Section 4

Tree planting now dominates (1) …….. and is often presented as an easy answer to the climate crisis, as well as a way for business corporations to (2)……. But unfortunately, tree planting isn't as straightforward as some people think. When the wrong trees are planted in the wrong place, it can do considerably (3) ……., failing to help either people or the environment.

Reforestation projects are currently being undertaken (4) …….. in many countries and it's crucial that the right trees are selected. (5) …….. should always be planted, typical of the local natural forest ecosystem and including rare and endangered species in order to (6) …….. It's important to avoid non-native species that could become invasive. Invasive species are a significant contributor to (7) …… and are often in competition with native species and may (8) …….

Restoring biodiversity that will maximise carbon capture is key when reforesting an area, but ideally any reforestation project should have several goals. These could include selecting trees that can (9) ……., improve the availability of food for the local community and maintain (10) ……. Meeting as many of these goals as possible, whilst doing no harm to local communities, native ecosystems and vulnerable species, is the sign of a highly successful tree-planting scheme. To ensure the survival and (11) …….., its vital to use tree seeds with appropriate levels of genetic diversity: the amount of genetic variation found within a species essential for their survival. Using seeds with (12) ……... generally lowers the resilience of restored forests, which can make them vulnerable to disease and (13) ……...

Choosing the right location for reforestation projects is as important as choosing the right trees. Ultimately, the best area for planting trees would be (14) …… that are in poor condition. It's better to avoid non-forested landscapes such as (15)……. or wetlands as these ecosystems already contribute greatly to capturing carbon. It would also be advantageous to choose an area where trees

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could provide other benefits, such as recreational spaces. Reforesting areas which are (16) ……..... should be avoided as this often leads to other areas being deforested.

Large-scale reforestation projects (17) …….. Making the right decisions about where to plant trees depends on having the right information. Having detailed and up-to-date maps (18) ……. for intervention is essential. Drone technology is a useful tool in helping to prioritise and monitor (19) areas of degraded forest for restoration. In Brazil, it's being used to identify and quantify how parts of the Amazon are being devastated by human activities such as (20)…….

A good example of where the right trees were picked to achieve a restored forest is in Lampang Province in Northern Thailand. A previously forested site which had been degraded through mining was reforested by (21) …….. together with Chiang Mai University. After spreading 60 cm of topsoil, they planted (22)…….. which included several species of fig, Figs are a keystone species because of the critical role they play in (23) ……. They are central to tropical reforestation projects as they accelerate the speed of the recovery process by attracting animals and birds which (24) ……..... This helps to promote diversity through the healthy regrowth of a wide range of plant species. Unlike the majority of fruit trees, figs bear fruit all year round, providing (25)…… for many species. At this site, for example, after only three rainy seasons, monkeys started visiting to eat the fig fruits, naturally dispersing seeds through defecation.

Reforestation projects should always aim to make sure that local communities are consulted and involved in (26) ……...

The restoration of mangrove forests in Madagascar is an example of a project which has succeeded in (27) …….. for the community. Destruction of the mangrove forests had a terrible impact on plant and animal life, and also (28)……., which was a major source of employment for local people living in coastal areas. The reforestation project involved hiring local people to

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plant and care for the new mangrove trees. Millions of mangrove trees have now been planted which has resulted in the return of a healthy aquatic ecosystem. The mangroves also act as a defence against (29) ……. caused by climate change. What's more, the local economy is more stable and thousands more Madagascans are now able to (30) …….

One other important point to consider …

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