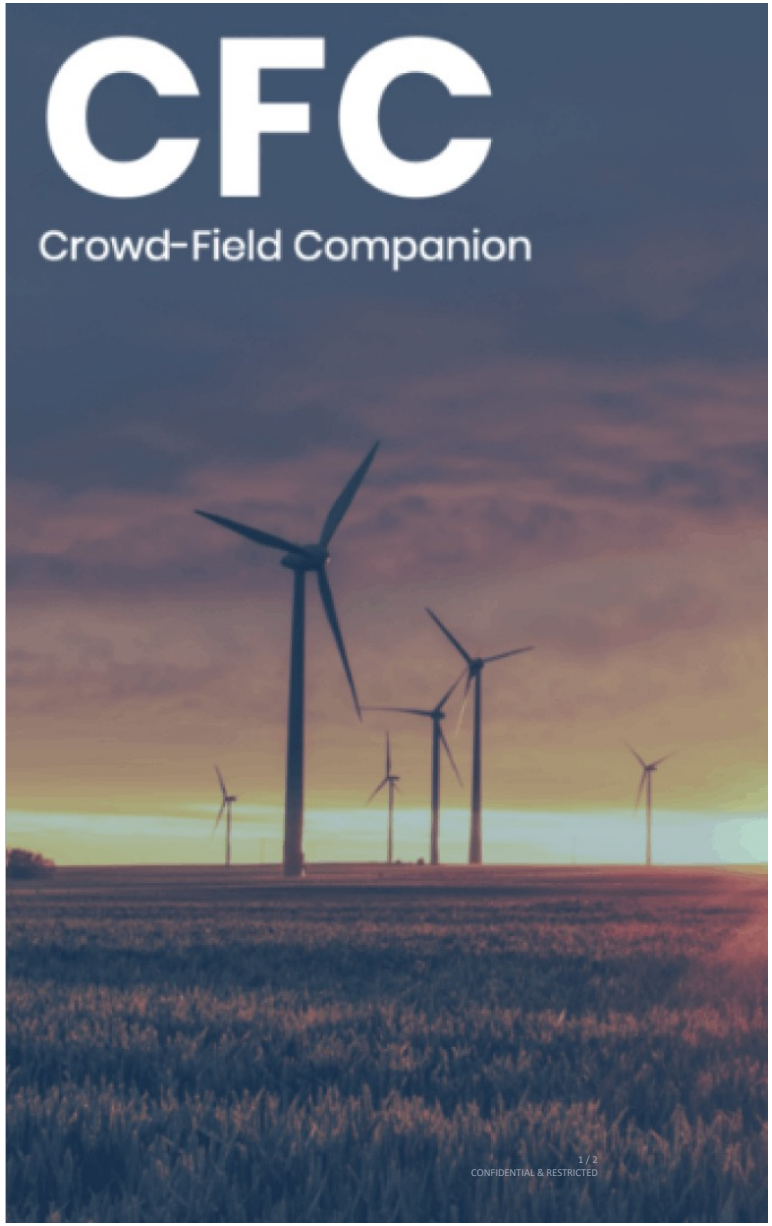
# Crowd Field Companion

## Blockchain-enabled reputation making for smart farming and smart logistics




This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 957228.

# Research Summary

*Crowd Field Companion: smart farming meets smart logistics*
*Hypothesis: Crowd-sourced reputation can valorise self-reported impact data in agri-food value chains*

## Scope

Where the research is applied: the location, whether it is specific to a nation, region or international; the industry sector (or sectors) to which the use case can be applied or the technology implemented; and any applicable laws and regulations.

With the Crowd Field Companion project, we do this for both human and computationally resourced input across the food value chain, in an open process of parallel innovation discovery.

## Objectives

The CFC project offers an onboarding methodology for smart farmers and smart logistic operators into a reputation-based agri-food co-creation environment. This environment offers opportunities for emerging technologies and scientific knowledge to experiment along with industry experts, and to field-test new information systems with the common purpose of providing climate-smart reputations scores for provenance and practice.

## Stakeholders

Those who are impacted by this case study:

The Crowd Field Companion project seeks to achieve such acceleration and to distribute benefits throughout the value chain, rewarding the smallest and largest actors who take their share of responsibility.

Affording stakeholders along the holistic value chain access to qualitative and quantitative data points.

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# Enterprise DLT Blockchain and Web3

A distributed ledger technology system is a decentralized system for recording transactions with mechanisms for processing, validating and authorizing transactions that are then recorded on an immutable ledger.

## Alastria Public-permissioned blockchain

The sovereign digital identity protocol developed by Alastria has become a benchmark for Europe. The participants' identity data is authenticated and bound to their digital identity, which is then authorized to perform specific actions that are recorded on the public blockchain.

## Digital Wallet

The wallet stores the user's digital identity used to access the system and also record the NFTs they acquire by participating in research projects, completing tasks and attending co-creation events.

## NFT

Non-fungible Tokens (NFTs) can be used to associate a token with a project. The holder of said token can inherit its properties to participate in the project and vote on project outcomes. Tokens are also awarded for completing research project tasks and will be used to evalute a reputation score for participating in the project.

ALASTRIA

ethereum

ORIGINCHAIN Networks

AGRI LEDGER


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# Land backed field-impact reporting

## 25 new agri-food innovation ecosystems

Educate the nation of the positive effects of regenerative collective actions toward a positive climate future.

## 93% 1st time wallet-users

Massive scale increase in agri-food adoption of blockchain, DLT and Web3 on farms and in land managment schemes.

## Smart farming & Smart logistics - Get connected

Remote, rural and off-shore marine locations can not depend on consistent network connectivity or even electrical supply. Off-line first service and low-performance criteria are pre-requisite.

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# Process

## Discovery

Download the app and discover a world of Web3 climate action and collaboration.

Make your own reputation as a cutting edge researcher in regenerative, pro-climate land management practices.

## Research

As part of the CFC innovation ecosystem you and your research colleagues will participate in applied field research, making a reputation for yourself and for your land in relation to novel climate impact reporting methods.

## Rewards

You can earn rewards for your engagements and upskilling. These rewards will be given as NFT micro-credentials and are evidence of participation, usage and contributions to the CFC ecosystem.

## Peer review

As a member of the CFC ecosystem you have an opportunity to validate, rate and demonstrate trust in the outcome of your own project and that of all others in the crowd-sourced reputation-making process.

Promote user engagement


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# Field Research Assignments - Levelling-up

### Basic

Level 1: Introduction -
Title of research assignment and submitting organisation

### New User

Level 2: Onboarding -
How to use the App to complete tasks

### Expert User

Level 3: Engage to succeed. Meet the targets, goals and assignment objectives

### Guru

Level 4: Understand how this field research relates to climate action. Assignment complete.

Gain meaningful insights into land managment and climate impact.
*Higher level achievements are given greater weight in Peer Review.


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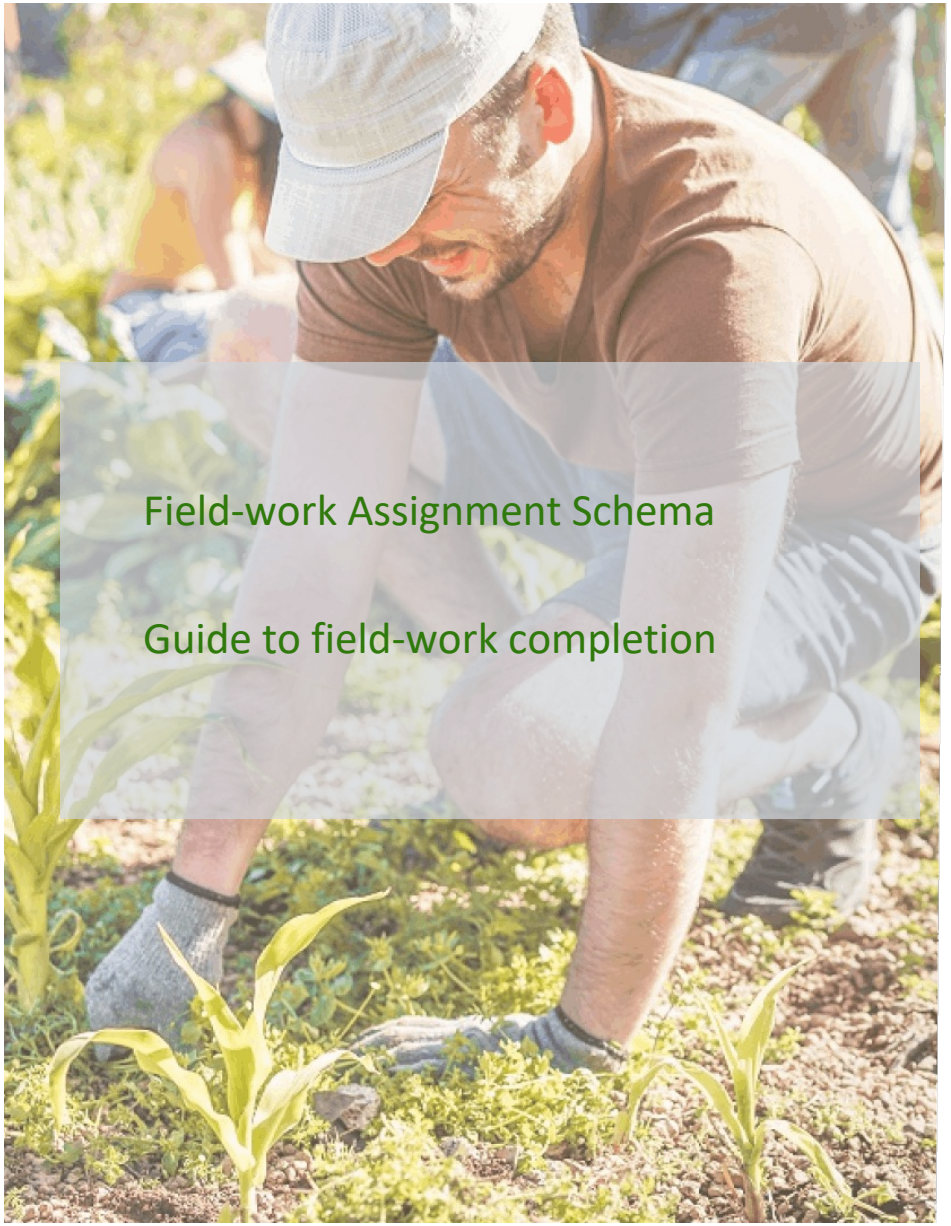


# Field work Assignment Schema

Farmers and field workers are very busy and tasks should be easy to complete, in the field. High performance and high availability are important non-functional requirements.

### Risks

How established is your research field? What are the known risks in your domain? How can your credibly inform novice users about your field of research and topic area?

### Mitigation

In what ways can risk be mitigated? What role might collective, cooperative oversight have in mitigating risk?

### Self Reporting

Valorising self-reported and self-published data in a low-trust digital environment is a concern. This is the context we work with at the CFC Ecosystem


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