

*The numbers in our Impact Report are based on the data provided by our partner, JustDiggIt.*

### **CO<sub>2</sub> sequestered:**

*JustdiggIt estimates that the average Farmer Managed Natural Regeneration (FMNR) tree absorbs 240kg of CO<sub>2</sub> over a period of 20 years.*

*JustdiggIt, in collaboration with a specialized external party – Face the Future <https://facethefuture.com/>, developed a model estimating absorbed CO<sub>2</sub> based on a growth model. This model takes into account detailed local conditions, providing a verified quantity of CO<sub>2</sub> absorbed by the trees at the ecosystem level. This is then translated into CO<sub>2</sub> absorption per tree. The estimated total amount of CO<sub>2</sub> absorbed over a 20-year period for an average FMNR tree is 240 kg, with an 80% survival rate. The assumption is that CO<sub>2</sub> absorption follows a more or less linear trajectory over the 20-year period, and the average FMNR tree, when rehabilitated, is 1 year old. Due to the survival rate of the trees, the maximum amount of CO<sub>2</sub> sequestered by each tree over its lifetime of twenty years is  $80\% \times 240\text{kg} = 192\text{kg}$ . This equals 0,192 tonnes of CO<sub>2</sub>. Due to the linear development of sequestration, the amount of carbon stored each year is 1/20 of the total amount of carbon over the lifetime, which amounts to 9,6 kg of CO<sub>2</sub> (0,0096 tonnes).*

### **Water retention:**

*To estimate water retention by Farmer Managed Natural Regeneration (FMNR) trees, JustdiggIt uses calculations and data from field and scientific research, in combination with local real time data.*

*Even though water retention is somewhat lower in the first years after the trees have been brought back and higher in the later years, the estimated average is 1371 liters per tree, per year.*

*As discussed i also asked Climate Focus, who is now working on advising us on the correct way of communicating our impact, to advise us on the accurate answer to the email below.*

### **Households benefited:**

*JustDiggIt calculated that each farmer has an average of 74 trees. The average household size in the project regions is 5-6 persons. This means that for every 74 trees that are brought back, an average of 1 household positively impacted!*

*The translation of CO<sub>2</sub> to flying hours and shower days are developed by Treebytree in consultation with JustDiggIt and is based on the most conservative estimations.”*