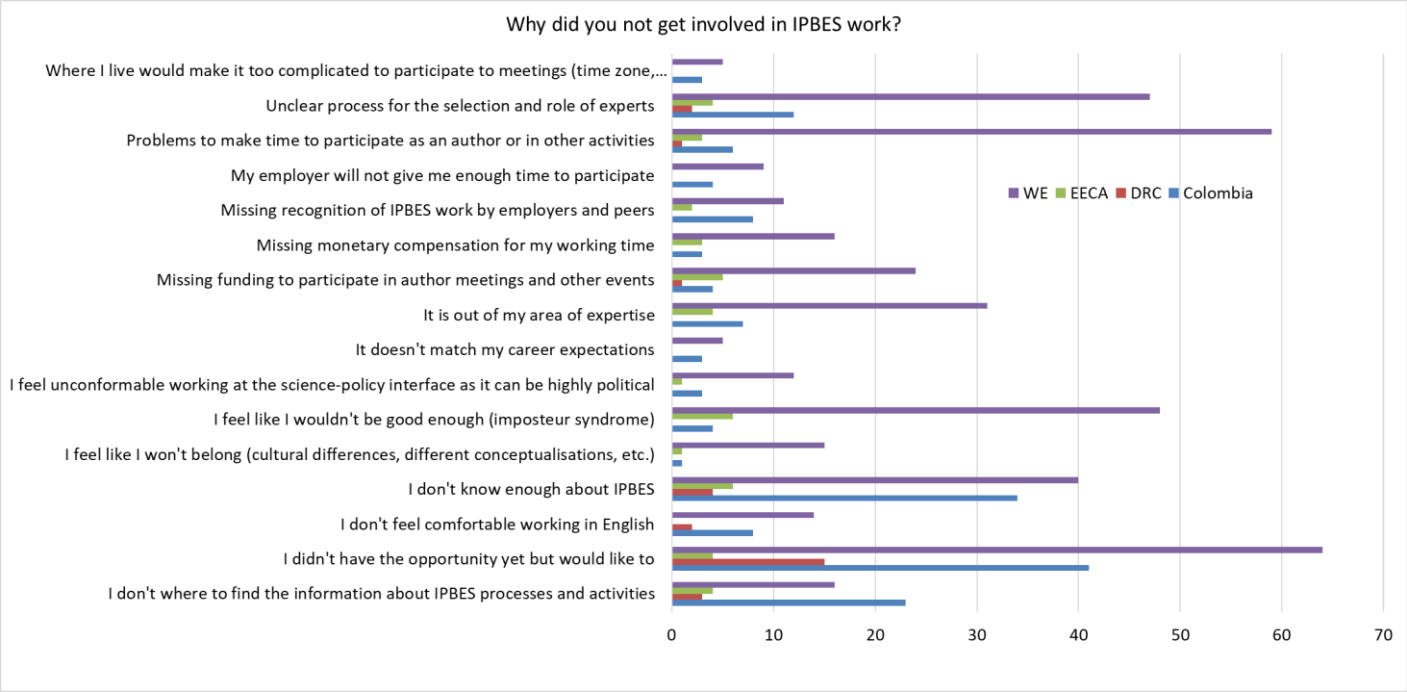

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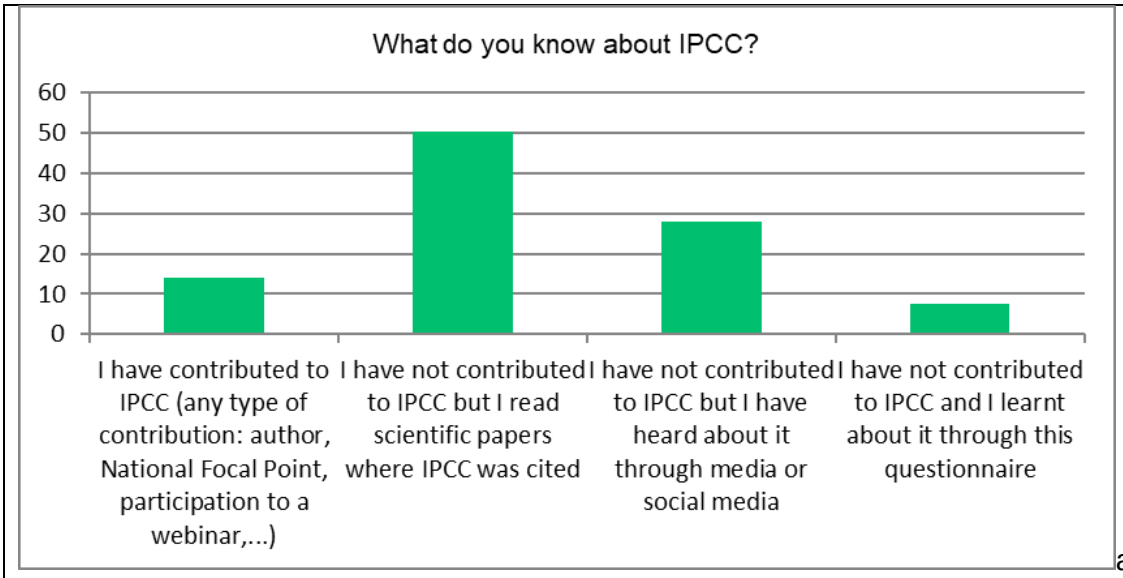
Figure 18. Answers from participants who did not participate in IPBES process, multiple options possible. a. All participants (N=722), b. Comparing expertise, c. Comparing gender, d. Comparing regions.

4.3. Participation to IPCC processes

14% of participants have contributed to IPCC processes (Figure 19a). We did not see any major difference to this question when comparing gender and regions but, for obvious reasons, climate experts were significantly more likely to have participated in IPCC process (40%) than biodiversity experts (17%). Experts between 50 and 60 also were more likely to have participated than younger experts (Figure 19b).

We also looked specifically if participants who had participated in IPBES processes also had participated in IPCC processes and 27% answered that they did.



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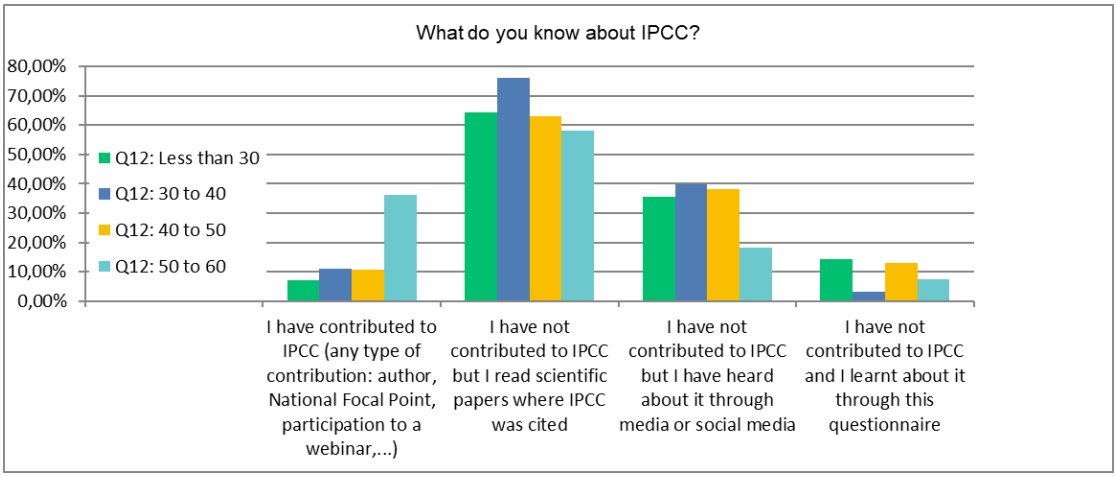

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Figure 18. Contribution to IPCC a. for all participants (N=577), b. comparing experts' age.

4.3.1. Participants who have contributed to IPCC processes

Participants who answered that they participated to IPCC processes:

- indicated that they used IPCC for their work (assessment report, synthesis report, figure, etc.) (84%),
- indicated that their institution or organization has been involved with IPCC (63%),
- pointed out that they had the chance to connect with their NFP (68%) via meetings (28%), workshops (20%) or writing sessions (7%),
- indicated that they were involved in IPCC mostly via webinars (22%), as reviewers (17%) or as authors (16% all together) (Figure 19).

To the same question, IPBES contributors that also contributed to IPCC, indicated that they were mostly involved in IPCC as authors (27%) or reviewers (22%), and experts less than 30 indicated that they were only involved as reviewers.

We can note here that despite the low number of capacity building activities reported in Table 2, 50+ participants to the questionnaire have indicated participating to webinars on IPCC.

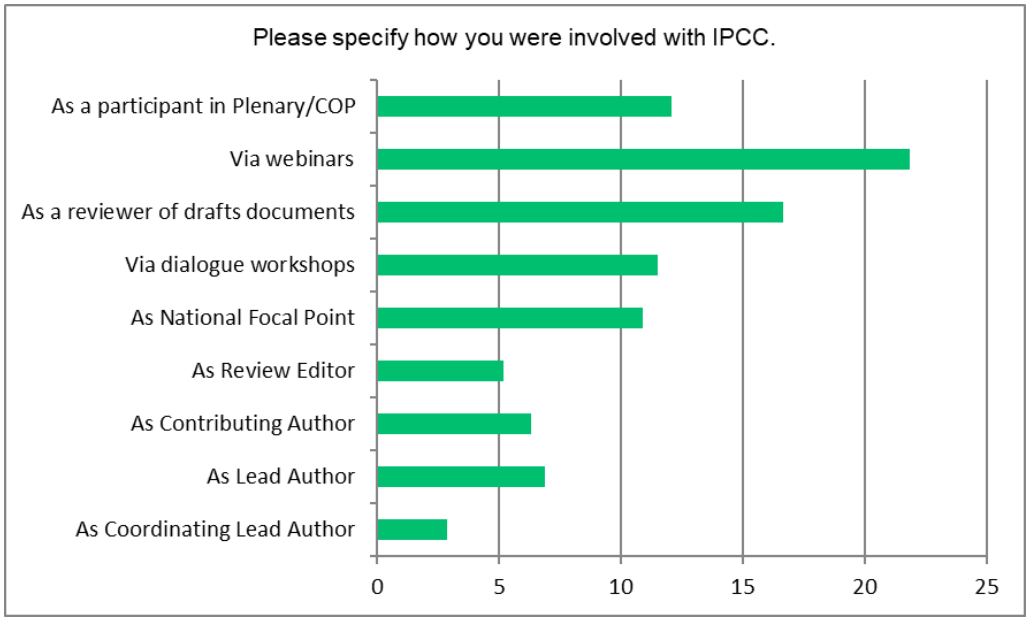


Figure 19. IPCC contribution for all participants (multiple options possible, N=201).

Participants who contributed to IPCC processes were then asked what challenges they faced and what motivated them to participate. Most indicated that they did not face any challenges (17%) and after, making time (12%) was pointed out as a challenge (Figure 20).

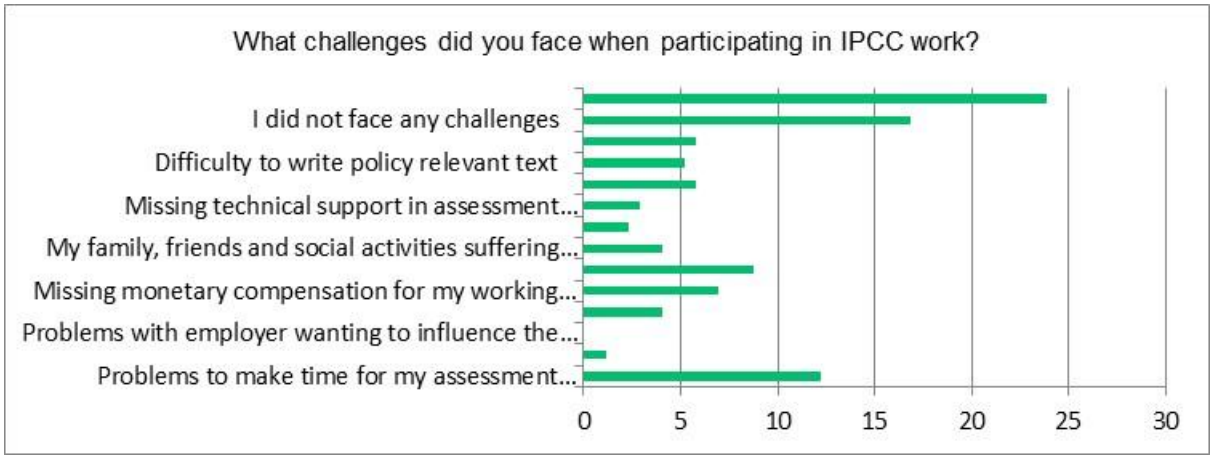


Figure 20. What challenges did participants faced when contributing to IPCC process (multiple options possible, N=172).

When replying 'others', participants had very different answers, so we rephrased them to make sure they were anonymous and presented them in Table 3.

Table 3: Answers from participants responding "Others" when asked about challenges they faced when participating in IPCC work. These are personal views on IPCC and may not reflect systemic and acknowledged challenges.

Missing recognition of IPCC work by employers and peers.
Not taking in consideration, relevance bibliography, perspectives and materials written in other languages.
Frustration of being mobilized at a stage where no additional articles or other source of knowledge could be added to the text.
I was just part of IPCC as a refereed author.
It was difficult to be heard given time constraints and many very vocal authors. A much more competitive group.
Not knowing IPCC processes, vocabulary used and political issues at stake.
Power imbalance.
Understanding and extracting the relevant messages from IPCC for specific policy areas.
Serious contradiction between the air conditioning, the plane, etc., the waste of energy and the very purpose of the work.
It is difficult to find extra time.
Lack of state funding to support the focal point and scientists in contributing to IPCC processes, especially from African states.
Strong dilution of individual contributions.
Lack of understanding at the national level.
Distance between those in science and reality.
Challenges due to the conditions of local communities.
Few meetings are not enough to learn more get more involved.

There were no strong differences between participants with biodiversity or climate expertise but when comparing gender, women significantly more indicated that they did not face any challenges (47%) compared to men (26%) expect when it came to find some time (32% for women compared to 26% for men) (Figure 21a).

Lak of time to engage was also documented in Liverman et al. (2022)[7] when looking at barriers to women's participation in IPCC. The study also pointed out dominance of male voices; lack of support for caregivers; and instances of sexual harassment and bias.

We could also note that younger experts faced more challenges than experienced experts – whether it was linked to "family, friends and social activities suffering from the expert's absence due to IPCC work" or "missing funding to participate in author meetings and other events" (Figure 21b).

Answers were also different between regions. While "not facing any challenges" and "problems making time" were more answered by experts from Western Europe, experts from Europe and Central Asia indicated that they faced more challenges linked to funding and monetary compensation (Figure 21c). Experts from Colombia also pointed out challenges linked to funding and the difficulty to work in English (Figure 21c).

[7] Liverman D, von Hedemann N, Nying'uro P et al (2022) Survey of gender bias in the IPCC. Nature 602:30– 32. https://doi.org/10.1038/d41586-022-00208-1

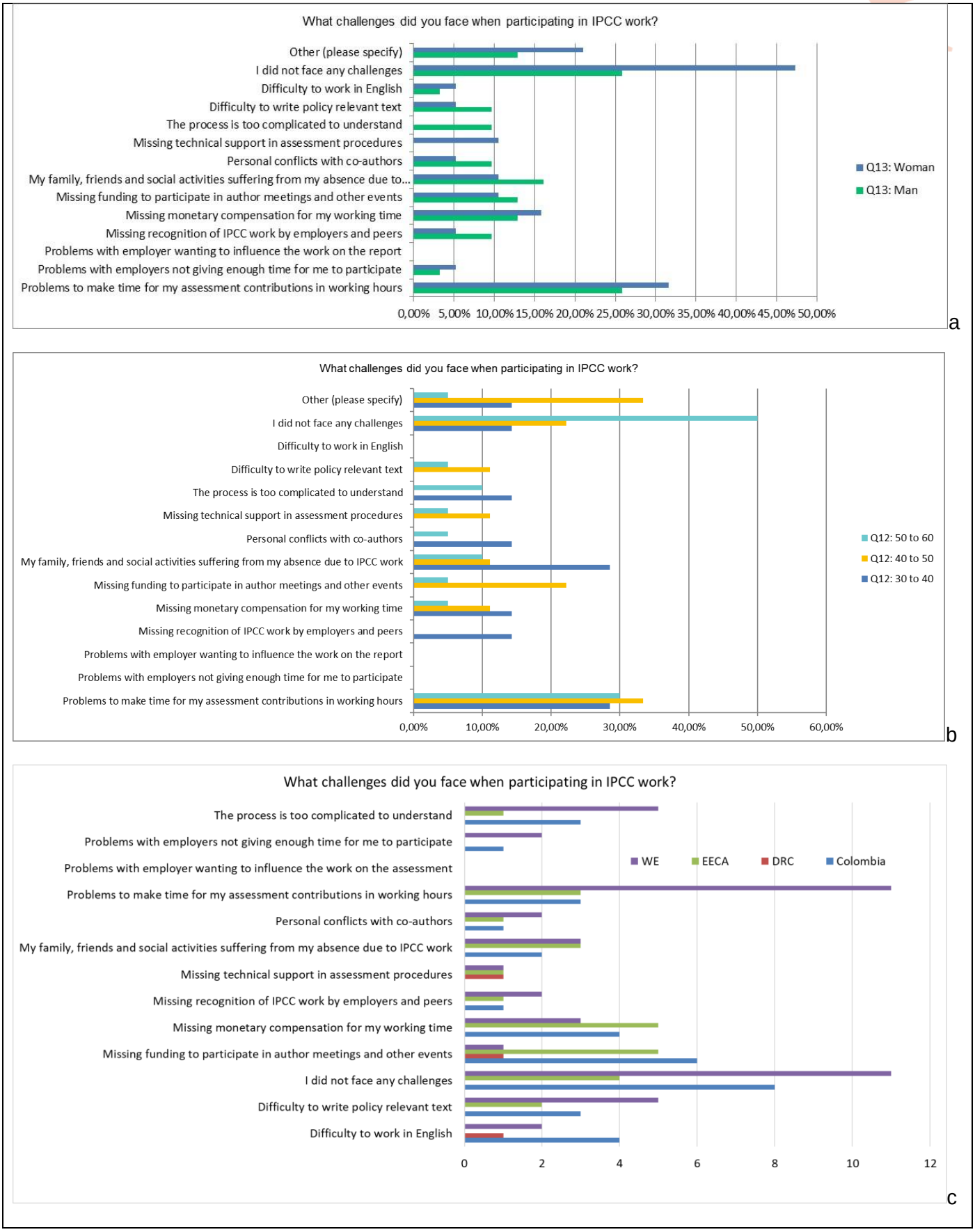
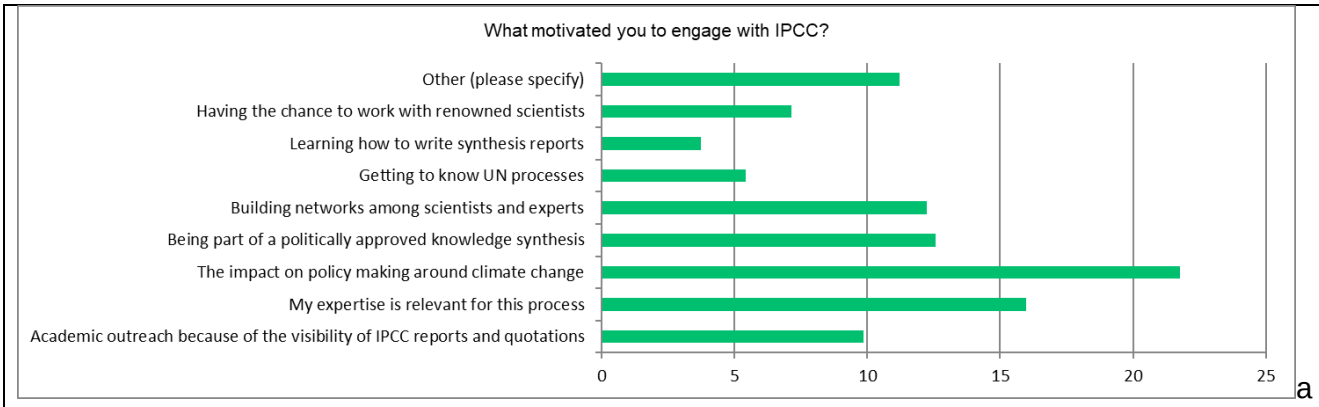


Figure 21. Challenges faced when contributing to IPCC process (multiple options possible) depending on a. gender, b. experts' age and c. region.

The motivation to engage in IPCC was, like for IPBES, mostly about the impact of policy-making around biodiversity (22%) and building networks among scientists (12%) but also about feeling relevant for the process (16%) (Figure 22). Answers in "Other" were very specific and included "make more effort on the social behavioral context'", "include indigenous and local knowledge to IPCC processes" and "integrate IPBES findings in IPCC work".

When comparing regions, experts from WE and Colombia indicated more "being part of a political approved knowledge synthesis" than other regions, while experts from EECA pointed out "academic outreach because of the visibility of IPCC reports and quotations" (Figure 22b).

When comparing gender, building network was more important to women (68%) than men (35%) (Figure 22c) and when comparing the participants' ages, the feeling of relevance was higher for younger experts as well as the need for "Academic outreach because of the visibility of IPCC reports and quotations" (Figure 22d).



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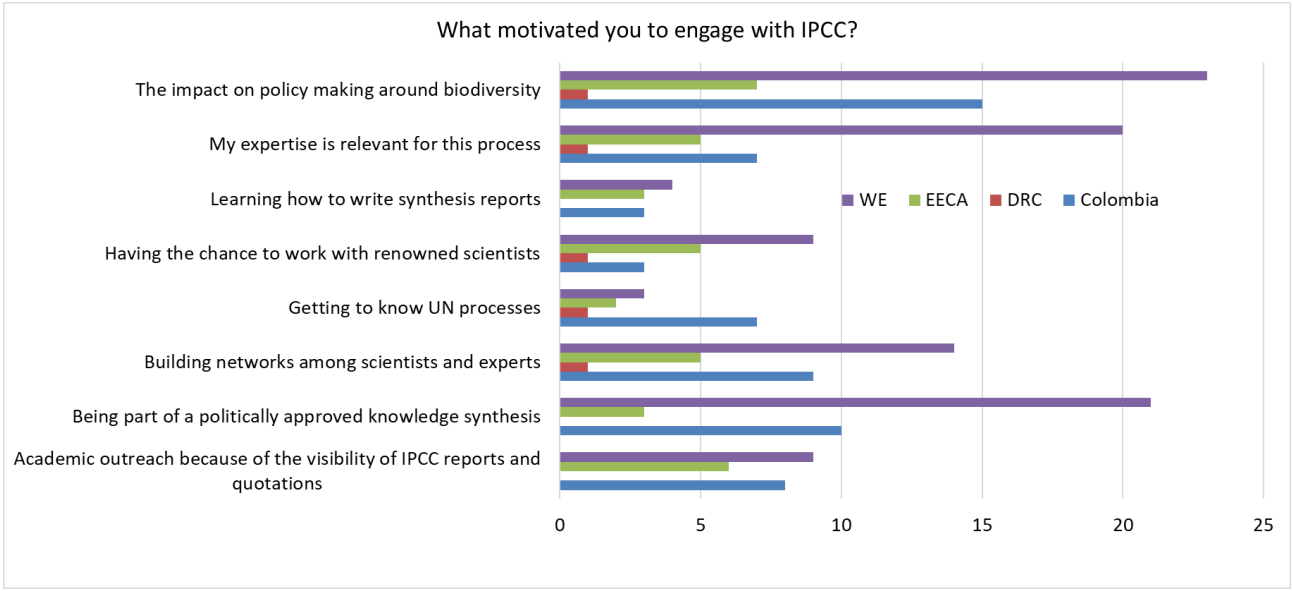

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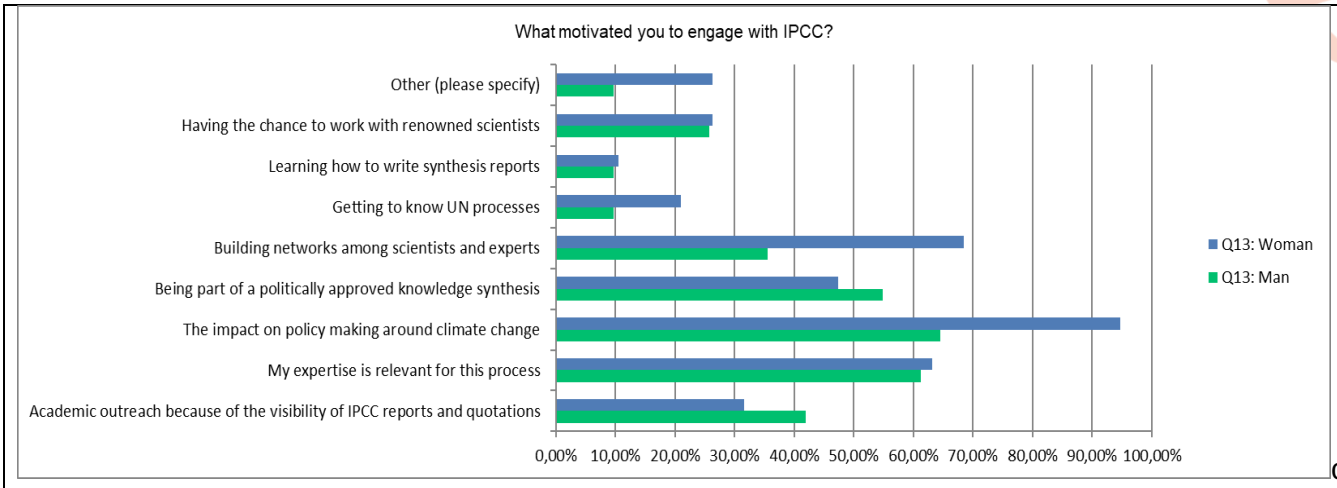

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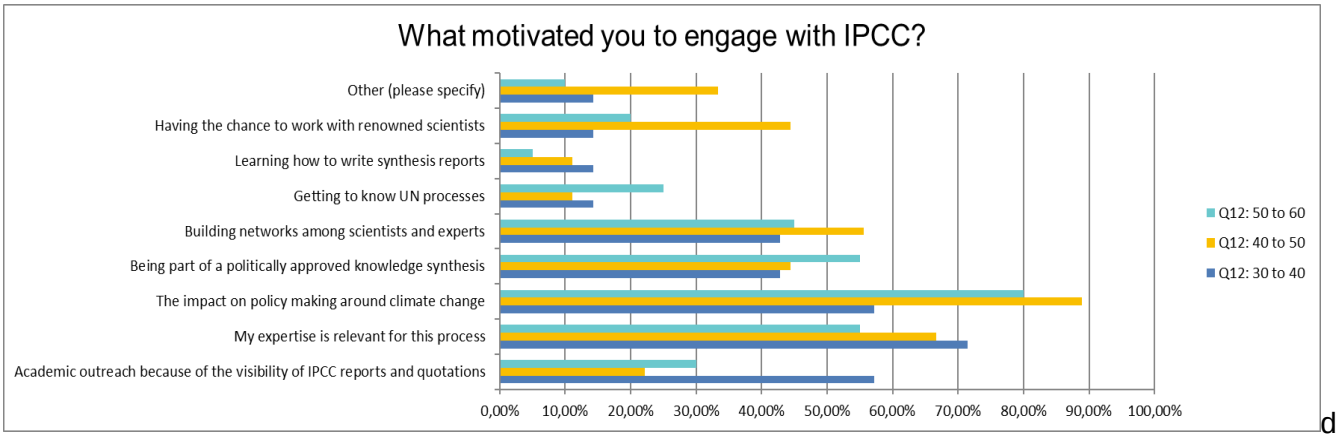


d

Figure 22. What motivated participants to take part in IPCC process (multiple options possible, N=294). a. for all participants, b. comparing regions, c. comparing gender, d. comparing participants' age.

When asked if the experience with IPCC would make the participant want to continue to get involved with it, 64% declared yes.

4.3.2. Participants who have not contributed to IPCC processes

Participants who answered that they did not participate to IPCC processes:

- indicated that they used IPCC for their work (assessment report, synthesis report, figure, etc.) (71%),
- mostly indicated that they didn't know if their institution or organization has been involved with IPCC (36%), but also indicated when it was the case (35%) or not (29%),
- pointed out that they did not have the chance to connect with their NFP (78%).

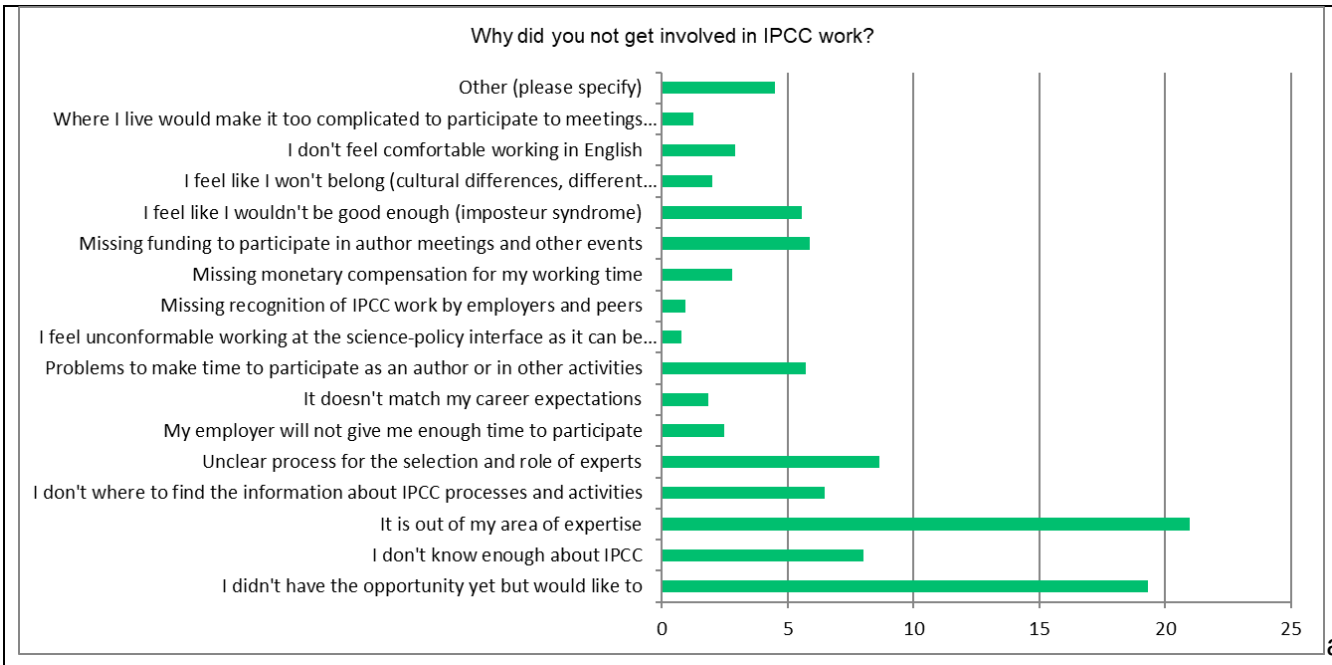
When asked about the reasons why they did not get involved in the IPCC process, most replied that it was out of their area of expertise (21%) before not having the opportunity yet (19%) (Figure 23a). The unclear process and not knowing enough about IPCC were also reasons for not getting involved.

Experts in biodiversity noted that they did not get involved because it was out of their area of expertise and experts in climate pointed out that the process for the selection and role of experts lacked clarity (Figure 23b).

There was no difference in answers between gender but when comparing participants' age, we could also point out differences in the first barriers to involvement (Figure 23c):

- 30 to 40: no opportunity yet > out of my area of expertise > I don't know where to find the information
- 40 to 50: out of my area of expertise > no opportunity yet > I don't know enough about IPCC
- 50 to 60: no opportunity yet > problems to make time > out of my area of expertise

Barriers to engagement were also different between regions: experts from WE answered in majority that it was because they didn't enough about IPCC, followed by the fact it was out their area of expertise, while experts from EECA and Colombia first indicated that they did not have the opportunity yet but would like to (Figure 24d).



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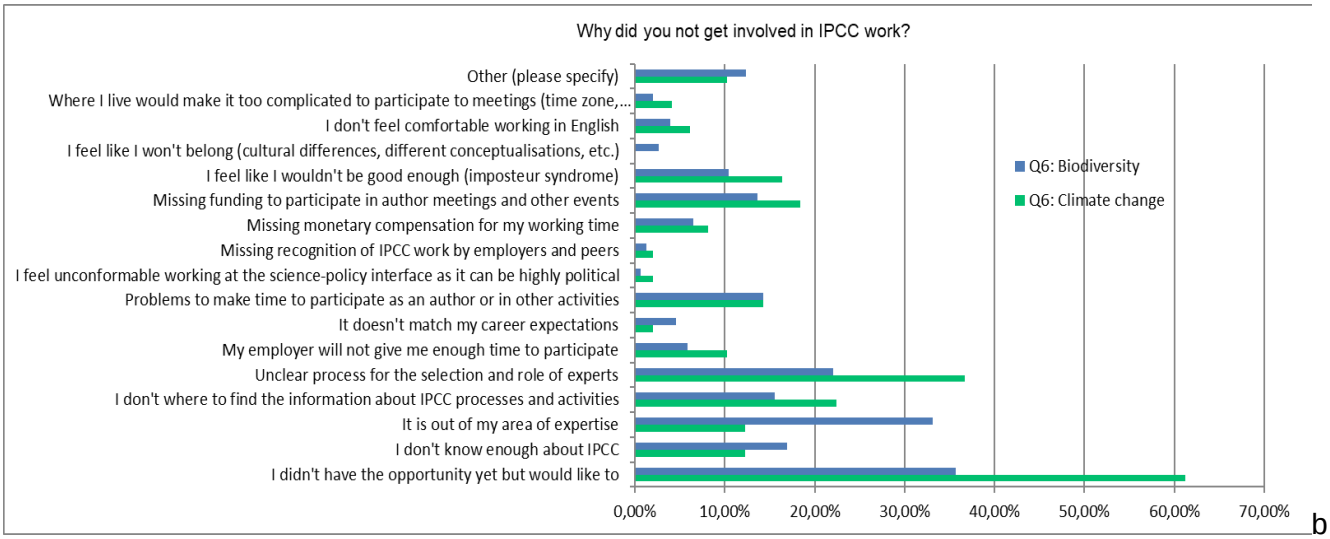

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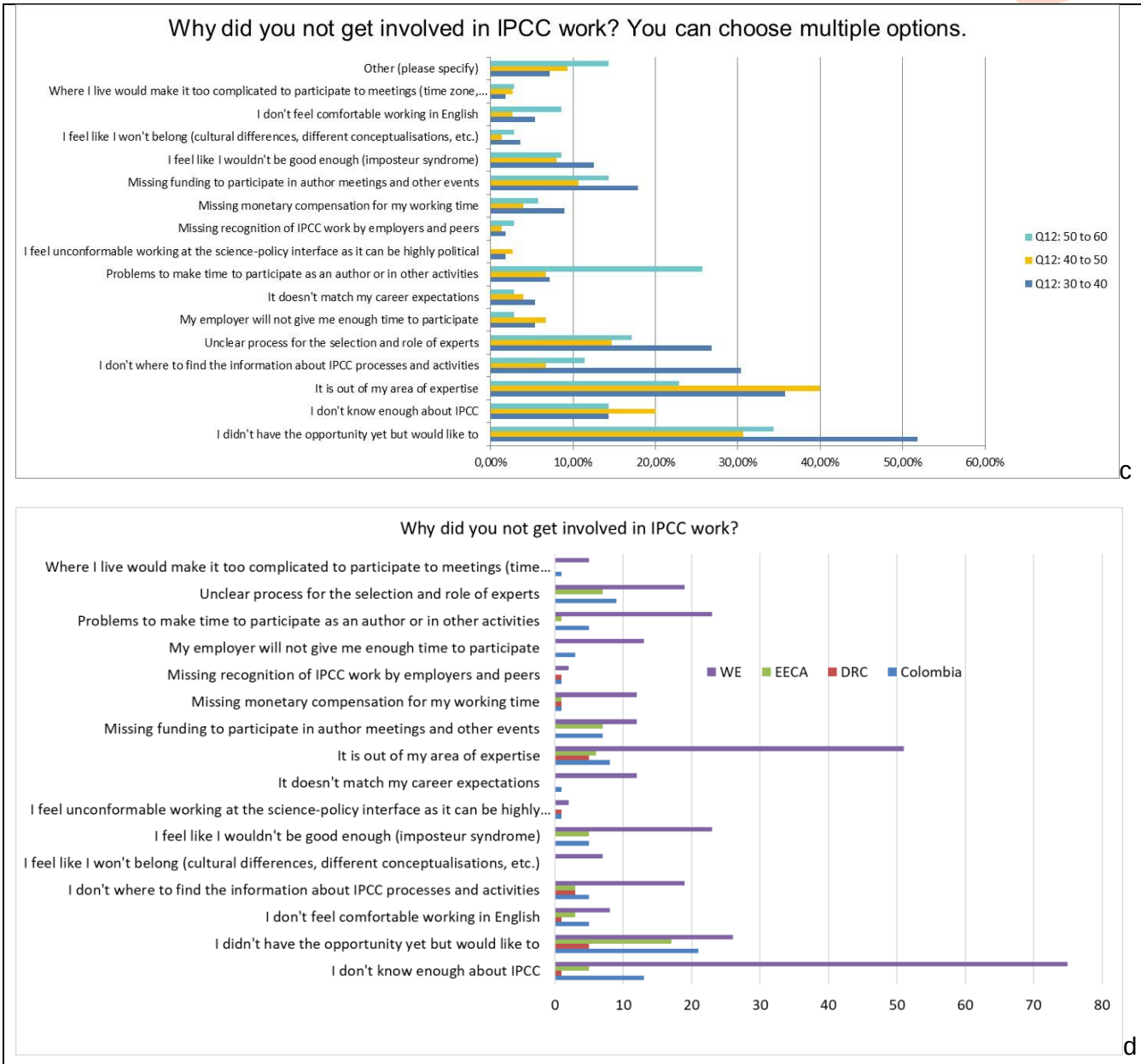


Figure 23. Answers from participants who did not participate in IPCC process, multiple options possible. a. All participants (N=648), b. Comparing expertise, c. Comparing participant's age, d. Comparing regions.

4.4. Capacity-building

As reported in Figure 8, most participants did not participate in any capacity building activities. We asked what type of capacity-building would be useful to facilitate contribution to IPBES and IPCC work.

4.4.1. Capacity-building for IPBES engagement

To facilitate engagement in IPBES, experts would welcome different capacity building activities: workshops, regional and national meetings, but also webinars and online course (Figure 24a). There was no difference in answers when comparing regions, gender or expertise but when looking at participant's age, we could note that the needs were different – different topic and different media (focusing on the first three):

- less than 30: factsheets, meetings and webinars on report's results
- 30 to 60: workshops, meetings and webinars on how to engage

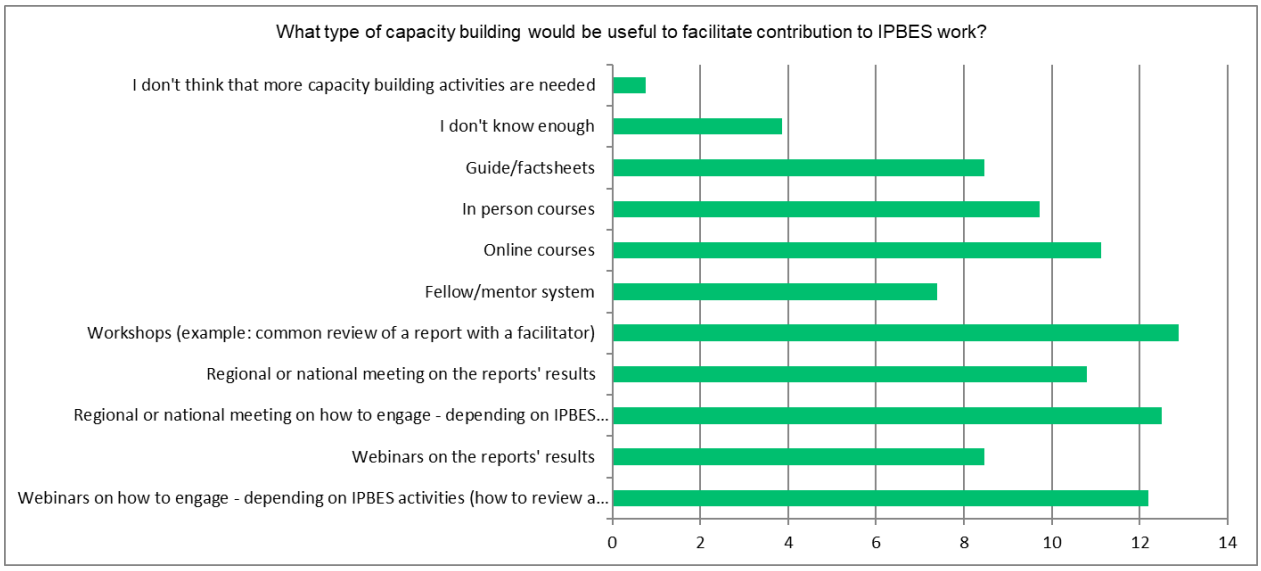


Figure 24. What type of capacity building would be useful to facilitate contribution to IPBES work (multiple options possible) for all participants (N=1583).

We asked if they had other suggestions regarding capacity-building and most participants replied that there were already enough capacity-building activities available. Others suggested more tailored activities at the national or regional level, training for the assessment authors (training in literature review for example), training in science communication and uptake, and some suggested to focus on the younger or future experts (Figure 25). It was also noted that some participants did not know of the existing activities available and would like to know more about them to be able to participate.

Figure 25. Wordcloud based on the coding of answers to the questions "Do you have any more comments regarding capacity building with IPBES?" and when replying "Other" to the question "What type of capacity building would be useful to facilitate contribution to IPBES work?" (N=94).

Participants were also asked if there were any aspects about IPBES process that they would like to change to improve the platform and most answers related to:

- inclusivity (e.g., Indigenous and Local Knowledge dialogues, outreach non-academic stakeholders, working in other languages, mobilize younger experts),
- communication (e.g., reach out to more experts, translate documents, visual schematics, improve uptake),
- funding (e.g., more funding for IPBES functioning and for authors to participate),
- process (e.g., exclude non-compliant authors, simplified application process, less bureaucracy) (Figure 26).

Figure 26. Wordcloud based on the coding of answers to the questions "Is there an aspect about IPBES processes that you would like to change to improve the platform?" (N=63).

4.4.2. Capacity-building for IPCC engagement

To facilitate engagement in IPCC, as for IPBES, experts would welcome a range of different capacity building activities: workshops, regional and national meetings, but also webinars and online course (Figure 27a). There was no difference in answers when comparing regions, or expertise but when looking at participant's gender, we could note that women identified the need to do more capacity-building activities, especially webinars (Figure 27b). And when comparing participants' age, we could note that the needs were also different – specially different media (focusing on the first two):

- Less than 30: webinars on how to engage, webinars on report's results
- 30 to 50: local meetings and webinars on how to engage
- 50 to 60: local meetings on how to engage, local meetings on report's results

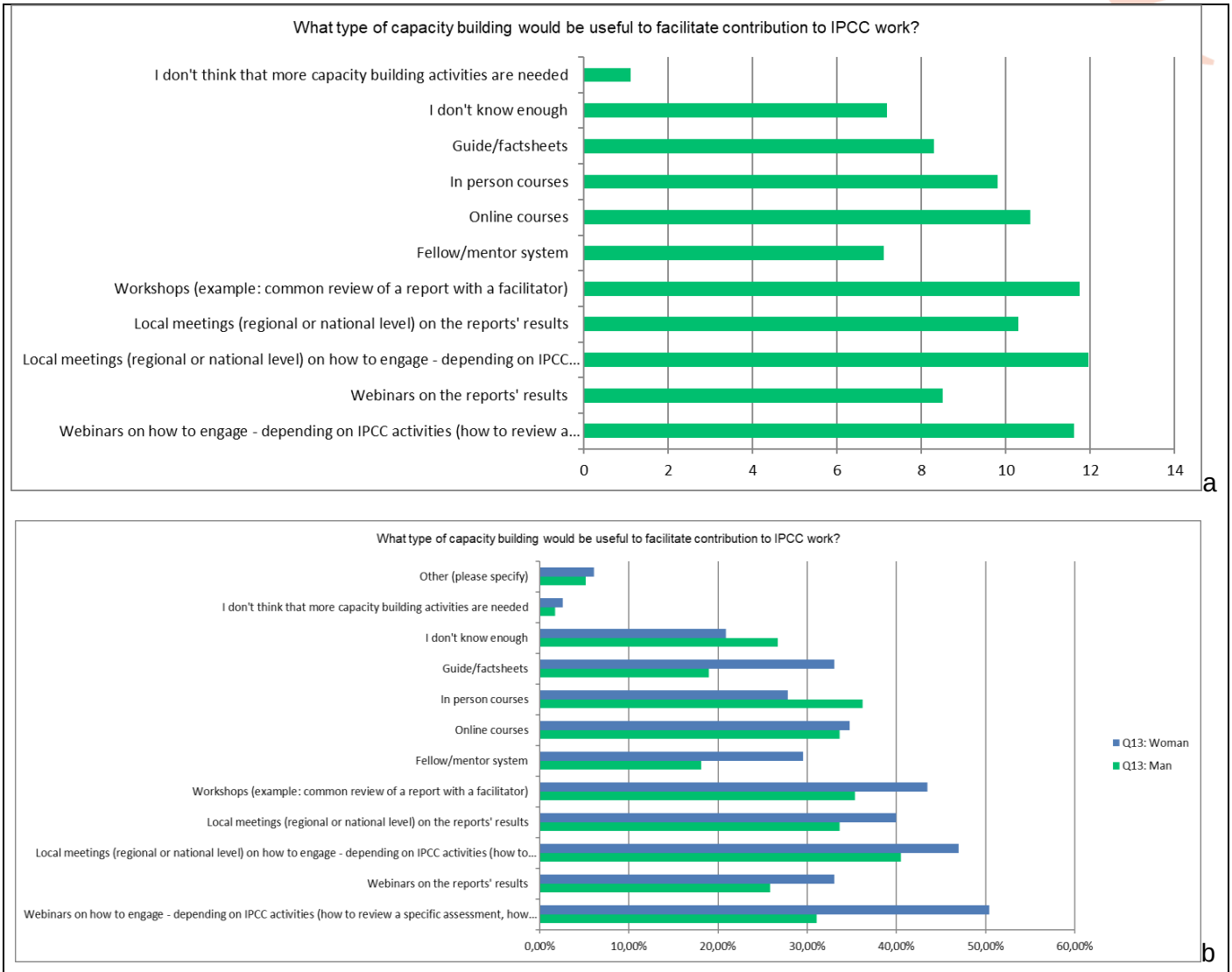


Figure 27. What type of capacity building would be useful to facilitate contribution to IPCC work (multiple options possible) for all participants (a, N=1147) and when comparing participants' gender (b).

Participants had similar answers to the questions "Do you have any more comments regarding capacity building with IPCC?" and "Is there an aspect about IPCC processes that you would like to change to improve the platform?" so we grouped them in one same wordcloud (Figure 28).

What came out first was about:

- improving inclusivity in IPCC (e.g., capacity-building activities in other languages and for non-academic experts to engage, especially IPLCs, engage with practitioners and farmers),
- tailored activities at the national or regional level including training on uptake and communication (e.g., communicate on IPCC and its results, train NFP on the dissemination at the national level) – as also pointed out in Klinsky & Sagar (2024)[8],
- joint activities with IPBES (certainly biased by the fact that most of the survey's participants are biodiversity experts),

[8] Klinsky, S., Sagar, A. Missing in action: capacity and capacity building in the IPCC's AR 6. *Climatic Change* **177**, 133 (2024). https://doi.org/10.1007/s10584-024-03746-x

- improve the process (i.e., clearer guidelines on the role of authors and how to get engaged).

Figure 28. Wordcloud based on the coding of answers to the questions "Do you have any more comments regarding capacity building with IPCC?", "Is there an aspect about IPCC processes that you would like to change to improve the platform?" and when replying "Other" to the question "What type of capacity building would be useful to facilitate contribution to IPCC work?" (N=71)

4.5. Collaboration between climate and biodiversity

To look into possible collaboration between climate and biodiversity stakeholders, we first asked all participants if they thought there was a difference in the way biodiversity and climate change are taken into account by knowledge holders (IPLCs, researchers, etc.) and by knowledge users (policymakers, government, etc.) in their country. The majority of participants answered yes to both questions (58% by knowledge holders, 68% by knowledge users) (Figures 29a and 29b).

There are no differences in answers when comparing gender or regions but when comparing expertise, we can see that this feeling is stronger for biodiversity than climate experts (Figures 29c and 29d). And when comparing participant's age, we can see that it is stronger for experts aged from 30 to 40 whereas younger participants preferred to indicate that they do not know enough to say (Figures 29e and 29f).

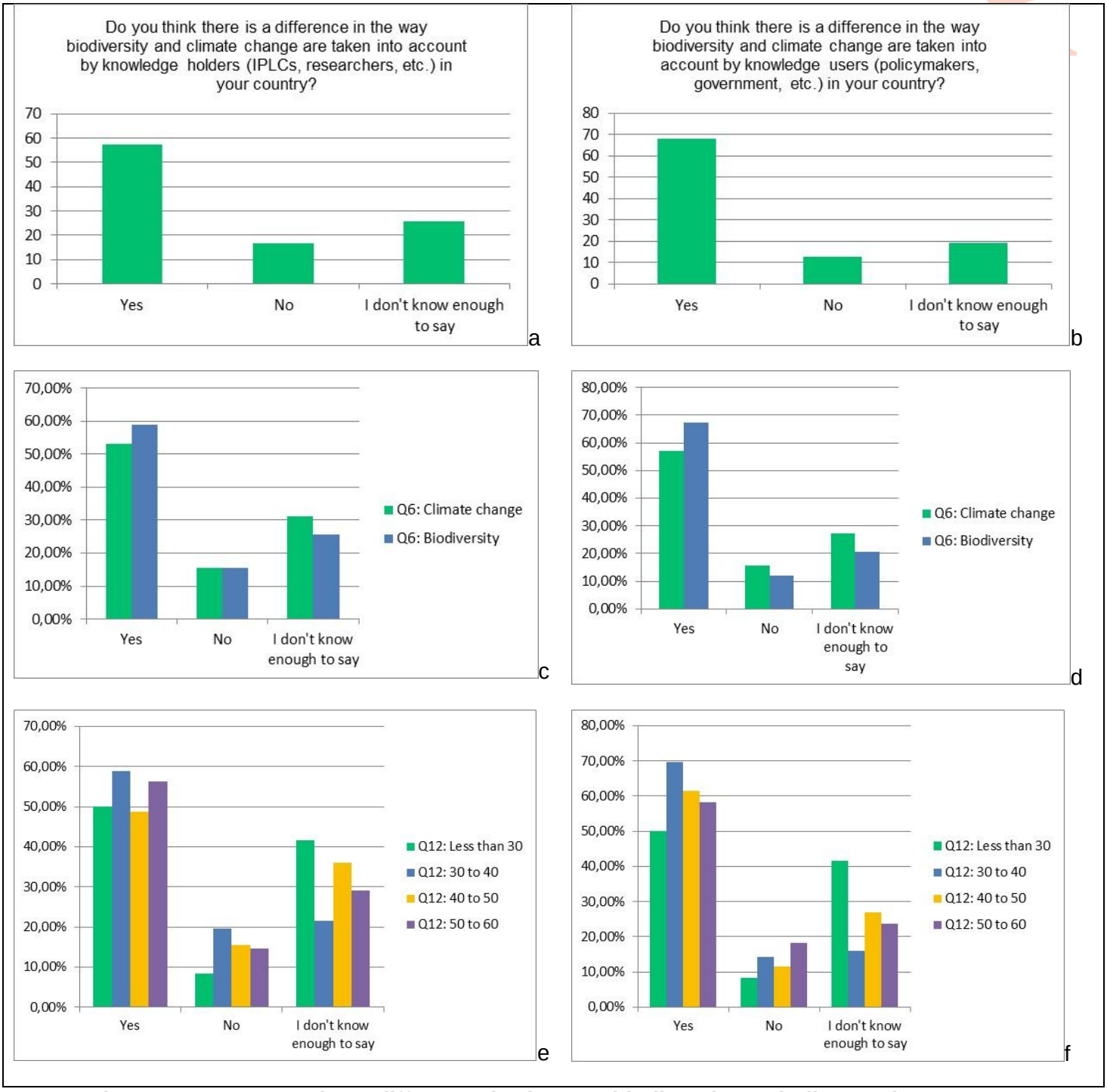


Figure 29. Answers about difference in the way biodiversity and climate change are taken into account by knowledge holders (a, c, e) and by knowledge users (b, d, f) in the participants' country. a, b. all participants (N=412), c, d. comparing expertise, e,f. comparing participants' age.

When looking into the answers to both questions, there was a clear feeling that climate was taken more seriously by knowledge holders and knowledge users (Figures 30 and 31) for many reasons: "IPCC is better established", "IPCC receives more media attention", "there is more knowledge in climate", "the urgency is better recognized", "it is taken more seriously", "it is viewed as a global issue whereas biodiversity can be managed at local scales, "it speaks to the economics", etc.

Reasons for this were indicated in some answers:

- knowledge silos (no multidisciplinary research),
- funding (more funding available for projects and experts in the field of climate),
- history (IPCC was established before IPBES),
- different methodology (clearer and more straightforward indicators for climate),
- complexity (biodiversity has more of a holistic approach than climate, includes diverse knowledge and requires more tailored responses).

Because of those reasons, some also answered that climate and biodiversity should be treated separately while others plead for more collaboration.

Inclusivity was also pointed out, noting that IPBES was better at stakeholder's engagement – indeed lessons from IPBES show that there are some steps that can be taken to include diverse knowledge systems and strengthen relations with interested stakeholders to increase legitimacy, help enroll more participants and advocates, and expand the knowledge base, all key goals for AR7[9]. Both platforms still need to better inform and take into account IPLCs.

We also noted that when it comes to climate and biodiversity being taken into account by knowledge users, many responders pointed out than none were taken into account because they were not perceived as important enough by politics: "Most are exploited (denied) for personal, political gain", "Government essentially concerned with economic growth", "It depends on the objectives of the decision-makers", "decision-makers are too quick to opt for solutions that are easy to understand". For some IPCC authors, the distance between science and politics has led to frustrations, as the current gap between knowledge and action on climate often appears overwhelming[10] and some AR6 authors even urged each other not to participate in the process anymore since it is not more knowledge that is needed but more political action[11].

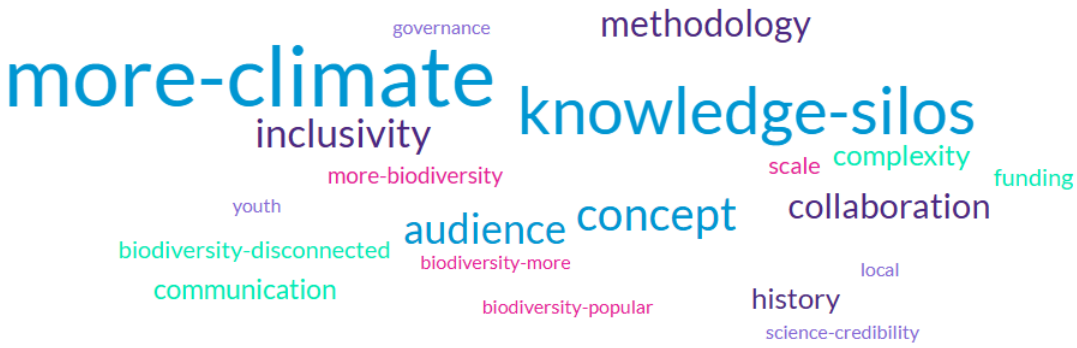


Figure 30. Wordcloud based on the coding of answers to the questions "Do you think there is a difference in the way biodiversity and climate change are taken into account by knowledge holders (IPLCs, researchers, etc.) in your country?" (N=182).

[9] McElwee, P. A tale of two panels: learning and coordinating across IPCC, IPBES, and other science-policy interfaces. *Climatic Change* **178**, 45 (2025). https://doi.org/10.1007/s10584-025-03869-9

[10] Knutti R (2019) Closing the knowledge-action gap in climate change. One Earth 1:21–23. https://doi.org/10.1016/j.oneear.2019.09.001

[11] Glavovic BC, Smith TF, White I (2021) The tragedy of climate change science. Clim Dev 1–5. https://doi.org/10.1080/17565529.2021.2008855

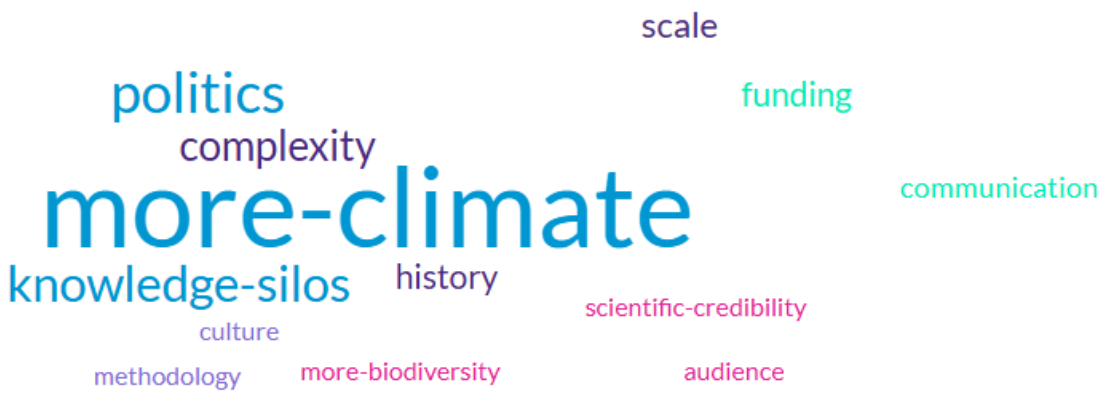


Figure 31. Wordcloud based on the coding of answers to the questions "Do you think there is a difference in the way biodiversity and climate change are taken into account by knowledge users (policymakers, government, etc.) in your country?" (N=203).

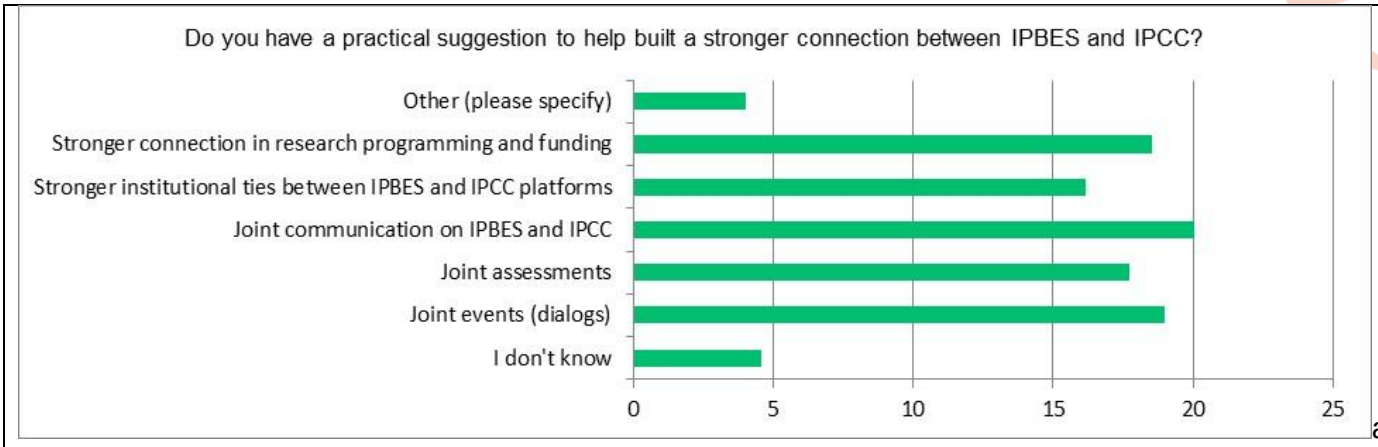
Finally, participants were asked if they had practical suggestions to help built a stronger connection between IPBES and IPCC. There were no strong distinctions between the propositions and participants seemed to welcome collaboration (Figure 32a).

Suggestions in "Other" (Figure 32b) included items around:

- having a common-goal (One Health, ocean sustainability, pollution),
- adjust both platforms' agenda to take each other into consideration (avoid clashes in meetings),
- plan national collaboration (joint work on NBSAP - National Biodiversity Strategies and Action Plans- and NDC - Nationally Determined Contributions-, more example of local uptake),
- focus on inclusivity (promote interdisciplinary perspective, stakeholder's engagement, stronger connection with indigenous and local knowledge),
- establish a joint committee and mutual authorship (participation in each other's external review processes and nomination of experts for each other's assessments).

Some answered that the platforms were too different to be collaborating and to be cautious because if the two platforms became one, both issues would have halved the attention. Indeed, simply saying one institution should be more like the other does not recognize that each has their particular audiences and strengths, which may be a more effective approach to ensure complementarity, if not better integration[12].

[12] McElwee, P. A tale of two panels: learning and coordinating across IPCC, IPBES, and other science-policy interfaces. *Climatic Change* **178**, 45 (2025). https://doi.org/10.1007/s10584-025-03869-9



a

b

Figure 32. a. Answers about practical suggestion to help built a stronger connection between IPBES and IPCC (N=1248), b. Wordcloud based on the coding of answers in "Other" to the same question (N=203)

5. CONCLUSION AND RECOMMANDATIONS

Results from this report give a lot of information regarding engagement of knowledge holders in IPBES and IPCC.

From the landscape analysis of existing capacity-building activities we note that **more countries are members of IPCC than of IPBES**. Experts living in countries that are not members of IPBES or without an IPBES NFP are less likely to engage in the platform which means that it can be more difficult for knowledge holders to contribute to IPBES processes compare to IPCC processes.

When looking at the institution hosting the NFP, we note that **more IPCC's NFPS are hosted by government agencies compared to IPBES's NFPs**. If we make the assumption that government agencies (such as the Belgian Science Policy Office or the Czech Hydrometeorological Institute) are better integrated in the research community compared to ministries, we can assume that climate experts have more opportunities to engage in IPCC processes compared to biodiversity experts in IPBES processes. IPCC has also been operational 25 years before IPBES, more present in the media and established as more of a research body as opposed to IPBES being established as a science-policy body so we can assume that IPCC is better known in the climate research community than IPBES is known in the biodiversity research community.

We also note that there are **more capacity-building activities related to IPBES than IPCC**. As pointed out above, IPCC being more known by knowledge holders than IPBES, it can explain why there are less capacity building activities for experts to engage in IPCC processes compare to IPBES.

It has been recognized however, that capacity building for climate action (i.e., the uptake of IPCC reports) are missing: "Effective climate action that is aligned with national needs and cognizant of the national context requires a range of capacities. To date it is almost impossible to clearly identify the exact nature and state of such capacity and capacity building within and across countries or the most promising pathways to improve it."[13]

Furthermore, because IPBES has been from the start more inclusive of diverse knowledge systems[14] - even though it was acknowledged by the IPCC that the "need to ensure inclusivity, with regard to increased gender, geographical and disciplinary balance"[15]-, IPBES needs to do more capacity building activities to go beyond the Global North research community.

The survey's results offer a lot of information that can help RESPIN and other platforms to tailor capacity-building activities.

Lack of time and funding are the biggest challenges to the engagement of knowledge holders in IPBES and IPCC. While RESPIN cannot add hours in the day or find money for all experts, it can focus in the next phases on helping experts to get **institutional support** by making the case for institutional benefits (e.g., high-profile outputs, reputational gain) and empowering experts to convince their institutions to support them to engage in IPBES and IPCC processes (e.g., by giving them time outside teaching or funding to participate to authors meetings).

[13] Klinsky, S., Sagar, A. Missing in action: capacity and capacity building in the IPCC's AR 6. *Climatic Change* **177**, 133 (2024). https://doi.org/10.1007/s10584-024-03746-x

[14] McElwee, P. A tale of two panels: learning and coordinating across IPCC, IPBES, and other science-policy interfaces. *Climatic Change* **178**, 45 (2025). https://doi.org/10.1007/s10584-025-03869-9

[15] IPCC (2023) Lessons learned from the sixth assessment cycle. IPCC-LX/INF. 9 (30.XII.2023). IPCC, Geneva
Kim H, Peterson GD, Cheung WWL et al (2023) Towards a better future for biodiversity and people: modelling nature futures. Glob Environ Chang 82:102681. https://doi.org/10.1016/j.gloenvcha.2023.102681

As this was early identified as a key challenge in knowledge holders' engagement, Function 1 has already implemented a webinar on June 5th 2025, open to all, to explore how to better identify the added value for knowledge institutions to support experts' participation in both platforms. This may also result in the production of other material as part of Function 4 that experts can use to gain institutional support for their work with IPCC and IPBES.

Based on all the results presented in Section 4, we can also make regional recommendations:

In **Western-Europe**, capacity-building activities can focus on:

- overcoming challenges related to gender imbalance to contribute to IPBES (women indicated having less time, more impostor syndrome, missing recognition),
- overcoming challenges regarding access to information about IPCC,
- overcoming challenges related to general lack of confidence in their expertise from biodiversity experts compared to climate experts,
- use the motivations of "impact on policy-making" and "building networks among scientists" (the last one especially for women to contribute in IPCC).

In **Eastern Europe, Central Asia, Colombia and DRC**, capacity-building activities can focus on:

- overcoming challenges related to language barriers to facilitate contributions to both platforms,
- overcoming challenges regarding access to information about IPBES,
- use the motivation of "building networks among scientists", especially in EECA to engage in IPBES and motivation of "academic outreach" especially in EECA to engage in IPCC.

While all regions are interested in knowing more about how to engage and to learn more about the report's results, the need was different depending on the participant's age. Therefore, **the topic and the type of media developed can be different depending on the age of the target audience**. We have identified the following preferences:

- less than 30: factsheets, webinars on IPBES report's results, webinars on how to engage in IPCC
- 30 to 60: local meetings on IPBES and IPCC outputs, webinars on how to engage in IPBES and IPCC.

As stated in McElwee (2025)[16]: "Increased targeted communication, such as a "Summary for Youth" or "Summary for Farmers" have been suggested to "further amplify IPCC findings to these communities" (IPCC 2023, p. 19). IPBES too has focused heavily on ensuring that youth voices are heard as stakeholders, including a fellowship program, a youth network, and specific workshops on IPBES work and products for them, spearheaded by a Capacity-building TSU. However, for IPCC, there is concern that these sorts of activities may detract from assessment work or undermine existing rules of procedure […]. IPBES has used "fact sheets", which are short but nearly verbatim from approved Summary for Policymakers reach new audiences without raising concerns about departures from underlying assessment text. IPBES also uses stakeholder communications during assessment development itself, holding virtual sessions during the public review comment periods to get the word out about the assessment and encourage people to make formal comments. Both of these may be fairly painless possibilities for IPCC, and there appears to be interest in doing so."

[16] McElwee, P. A tale of two panels: learning and coordinating across IPCC, IPBES, and other science-policy interfaces. *Climatic Change* **178**, 45 (2025). https://doi.org/10.1007/s10584-025-03869-9

RESPIN and other platforms organizing capcity-building activities can work on what is already existing or planned to come and focus on gaps in capacity-building material such as different factsheets depending on the audience (age, expertise), more local meetings, etc.

Regarding collaboration, it is McElwee (2025) again who states that "it is IPCC rules and procedures that appear to be the primary barrier to more joint action […]. An IPCC Bureau member quoted as expressing concerns that if cooperative efforts were to be "co-branded as an IPCC product, it will be critical that key features of the IPCC procedures will be retained that ensure the balanced consideration of relevant knowledge and regional perspectives, and the robust review of drafts…. Where this is not possible, it may be necessary to consider a different type of product where the IPCC clearly only plays a supporting but not an authorship role, to protect the integrity and reputation of the IPCC" (IPCC 2023, p. 23). In other words, some governments in IPCC seem highly reluctant to join with IPBES due to worries over their influence over knowledge processes."

It is not in RESPIN's mandate to change IPBES and IPCC procedures or to call for a collaboration between secretaries of both platforms, but RESPIN can foster collaboration between climate and biodiversity knowledge holders and knowledge users by **focusing on activities with a common goal** (e.g., ocean sustainability, One Health), inclusivity (e.g., diverse knowledge, gender - possibly in collaboration with IPBES Social Science and Humanities Network[17]) and mutual authorship (i.e., climate experts can participate to IPBES assessments as authors or reviewers and biodiversity experts can participate to IPCC reports as authors or reviewers).

We would also like to point out that, even though participants filling the survey (mostly knowledge holders) seemed positive about climate and biodiversity global actions and indicated that they had interactions with decision-makers (especially interaction with the NFP when contributing to the platforms), there were a lot of negative answers associated with the way biodiversity and climate were taken into account by knowledge users. Fostering networking and exchange between knowledge holders and knowledge users such as in the PESC-RESPIN event in March 2025 in Brussels should therefore be continued. We can also note here how these results are important for the work carried out in Function 2. RESPIN Function 2 is about empowering knowledge users at the national and subnational level: it first identifies gaps and needs in the use of biodiversity and climate related decision makers in national and sub-national governments and, in the second phase of the project, will develop best-practices and recommendations for synergistic biodiversity and climate knowledge uptake on the national level.

[17] https://onet.ipbes.net/ssh

6. AUTHORS CONTRIBUTIONS AND ACKNOWLEDGEMENT

Constance Laureau (FRB) and Marie-Claire Danner (FRB) performed the landscape analysis on existing capacity building activities. Constance Laureau (FRB), Coline Léandre (FRB), Nathalie Morata (FRB), Nastassia Elst (Belspo), Divija Jata (Belspo), Yves ZInngrebe (UfZ), Yamini Yogya (UfZ), Axel Paulsch (IBN) and Marie-Claire Danner (FRB) designed the survey on knowledge holders' engagement. Marie-Claire Danner (FRB) and Nastassia Elst (Belspo) performed the analyses and Marie-Claire Danner (FRB) wrote the first draft of the report. Nastassia Elst (Belspo) gave some input on the first draft. Anna Heck (Beslpo), Alicia Perrez-Porro (CREAF), Axel Pauslch (IBN) and Yamini Yogya (UFZ) reviewed the first draft and Bastian Bertzky (European Commission) reviewed the second draft. Marie-Claire Danner (FRB) incorporated the comments from both reviews into a final report.

7. ANNEXES

Annex I. Analysis of existing capacity building activities for knowledge holders in Europe and Central Asia, DRC and Colombia.

IPCC Member	NFP Host	Coding	IPBES Member	IPBES Observer	NFP Host	Coding
Albania	Ministry of Tourism and Environment	Ministry	Albania		Ministry of tourism and environment	Ministry
Andorra	Ministry of Environment, Agriculture and Sustanaibility	Ministry	Andorra		Unknown	Unknown
Armenia	Ministry of Environment of RA	Ministry	Armenia		Scientific Center of Zoology and Hydroecology, National Academy of Sciences	Research Institute
Austria	Federal Ministry of Agriculture, Forestry	Ministry	Austria		Federal Ministry for Sustainability and Tourism	Ministry
Azerbaijan	National Hydrometeorology Service	State Agency	Azerbaijan		Khazar University	University
Belarus	Ministry of Natural Resources and Environment Protection	Ministry	Belarus		Scientific and Practical Center for Bioresources of the National Academy of Sciences of Belarus	Research Institute
Belgium	Belgian Biodiversity Platform	State Agency	Belgium		Belgian Biodiversity Platform	State agency
Bosnia and Herzegovina	Faculty of Science University of Banja Luka	University	Bosnia and Herzegovina		Federal Ministry on Environment and Tourism	Ministry
Bulgaria	Ministry of Environment and Water	Ministry	Bulgaria		Ministry of Environment and Water; National Institute of Geophysics, Geodesy and Geography - Bulgarian Academy of Sciences	Ministry
Colombia	Institute of Hydrology, Meteorology and Environmental Studies	State agency	Colombia		Instituto Alexander Von Humboldt	Research Institute
Croatia	Croatian Meteorological and Hydrological Service	State Agency	Croatia		Ministry of Economy and Sustainable Development	Ministry
Cyprus	Ministry of Agriculture, Rural Development and Environment	Ministry		Cyprus	Unknown	Unknown
Czech Republic	Czech Hydrometeorological Institute	State Agency	Czechia		Nature Conservation Agency of the Czech Republic	State agency
Democratic Republic of the Congo	METTELSAT	State Agency	Democratic Republic of the Congo		Unknown	Unknown
Denmark	Danish Meteorological Institute	State Agency	Denmark		The Danish Ministry of Environment	Ministry
Estonia	Estonian Meteorological and Hydrological Institute	State Agency	Estonia		Ministry of the Environment (under Ministry of Climate)	Ministry
Finland	Finnish Meteorological Institute	State Agency	Finland		Ministry of Environment	Ministry
France	Ministère de la Transition Energétique	Ministry	France		Ministry of Foreign Affairs of France	Ministry
Georgia	Ministry of Environmental Protection of Georgia	Ministry	Georgia		Ministry of Environmental Protection and Agriculture of Georgia	Ministry

Germany	Federal Foreign Office, Division 409	State Agency	Germany		Federal Ministry for the Environment	Ministry
Greece	Institute for Environmental Research and Sustainable Development of the National Observatory of Athens	Research Institute	Greece		Department of Biology of the National and Kapodistrian University of Athens	University
				Holy See	Unknown	Unknown
Hungary	Ministry of Energy, Hungary Climate Policy Department	Ministry	Hungary		Ministry of Agriculture	Ministry
Iceland	Icelandic Meteorological Office	State Agency	Iceland		Unknown	Unknown
Ireland	Department of Environment, Climate and Communications	Ministry	Ireland		Unknown	Unknown
Israel	Israel Meteorological Service	State Agency	Israel		Isreali Ministry of Environmental Protection	Ministry
Italy	CMCC - Centro Euro-Mediterraneo per i Cambiamenti Climatici Instituto Nazionale di Geofisica e Vulcanologia	Research Institute	Italy		Italy's Higher Institute for Environmental Protection and Research	State agency
Kazakhstan	Ministry of Ecology and Natural Resources	Ministry	Kazakhstan		Unknown	Unknown
Kyrgyzstan	Ministry of Natural Resources, Ecology and Technical Supervision	Ministry	Kyrgystan		Unknown	Unknown
Latvia	Ministry of Climate and Energy of the Republic of Latvia	Ministry	Latvia		Ministry of Environmental Protection and Regional Development of the Republic of Latvia	Ministry
Liechtenstein	Office of Environment	State agency		Liechtenstein	Unknown	Unknown
Lithuania	Ministry of Environment	Ministry	Lithuania		Ministry of Environment	Ministry
Luxembourg	Ministère du développement durable et des infrastructures	Ministry	Luxembourg		Ministère de l'Environnement, du Climat et de la Biodiversité	Ministry
Malta	Unknown	Unknown		Malta	Unknown	Unknown
Moldova (Republic of)	Ministry of Environment	Ministry	Moldova (Republic of)		Moldova`s Unit for Project Implementation	State agency
Monaco	Direction de l'Environnement	Ministry	Monaco		Direction de l'Environnement	Ministry
Montenegro	Institute of hydrometeorology and Seismology	State Agency	Montenegro		Environmental protection Agency	State agency
Netherlands (Kingdom of the)	Ministry of Economic Affairs and Climate Policy	Ministry	Netherlands (Kingdom of the)		Ministry of Agriculture, Nature and Food Quality	Ministry
North Macedonia	Macedonian Academy of Sciences and Art (ICEIM-MANU)	Institute	North Macedonia		Ministry of environment and physical planning	Ministry
Norway	Norwegian Environment Agency	State agency	Norway		Norwegian Environment Agency	State agency
Poland	Ministry of Environment, Department of Air Protection and Climate	Ministry	Poland		Reykjavik University School of Law	University
Portugal	National Institute of Meteorology and Geophysics	State agency	Portugal		Centre for Functional Ecology; University of Coimbra	University
Romania	National Meteorological Administration	State agency	Romania		Ministry of Environment, Waters and Forests	Ministry

Russian Federation	Institute of Global Climate and Ecology	Research Institute	Russian Federation		Ministry of natural resources and environment of the Russian Federation	Ministry
San Marino	University of San Marino	University		San Marino	Unknown	Unknown
Serbia	Republic Hydrometeorological Service of Serbia	State Agency	Serbia		Ministry of Environmental Protection	Ministry
Slovakia	Ministry of Environment of the Slovak Republic	Ministry	Slovakia		Ministry of Environment of the Slovak Republic	Ministry
Slovenia	Ministry of the Environment and Spatial Planning	Ministry		Slovenia	Ministry of the Environment and Spatial Planning	Ministry
Spain	Ministry for the Ecological Transition and the Demographic Challenge	Ministry	Spain		Ministry for the Ecological Transition and the Demographic Challenge	Ministry
Sweden	Swedish meteorological and hydrological Institute	State agency	Sweden		Swedish Environmental Protection Agency	State agency
Switzerland	Federal Office for the Environment	Ministry	Switzerland		Federal Office for the Environment	Ministry
Tajikistan	Committee for Environmental Protection under the Government of Tajikistan	State Agency	Tajikistan		National Center for Biodiversity and Biosafety	State agency
Turkey	Ministry of Environment, Urbanization and Climate Change	Ministry	Türkiye		Minitry of Agrculture and Forestry	Ministry
Turkmenistan	Ministry of Nature Protection	Ministry		Turkmenistan	Unknown	Unknown
Ukraine	Director Ukrainian Hydrometeorological Institute	Sate agency		Ukraine	Unknown	Unknown
United Kingdom of Great Britain and Northern Ireland	Department for Business, Energy & Industrial Strategy	State agency	United Kingdom of Great Britain and Northern Ireland		Defra - Department for Environment Food and Rural Affairs	State agency
Uzbekistan	Center of the Hydrometeorological Service of the Republic of Uzbekistan	State Agency	Uzbekistan		State committee for Ecology and environmental protection	Stage agency

Annex II. Images used in the questionnaire to represent different ideas and feelings around biodiversity and climate. We asked the participants to select four images maximum, that represented the most how they felt about climate and biodiversity. The order of the images was randomized for each participant. Most chose images related to the words "Biodiversity", "International", "Future/hope" and "climate", followed by "Cooperation" and "Peace" before "Challenge" (see Figure 12).

Biodiversity

Bureaucracy

Challenge

Climate

Complicated

Cooperation

Future, hope

International

Peace

Politics

Research