Farmdiymoon Contract Whitepaper

Farmcoin Contract platform will bring fairness, transparency and accountability in contract farming projects.

Connecting sponsors with Thai's and Foreign amazing farmers in a peer to peer relationship; sharing financial, social and professional capital.

SMARTFARMDIY will make use of Blockchain technologies such as smart contracts and distributed ledgers.

Official v
(1.2) July - Oct
2020

Abstract

SMARTFARMDIY bring Blockchain Technology in 2020. Coin is “Farmdiymoon” has utilized Blockchain technology to facilitate the remittance of money

The use of data and information becomes increasingly crucial for the agriculture sector to improve productivity and sustainability. This paper outlines how we plan to use Blockchain smart contract technology in existing agriculture production methodologies in-order to create a level playing field in contract farming.

Farmers who engage in contract farming with individuals or organizations are often short-changed by off-takers with unfair contracts and pricing models. Offtakers benefit from the farmer’s labor, they leave the farmer with long-term debts, unpredictable and highly variable payments and in extreme cases bankruptcy.

The focus is on using smart contract technology and Blockchain digital tokens to bring fairness, transparency and efficiency into the contract farming. The Farmdiymoon Contract will allow farmers to conduct contract farming with sponsors from anywhere in the world in a fair, transparent and non-predatory way. The farmer’s produce will still be sold locally within the farmer’s marketplace.

Contents

1.Background

1.1 The Farmdiymoon Blockchain 2020/2021

FARMDIYMOON “Farmcoin” use the Blockchain technology, farmcoin was able to conduct Farmers provided farming inputs to selected farmers in Thailand. In this program, digital Coin rewark were used to redeem farming inputs at various retailers nationwide.

1.2 The Farmcoin Digital Coupon

The Use of The Farmdiymoon Digital Coin reward 2020/21

The digital Coin was used as a digital token for farmers to redeem inputs , discount product and used for payment our all product. The digital coin coupon focused on transactional transparency. This solved counterparty risk and the risk of not receiving fair payment that farmers face, in this case farming inputs.

1.1 What is Contract Farming?

Contract farming can be defined as agricultural production carried out according to an agreement between a buyer and farmers, which establishes conditions for the production and marketing of a farm product or products. Typically, the farmer agrees to provide agreed quantities of a specific agricultural product.

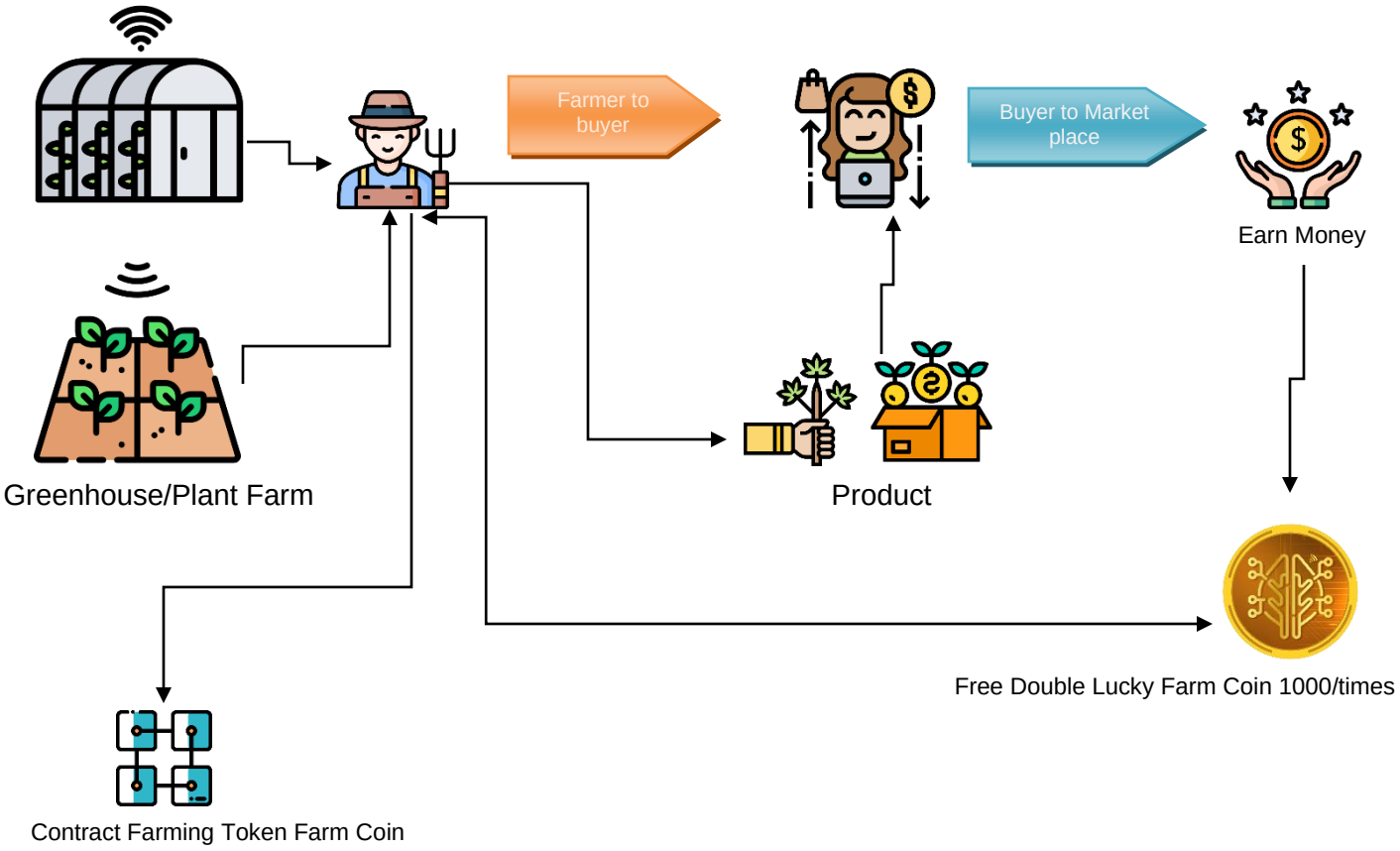

Diagram. Contracting Farmer to Buyer Flow Chart

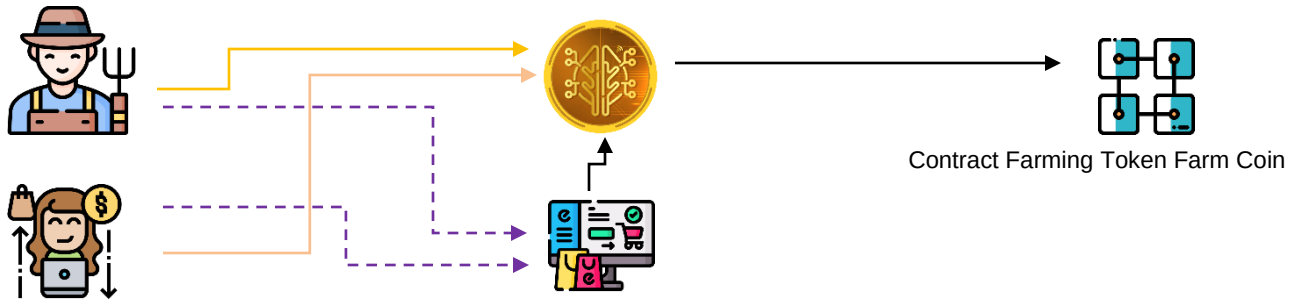

Diagram. Farmer or Buyer purchase Farm DIY's product. Then receive free reward coin 1000 coin/times

Contract farming

The buyer can be a local or a transnational agribusiness (processor, exporter, retail outlet or shipper), a private plantation, a parastatal with its own production, or local merchants (greengrocers, wholesalers, hawkers, brokers etc.)

Contract farming allows the buyer a measure of control (decision-rights) over production without formally engaging in the farming activities. The allocation of risk depends on the terms of the contracts. As such, contract farming provides a response to market failures with respect to inputs, credit, insurance, information and outputs, by reducing the associated transaction costs, monitoring, transfer of goods and bargaining.

1.2 What Is Farmdiymoon Contract?

Smart Farm Contract technology creates fair & transparent farm contracts that give the consumer and farmer the best value.

1.6 Why the bsc-Blockchain?

bsc was launched in 2015 as China's first public Blockchain. Recent improvements to the network have made it a compelling alternative to Ethereum for smart contracts and distributed applications.

We are able to create smart contracts on the BSC Blockchain and one of the programming languages that BSC supports is Python. Python is a popular and versatile language, this enables us to get more developers involved in our work. Contract code will be open source.

2.What is the problem?

2.1 Lack of fairness, transparency and accountability in contract farming

The industry and the powerful corporations who control the majority of the contract farming market, use these contracts to benefit themselves while unfairly shifting production risks onto farmers. This often leaves the farmers in long-term debt, unpredictable and highly variable payments, small or negative revenues and bankruptcy.

Research has shown that farmers in the current system are being taken advantage of through unfair contracts. The Farm Contract ecosystem will play a big role in ensuring that farmers are treated fairly including receiving fair compensation for their work.

3.The Solution

3.0 The Farm Contracts

has developed an application that allows buyers to purchase farming contracts for agricultural projects in Thailand from anywhere in the world in a peer to peer nature. Smart Farm Contract technology creates fair & transparent farm contracts that give the consumer and farmer the best value. Contract farmers will get funding for their projects while everything is being monitored transparently using the Blockchain.

Farm will leverage on the Blockchain technology to manage the contractual obligations between the buyer and the contract farmer as well as utility tokens for the distribution of farming inputs. The smart contract will also be used to record participants' performance ratings for future contracts.

In the architecture design the buyer funds the farmer who then uses the utility token to redeem farming inputs from the Suppliers. This information is added into the Blockchain smart contract, creating a transparent environment where all participants can trace the contract transactions.

3.1 Farm Contract compared to traditional systems

	Farm Smart Farm Contract	Traditional Systems
Fairness	Using Blockchain technology, all the prices along the farm contract value chain can be made available publicly, therefore making it possible for all the participants to know exactly what the fair market price is for buying contracts, selling produce, sharing profits etc.	**Big companies control the majority of the contract farming market. These companies use these contracts to primarily benefit them and shift production risks onto farmers. In most cases, production risk is solely borne by the farmer. This leaves the farmer in crippling debts.**
Transparency	An irrevocable digital ledger of transactions can be created by integrating smart contract technology into the contract farming. The movement of funds, redeeming of farm inputs, selling of produce can all be tracked and audited.	**The predatory nature of the farm contract may not be transparent at the disadvantage of the farmer and the final consumer of the produce.**
Digital coupons	Introduction of Digital coupons which offer transactional transparency to participants using the blockchain and redistribution of power in the agriculture supply chain.	**Traditional systems use fiat currency which is prone to fraud and corruption risk. Further, the traditional systems can be easily manipulated and funds directed for other uses.**
Access to finance	**Farmers get access to a diverse pool of funds that were never accessible before because of the peer to peer nature of the smart contract. Sponsors world over can also get the opportunity to fund small scale farming projects.**	**Access to the same pool of financial opportunities with limited diversity.**

3.2 Farmdiy Contracts Overview

Farmdiy has created an ecosystem of different stakeholders in order to create a complete Agriculture value chain.

Users Registration

This is the process where the smart contract participants get registered on Farmdiyi.e. the contract farmer and buyer.

Projects listing

A contract farmer will list the projects they intend to do as crowdfunding projects. These projects will not be registered on the Blockchain until such time the farmer and a buyer agree on the applicable terms and conditions and enter into a binding contract.

Farmdiy Contract

Once the two parties have agreed, the buyer will proceed to purchase the contract. By so doing, the buyer will fund the contract and create an address with a Digital Coupon balance which will be the Blockchain Utility Token, to be used to redeem farming inputs and run the contract until its expiration.

Digital Coupon (see next section)

At this stage the farmer will use the digital coupon to redeem farm inputs from suppliers which redemptions will be recorded on the Blockchain contract.

Farm Project

The farm project will commence once agreement between buyer / sponsor and farmer is in place. As part of the terms and conditions, the buyer will be kept abreast of all developments until the produce is ready.

Closing of Contract

The contract will run subject to the agreed terms and conditions for example, if the agreed contract duration is 90 days, after 90 days the contract will change its status from In-progress to Complete. Once the contract has lapsed, both the buyer and farmer are rated by the smart farm contract technology based on their performance which rating will determine their readiness and qualification for the next farm contract.

In accordance with the agreed terms and conditions of the contract, fees are collected for the Farmer, Buyer and farm Contract Buyers are given returns up to their principal sponsorship, any returns beyond.

3.3 Farm Digital Coupons

Transparent distribution of farm inputs.

Project Funding and coupon generation

Digital coin coupons generated by smart farm contract.

Local supplier payments

Farm pays supplier upfront from a local bank account.

Digital Coupon Distribution

Blockchain utility token distributed to participating contract farmers through the Metamask Application.

Coupons redeemed for farming inputs

Contract Farmer redeems coupons at supplier for farming inputs like fertilizer using the Farm Application and Supplier Point of sale.

Instant Settlement

Instantly settling the transaction and updating the Smart Farm Contract. Funder is notified of updates and can verify them on the Blockchain.

Transparency All transactions are available for audit and traceable through the Blockchain smart farm contract.

3.4 Token Economy

The Utility Token For The Global Black Community

The Token Name FARMCOIN
Token Symbol/Ticker : SFM
Token Decimals : 8:
Token Type Token
Token Total Supply : 100 000 000 (100 million)
Token Initial Amount : 100 000 (100 thousand, 0.1% of supply
Token Blockchain :BSC Blockchain
Token Usage : BSC Digital Coupons for adding transparency into contract farming using the Blockchain.
Token Users : The Global Black Community, Contract Farmers, Farm Input Suppliers.

3.5 The FARMCOIN Contracts

Farm Contract Test Net First Release Summary v 0.1

Contract Address : AZ4bDeyyq6mCWXoNP8EQS3CYByfS27dfto
Transaction:
https://bscscan.com/token/0x9082fa08c1ff6ead21d983a361c09c4e5f7a42e8?fbclid=IwAR3rm_FxiuncUMdMUdbod-XozKXV5cdMFpDPGMb56CII_GMnkVNfqkvMFAE
Smart Contract :
0x9082fa08c1ff6ead21d983a361c09c4e5f7a42e8

Data will be recorded into a traditional database first for a better user interface and only crucial data will be added into the neo smart contract memory. For example a farmer ID is entered into the contract whereas a farmer name , surname email etc will be on the database.

3.6 Smart Contract Features

farm contract creation

- This feature is to join a farmer and a contract buyer into a smart farm contract.
- The contract has farmer, buyer, project, balance, status and ability to add additional data that may be required.

Farm Contract Balance (Digital Coupon)

- Each contract has a numerical balance of the utility token that will be used by a farmer to redeem farming inputs from suppliers
- This is part of the Digital Coupon.

farm contract progress

- All contracts will have a status depending on the stage at which the farm contract is.
- Participants will be updated of progress made until completion and conclusion of the contract.

farm contract Participant Rating

- All participants in the contract can be rated based on performances. This rating includes performances on previous/past farm contracts undertaken by either of the participants.
- This SMARTFARMDIY contract allows the ability for each and every entity to be rated.

- It makes use of the weighted arithmetic average : an average resulting from the multiplication of each component by a factor reflecting its importance.
- This is a powerful feature as buyers , farmers and even the contracts themselves can be rated against a lot of variables and data points

farm contract ownership transfer

- Ownership of the contract is transferable i.e. all rights and title to the contract will be transferred to the new owner.

farm contract delete

- Contracts can also be deleted which functionality is a preserve of the administrator only.

3.7 Conclusion

To solve the problems that have plagued the contract farming agribusiness we propose a smart contract which records historical and present transactional data. The results of our pilot project demonstrate that participation in our Smart Farm Contract can increase small commercial farmers' income in circumstances where terms of the contract are clear to the participants. Farmers in Smart Contract report higher incomes. Access to produce market information has been shown to have positive impacts on the welfare of the participants.

Farm Contract is the way to GO for empowerment!

References