REVIEW FORM

- **REVIEWER´S NAME: MARTIN DE STOPPANI**

- **DOCUMENT TYPE:**

I. General document	II. Standard	III. Procedure	IV. Methodology	V. Support
			✓	

(Select the type of document with "✓")

- **DOCUMENT NAME: AOCP METHODOLOGY FOR BIODIVERSITY PROJECTS**

- Version: **V1.0**

COMMENTS:

No.	Section	Comment	aOCP answer
1		• Why did you choose the Shannon index?	The Shannon-Weiner index accounts for both species richness and its evenness so you can go with the Shannon-Weiner Index to estimate diversity. The Simpson index is used only to estimate the dominance of the species and it does not account for the species richness.
2		• Have you considered other indexes?	Monitoring and evaluation may be carried out for a variety of reasons, included identification of a given area for biodiversity richness, evenness or healthy ecosystems. The richness is the number of species per sample, the more species present in a sample, the richer the sample. Evenness is a measure of the relative abundance of the different species making up the richness of an area. Two commonly used to measure biodiversity Simpson index Ds and Shannon's index H'. Simpson's index DS is similarity index (the higher the value the lower in diversity). While Shannon index is combining evenness and richness and less weighted on dominant species. Both

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			indexes are more reflective in nature and can predict the environment health.
3		• Do you estimate a biodiversity reference for this type of ecosystem? (= calculate the Shannon index in an undeteriorated similar forest in the same area)	Depends on the study case. If the Project area and its surroundings are similar, it is possible and makes sense to assess the evolution of the ecosystem without interventions versus the Project activities. Not all cases are like that, some Projects take place in perturbed ecosystems, where monocultures have been established historically and, therefore, tree diversity is low. The Project may consist in reestablishing a more diverse tree community with native species. In this case, there is no "undeteriorated" forest to compare with in the near surroundings and other near areas may have different geological and thus ecological conditions such as slope, orientation, soil type, hydrology, altitude, humidity, etc.
4		• How do biodiversity co-benefits impact the value of your credit?	These are accounted for in the SDG impact assessment, which leads to the labeling of Verified Carbon Credits (VCCs) with the SDGs they project contributes to. Only if it happens to have a quantifiable impact on the SDG indicators. VCCs are valued higher based on their SDG labels. We certify as well Verified Biodiversity Based Credits, whose value is completely based on benefits for biodiversity. These credits are issued independently of the VCC issuance.
5		• "VBBC = Verified Biodiversity Based Credit " ⇒ Do you want to issue Biodiversity credit or make it only a carbon credit co-benefit?	See previous answer.
6		• How do you determine the richness and abundance of species?	For the baseline, sampling is performed at the Project area. We are not actually considering absolute richness and abundance, but relative.

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7		o　　Are　　you　　sending ecologists on the ground ? In that case, can you still penetrate the forest? For how long will it be possible?	Yes, as for any ecological study, ecologists are the adequate professionals to go on the field and get the required data (even in the Amazonian jungle or mangroves in Mexico). Forests in Europe do not pose a bigger challenge. The plantations are always suitable for monitoring on the field. Since the start of the Project we establish a monitoring protocol that includes field data and relate it to drone and satellite images, which allows us to monitor remotely the forest at the desired frequency.
8		o　　Do you use remote sensing techniques to do species recognition?	For the trees planted it is not necessary, since all the trees are geolocated in the field during the plantation. Thus, we have a database with information regarding species, GPS coordinates, age and biometry (once they reach 5 years old).
9		o　　Are you considering other types of imagery to get more precise data? (Hyperspectral, LiDAR)	The analysis of Sentinel-1 SAR and Sentinel-2 multispectral data with the random forests algorithm can achieve high accuracy. This is directly influenced by the quality of field data used to train the model. Aside from that, we use drone imagery with spatial resolution higher than 10 cm.
10		**Animal biodiversity - fauna** Why don't you measure it?	It is optional for project proponents to do so and get biodiversity credits for each taxocenosis they chose to assess. This choice is dependent on multiple factors including the project characteristics (for regenerative agriculture we can expect an increase in pollinators, while for water restoration projects amphibian diversity would be more interesting, for instance), the Project proponents' own interests and capabilities, etc.
11		• Do you want to consider it in the future?	We are already open to projects assessing any taxocenosis.

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12		• I saw that you are using camera traps on some sites, what about bioacoustic & DNA analysis?	For biodiversity yes, acoustic detection is useful for (singing) birds, bats, amphibians, some mammals and insects. Camera traps are also indicated for mammals and sometimes they get some birds too. And DNA analysis are very powerful but also very costly. The aOCP sets the principles and guidelines for the sound assessment of Projects' impacts, at the same time it remains flexible for the use of diverse techniques to obtain biodiversity information. Project proponents can propose their own methodology and we will evaluate and approve it, if compliant.
13		• Do you assess the soil quality?	Yes, the methodology for assessing carbon in soil considers multiple parameters such as Soil Organic Carbon percentage, cation exchange capacity, pH, and others. While the methodology for water restoration projects considers infiltration, instantaneous maximum runoff and hydric erosion.

DATE:

the reviewer sent his comments via email on 24/02/2023 without using the recommended format, the comments and aOCP's answers were latter gathered in this document by the aOCP operations team.

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Reviewer´s name(s) and signature(s)