

Using **Data** to Increase Farming **Productivity**

CASE STUDY





Natural Resources



Data Analysis

PUTTING SMALLHOLDERS ON THE MAP

OPTEL's GeoTraceability solutions help organisations better know the smallholders they are supporting. The information gathered by customers using these tools allows them to adapt interventions to where they are most needed and accurately report directly to shareholders and customers. Our GeoTraceability solutions do this through a suite of data collection tools (including GPS mapping and mobile applications), traceability systems and online data hosting. Once the data has been collected using our system, or a third-party system, the data can be viewed, analysed and downloaded using the web platform.

IVORY COAST PROJECT OVERVIEW

Aim: Understand what influences cocoa farmers' incomes

Producers: 3,650 farmers across 24 cooperatives

Process:

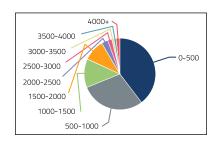
- 2 months developing a robust survey
- 3 days training data collectors
- 2 months collecting farmers' data using our mobile application. The app is user-friendly and so we were able to use local data collectors who had never used a mobile application before to collect data.
- Data uploaded to the web platform for analysis and reporting

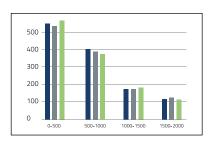


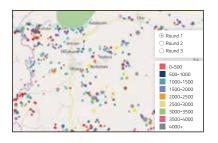
SOLUTION OVERVIEW

OPTEL's GeoTraceability web solution shows data in different visual formats (tables, bar charts and pie charts). The GIS platform allows the data to be viewed on maps. Below are three different ways of showing production data.

The GeoTraceability solution also allows analysis thanks to filters and pivot tables.







HOW TO INCREASE SMALLHOLDER PRODUCTIVITY IN A COST-EFFECTIVE WAY

THE FARM BUSINESS PLAN

GeoTraceability has developed a tool that generates business plans for smallholders, which can be used to support productivity enhancement projects. The tool generates individual farmer plans and aggregated plans, summarising the recommendations made to all the farmers on the project.

SOLUTION TO THE PROBLEM:
"TOO MANY FARMERS, TOO FEW AGRONOMISTS"

TAILORED FARMER PLANS SHOWING:













Activities

Labour

Inputs

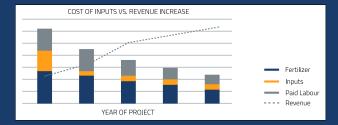
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An individual plan tells a farmer what activities to do and the increase in productivity they can expect.

SOLUTION TO THE PROBLEM: "MONEY WASTED ON HOPEFUL INVESTMENTS"

AN AGGREGATED PLAN SHOWING OVERALL INVESTMENT:



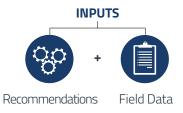
The aggregated plan provides investors and shareholders with information they can use to design field intervention projects. This can support financial and logistical planning.

CONTACT US

For more information on our Fast Track solutions for serialization, visit www.optelgroup.com/fast.

HOW DOES THE TOOL WORK?

- 1. **Set recommendations**: An expert agronomist lists in the Farm Business Plan Builder the actions a farmer can take to improve productivity, including the cost, time, inputs, etc., needed for each activity.
- 2. **Upload data**: Key information for each farmer and their field(s) is uploaded to the FBPB.
- 3. **Compare scenarios**: Compare and select the one that best matches your objectives.
- 4. **Click a button**: At the click of a button, the FBPB applies the "rules" for each recommendation to data on each individual farmer. This produces individual farmer plans and an aggregated plan.





FARM BUSINESS PLAN BUILDER





Community Plan Individual Plans