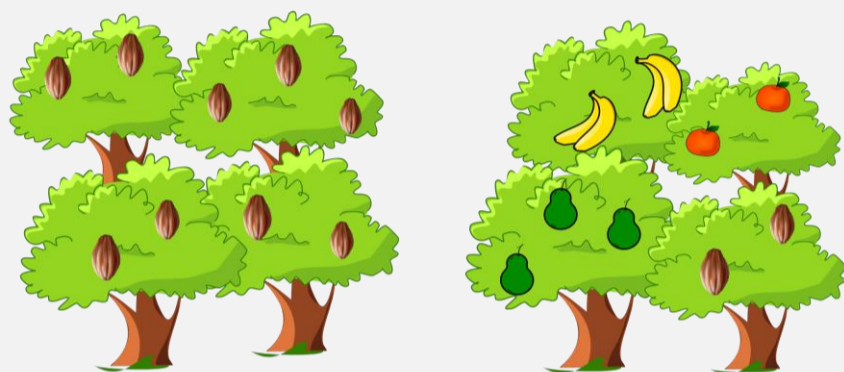


Effects of Agroforestry on Food Security a Case Study of Cacao Production in Ecuador

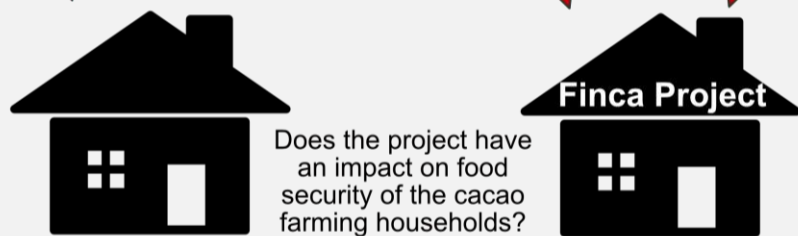
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1 Motivation & Method

The need for smallholders to renovate their old cacao plantations led to the implementation of a dynamic agroforestry project called FINCA in Ecuador. Effects of this project were analysed within this thesis.



Agroforestry systems have the potential to diversify a household's income and enhance its self-sufficiency comparing to a monoculture.



Coping Strategy Index

Which coping strategies are used by the households and how often?

Household Dietary Diversity Score

What foods are consumed on a normal day by each household member?



VS.

Product Diversity Inventory

How diverse is the farm set up?

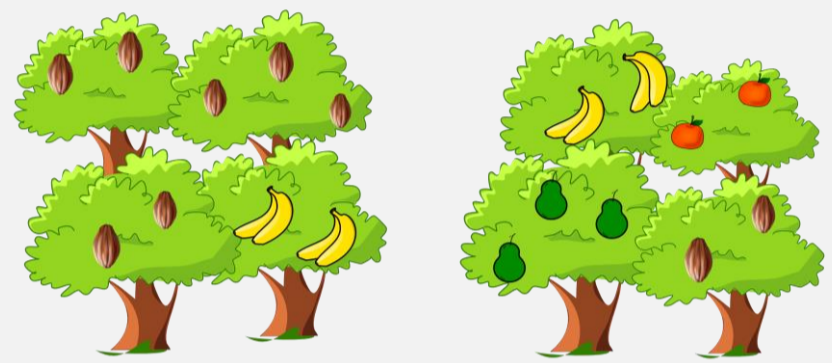


Income Distribution

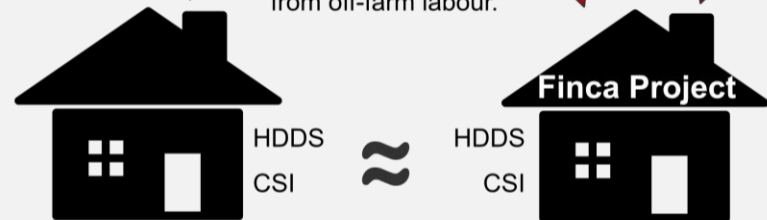
Where does the household's budget come from?

2 Results

In reality, the non-participants and the FINCA project participants are more similar than expected regarding product diversity. There was no farmer cultivating cacao in a pure monoculture within the interviewed households.



There was no trade-off found between project participation and time spent for off-farm labour hence both groups derive about 20% of their income from off-farm labour.



Due to traditional home gardening or possible spill-over effects, no correlation was found between food security and the project participation. The absence of a negative correlation can be interpreted positively, because within the first years after implementation of an agroforestry system, the farm can be exposed to additional (financial) risks.

HDDS = Household Dietary Diversity Score, CSI = Coping Strategy Index

3 Conclusion

Expanding the market for agroforestry products is desirable to maximize the potential of agroforestry systems on food security. Further, it is advisable that farmers maintain accurate records of their sales to enable informed decision making.

4 Contribution to Sustainable Food Systems

Agroforestry practices are recognised as a promising way for boosting cocoa production, whilst maintaining the ecosystem services and without expanding agricultural land. Further, they have the potential to mitigate climate change. As agroforestry projects gain popularity, thorough analysis of their impact proves valuable for project expansion and implementation in different regions.

