

156 MILLION TONS OF FOOD

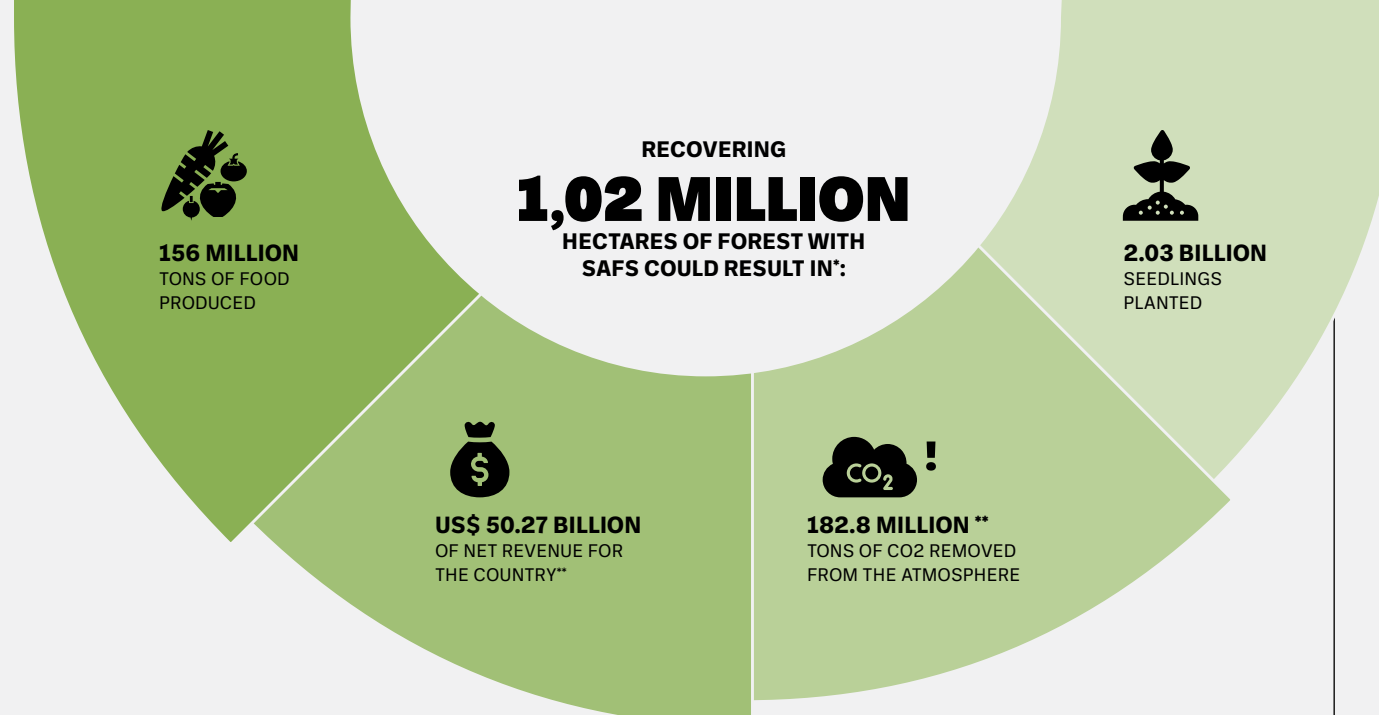
the good fruits from forest recovery

Recovering 1.02 million hectares of deforested areas with application of Agroforestry System models (SAFs) can entail a production of 156 million tons of food. This is the subject of a study by Instituto Escolhas, which revealed the potential benefits generated with the recovery of 12 million hectares of forest lands by 2030, a goal established by Brazil in the Paris Agreement.

Considering factors such as the natural regeneration potential of each biome and region, economic viability and the current legislation*, the study proposes a combination of ecological restoration, food and timber production to enable to meet the established goal by Brazil.

This is where the recovery of 1.02 million hectares of deforested Permanent Preservation Areas (PPAs) comes in, mainly at small family properties, through the implementation of SAF models with food sources from different country regions, reconciling nutritional security with promotion of ecosystem services.

* With observance of the Forest Code (Federal Law 12.651/2012).



SAFS CAN BE EXTREMELY ADVANTAGEOUS FOR FAMILY FARMERS

The food production diversification enables investment returns in the short term, thanks to the harvesting of fast-growing agricultural crops, as well as periodic income in the long term, due to the ongoing production of perennial species.

* Considering a timeframe of 30 years and beyond, the period needed to fully implement the models suggested by the study. ** US\$ 1 = R\$ 5,17 (Source: BCB, 06/10/2023).

INCREASING AND DIVERSIFYING ANNUAL FOOD PRODUCTION IN BRAZIL

To compose the SAFs, the study defined models according to the ecological characteristics and productive aptitude of each country region, considering a total of foods from **43 types of crops and extractive fruit and nut varieties**.



In the scenarios resulting from the application of the models, with the planting of **green corn, pine nuts, cumaru seeds (tonka beans), tree fruits (buriti, jaboticaba, mangaba), yerba mate and palm hearts** would surpass by over

100% THEIR CURRENT PRODUCTION IN THE COUNTRY.



Other types of agricultural products with official data available for direct comparison would have variable increases – for instance,

27.4% FOR COCOA, 40.4% FOR CUPUAÇU FRUITS AND 71.1% FOR THE PEQUI FRUITS.



For short-cycle crops, grown in the first three years, the increase would be

11% FOR BEANS, 12.4% FOR BANANAS AND 28.9% FOR CASSAVA.

INVESTMENT IN AGROFORESTRY CAN RESULT IN SIGNIFICANT RETURNS

Calculations from the study resulted in revenues of US\$ 50.27 billion for the country in consequence of investing US\$ 6.4 billion for implementation of the SAFs. The return therefore exceeds almost eight times the amount to be invested.



The total production of the SAFs would therefore represent an average of

5,2 MILLION

tons additional food produced per year, increasing the quantity and diversity of food for the Brazilian population.