

Agriculture Chain

**ECOLOGICAL
BREEDING**

**POWERED
TECHNOLOGY** **BY** **BLOCKCHAIN**

**AGRICULTURE CHAIN  AN INTEGRATION OF
ECOLOGICAL BREEDING SUPPLYING,
MANUFACTURING AND MARKETING**

BLOCKCHAIN SOLUTION WHITE PAPER

Table of content

1. Overview of the agricultural breeding industry

2. Pain points in the agricultural breeding industry

2.1 Safety issues in farming

2.2 Traceability

2.3 Sales Channel: Unbalanced Supply and Demand

3. Agriculture chain

3.1 Advanced planting and breeding ecology

3.1.1 Organic feed cultivation

3.1.2 Ecological farming

3.1.3 Core: Blockchain Technology

3.1.4 Innovative integrated marketing model

3.2 Production and sales integration-quantum e-commerce platform

3.2.1 Local market

3.2.2 Surrounding market

3.2.3 Member Market

3.2.4 Blockchain empowers community ecology

3.3 Insurance

3.4 Combined with the incentive mode of digital currency

3.4.1 Digital currency adoption

3.4.2 Incentive mode of digital currency

3.5 Combining the traceability of the blockchain

4. Digital currency ecology

4.1 Agricultural foundation

4.2 Digital Currency Applications

4.2.1 Buy Products-Quantum Food

4.2.2 Points conversation

4.3 Coins distribution

4.3.1 Distribution plan

4.3.2 Coin Distribution

5. Overall technical architecture

5.1 Agricultural Public Chain

5.2 Core technology

5.3 Structural design

5.3.1 Basic Layer

5.3.2 Core Layer

5.3.3 Platform Layer

5.3.4 Application Layer

6. Core team members

7. Development route

8. Notice of Risk

8.1 Liquidity Risk

8.2 Market Risks

8.3 Compliance Risks

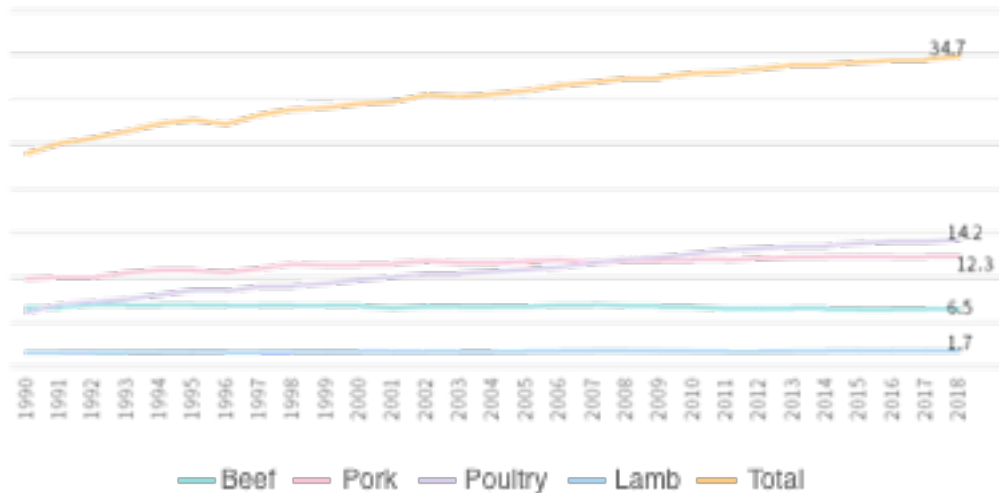
8.4 Security Risks

Disclaimer

1. Overview of the agricultural breeding industry

Since the 1990s, various countries around the world have focused their work on economic development. The rapid economic development has greatly driven the growth of disposable income of people, which has a direct impact on global meat consumption, and per capita meat consumption has increased year by year. In 2018, global pork consumption reached 12.3 kg / person. Especially for Chinese consumers, pork is one of the most common animal foods, and it is adamantly demanded by the Chinese people.

1990-2018 global meat consumption line chart (kg / person)



Source: OECD-FAO Agricultural Outlook, iiMedia Research

Agriculture is the foundation of China's national economy, and animal husbandry is one of four major sub-industries of agriculture: planting, forestry, animal husbandry, and fishery. In 2018, China's total output value of animal husbandry was 2869.74 (411.49) billion yuan (USD). As a large agricultural country, China's animal husbandry industry has a huge overall scale. At present, the total output value of the industry is stable at about 3 trillion yuan. In 2016, the State Council issued the "National Agricultural Modernization Plan (2016-2020)", which clearly stated that by 2020, the value of animal husbandry output will account for more than 30% of the total agricultural output value. In 2018, China's animal husbandry output value only accounted for 25.27%. The "Plan" proposes to promote the adjustment of the animal husbandry structure with a focus on pigs and herbivorous animal husbandry, to form an industrial development pattern led by large-scale production and intensive management, and to take the lead in modernizing in the major production provinces (regions) of animal husbandry; speed up the development of herbivorous animal husbandry, expand the production of high-quality beef and mutton, strengthen the construction of milk source bases, and improve the quality of domestic milk and brand influence (1).

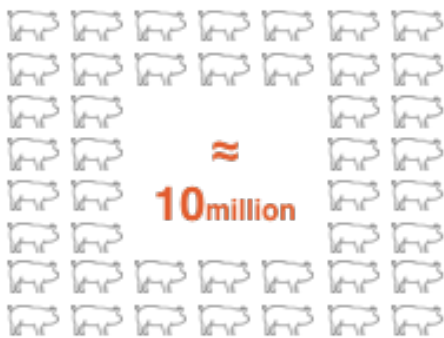
Pig breeding is the pillar industry of China's animal husbandry. Chinese pig breeding accounts for the largest proportion in the world, accounting for 56.6% of the global pig breeding volume.

¹ Prospective Industry Research Institute-"Analysis Report on Prospects and Investment Strategies of China's Animal Husbandry Market"

In 2018, China's pig production value was about 1.6 (.23) trillion yuan (USD), and the pig industry has a large volume and optimistic development potential. In the future, as the segmented companies continue to integrate and grow, the professional and large-scale process of pig breeding will continue to accelerate. Since the outbreak of African swine fever in August 2018, China has culled 10 million pigs, in order to stop the spread of the swine flu. In 2019, China's current pork production continues to decline, and it is necessary to increase pork imports from other countries to fill the supply gap.

From March 4 - 9, 2019, China purchased the largest American pork in the past two years, reaching 24,000 tons.

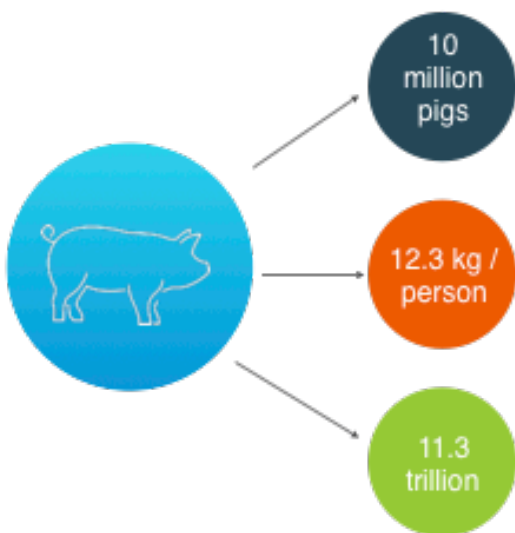
2018-2019 Number of pigs culled in China
(Ten thousand)



China's weekly pork purchases in March 2019
(10,000 tons)



Data Sources: USDA, Intl Fcstone, IIMedia Research



Since the African swine fever in 2018, China has culled 10 million pigs, and the market is severely under-supplied.

Global pork consumption reached 12.3 kg / person, and it is the rigid demand of Chinese people.

China's pig production value was about 1.6 trillion yuan, and the pig industry has a large volume.

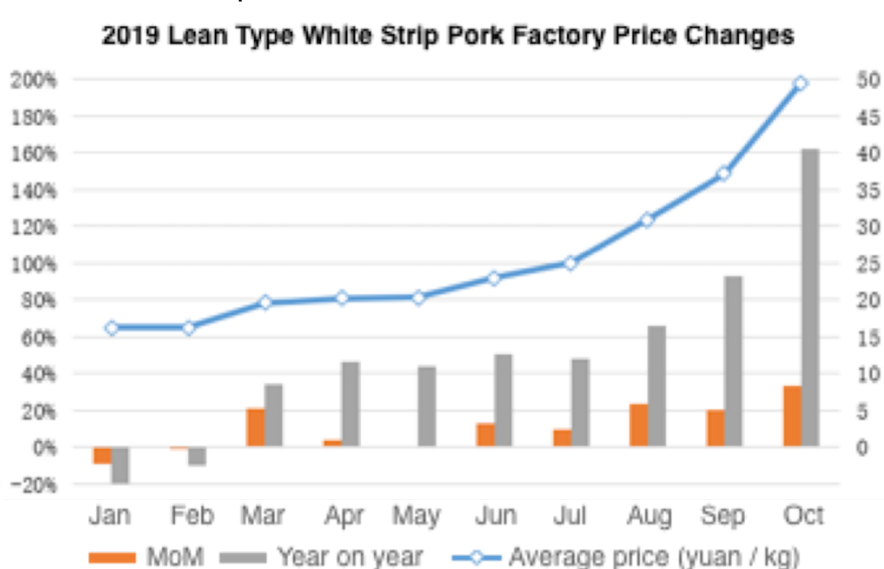
Since April 2019, the pig inventory remains affected by the severe swine fever epidemic in Africa and has fallen by over 20% year-on-year, and by September 2019, it has fallen by 41%. The pig inventory has fallen to a historical low of 192 million heads, which means that in the coming year supply in the pig industry will show a sharp decline. It is expected that domestic pork production in 2019 will fall by 10-11 million tons year-on-

year, a decrease of about 20%. The number of pigs in the first three quarters dropped by 17.35% year-on-year, and the annual production volume was first high and then low. In the fourth quarter of the year, the year-on-year decline was even larger. The conservative estimate is that the annual slaughter volume will drop by 20% year-on-year. In 2018, the national pork output will be 54 million tons, corresponding to a drop of more than 10 million tons this year.

It is expected that the average sow inventory that can affect the supply of live pigs in 2020 will decrease by about 30% year-on-year, and pork production will further decline by more than 10 million tons, and the contradiction between supply and demand will increase. "Enhancing volume and profit" is the main line running through the 2020 annual market of the pig breeding sector. Based on an average cost of 15 yuan / kg and an average price of 30 yuan / kg in 2020, the average profit of self-reliance is expected to reach 1700-1800 yuan per pig.

It is expected that it will take at least 2.5 years for the production capacity to return to the equilibrium level. The corresponding production capacity equilibrium point will not appear until the middle of 2022 at the earliest. The corresponding pig supply will not be roughly balanced until 2022-2023. A conservative estimate is that 2020 The average price of pigs will reach at least 30 yuan / kg, and breeding companies are expected to share a high profit period of at least 2-3 years in the future (2).

At the same time, due to the price spillover of pork after the price rise and the substitution effect of food protein, meat such as chicken and beef has risen, and the increase is close to that of pork.



Data source: Ministry of Agriculture and Rural Affairs

≡ Founder Securities-Agriculture, Forestry, Animal Husbandry, and Fishing Industry Weekly Report: Short-term correction does not change the upward trend, and continues to recommend the breeding sector -191124



Data source: Ministry of Agriculture and Rural Affairs

In the next 10 years, China's animal husbandry industry will undergo a major strategic transformation, taking the lead in modernizing agriculture, becoming a pillar industry that guarantees food security and promotes farmers' income, and a basic industry that promotes the coordinated development of the national economy. Looking to the future, with China's support for agricultural modernization and the improvement of the level of animal husbandry in the future, with our technological and DNA input the efficiency of China's animal husbandry will increase. With the steady development of the domestic economy, the total output value of the industry will resume growth and exceed 3.2 trillion yuan by 2024.

2. Pain points in the agricultural breeding industry

2.1 Safety issues in farming

Consumers can't see the breeding process and feeding environment, the feed safety at the source cannot be guaranteed, the antibiotics for disease prevention are used arbitrarily, and consumers are too busy to work and don't have time to select assured meats.

Suspect meats and questionable sources of protein as found in many of China's open markets, have come under scrutiny, by the recent outbreak of the coronavirus that originated in city of Wuhan, in the Hunan province at the start of 2020. The coronavirus is a zoonotic virus, a disease process that is transmissible from animals to humans, that was previously unknown. Given this virus, along with all of the other swine and bird related virii, the food supply must be cleaned up. With the additional sources of exotic meats, as highlighted from the wiki below, and demand for a clean food supply, it becomes even more paramount and critical to ensure a safer food supply. Additionally, various problems in the breeding process have also resulted in meat food safety issues that have not been satisfactorily resolved.

https://en.wikipedia.org/wiki/Huanan_Seafood_Wholesale_Market quoted from the wiki: "... it primarily known for the sale of [bushmeat](#) (*ye wei* in Chinese) and other exotic animals due to the demand for such animals for consumption.^{[8][17]} A price list posted by one vendor on the popular Chinese review site 'Dazhong Dianping' listed 112 items including a number of wild animals.^{[18][3][19]} The *South China Morning Post* reported on 29 January 2020, that the market had a section selling around "120 wildlife animals across 75 species".^[20]

Besides seafood,^[17] items sold at the market included: [Badgers](#)^[21], [Bats](#)^[22], [Beavers](#)^[23], [Camel](#)^{[3][21]}, [Chickens](#)^[22], [Civets](#)^[24], [Crab](#)^[18], [Crocodiles](#)^[3], [Dogs](#)^[24], [Donkeys](#)^[21], [Emmental cheese](#)^[25], [Foxes](#)^[3], [Giant salamanders](#)^[3], [Hedgehog](#)^[25], [Herbs](#)^[25], "Koalas"^{[14][26][a]}, [Marmots](#)^[22], [Ostrich](#)^[7], [Otters](#)^[24], [Peacocks](#)^[3], [Pheasants](#)^[8], [Wild Pigs](#)^[21], [Porcupines](#)^[3], [Rabbit organs](#)^[27], [Rats](#)^[3], [Sheep](#)^[21], [Shrimp](#)^[18], [Spices](#)^[17], [Spotted deer](#)^[27], [Striped bass](#)^[18], [Turtles](#)^[18], [Vegetables](#)^[18], [Venomous snakes](#) (including [Bungarus multicinctus](#))^[28], and [Wolf](#) puppies^[9]."

In recent years, although China's food safety and health issues have improved, with the emergence of various food and drug safety issues, traditional inspections have become increasingly difficult to meet market norms and consumer requirements due to high demand. Food safety has also changed from small businesses in the past to large companies such as Sanlu and KFC. These problems have caused consumers to have a serious crisis of trust in goods.

2.2 Traceability

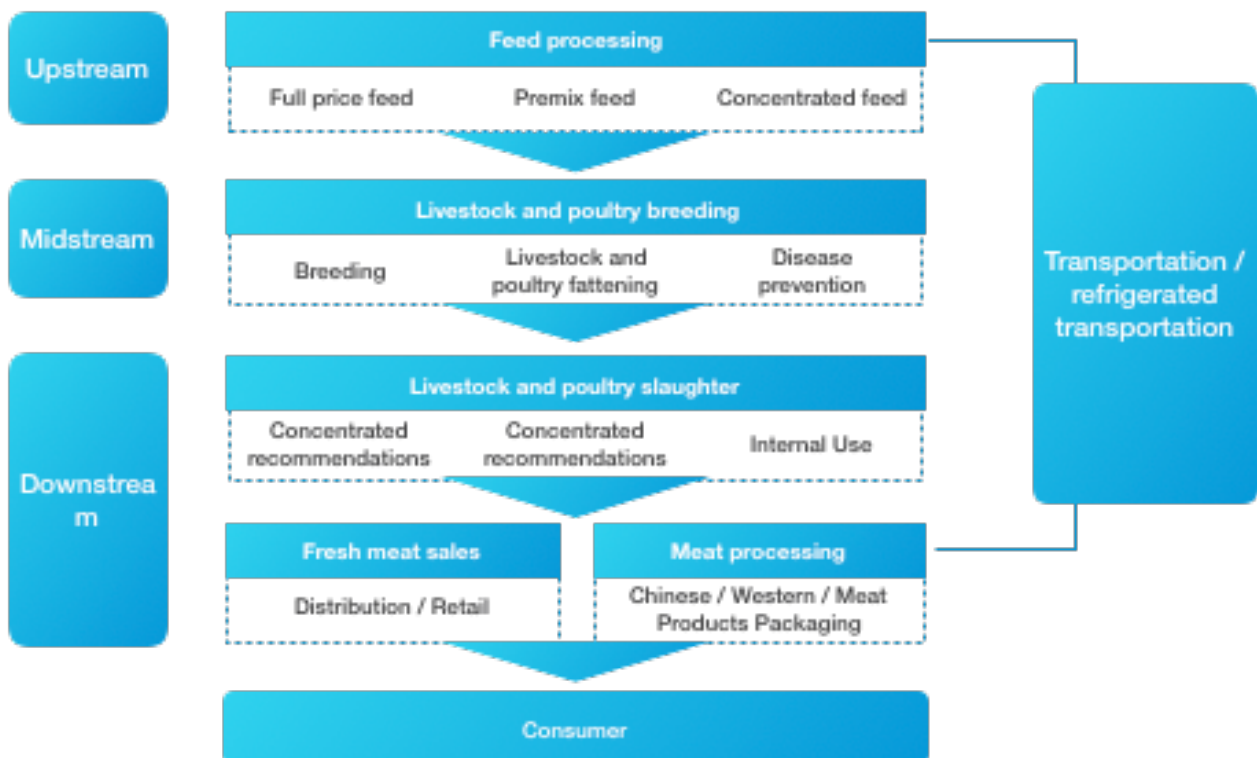
During the 13th Five-Year Plan period, food safety has become a major national strategy. With the implementation of the strictest "Food Safety Law" in history, various measures have been adopted in various parts of the country regarding food safety. The construction of food traceability system has become an indispensable item in food safety work, and traceability has become a guarantee label for product quality. With this, the market prospects of the food safety traceability platform are promising, and the industry will usher in great opportunities. The establishment of a food safety traceability platform guarantees the full traceability of food from the field to the dining table, and to a considerable extent curbs the circulation of fake and shoddy product, at the same time, it provides a digital dynamic tracking and monitoring system for consumers to provide data on the entire process of food production.

The proportion of traceable agricultural products in China is still at a relatively low level, and the traditional traceability system uses a centralized storage model. Under this model, who acts as the center to keep the record book becomes the key to the problem. Regardless of whether it is kept by the source company or the channel provider, since it is a stakeholder on the circulation chain itself, when the ledger information is not adverse to it, such companies are likely to choose to tamper with the ledger or lie that the ledger information is lost due to technical reasons, which will invalidate the traceability process. And in this information island model, each participant in the market maintains a ledger, and the owner can tamper with it or make up after the fact.

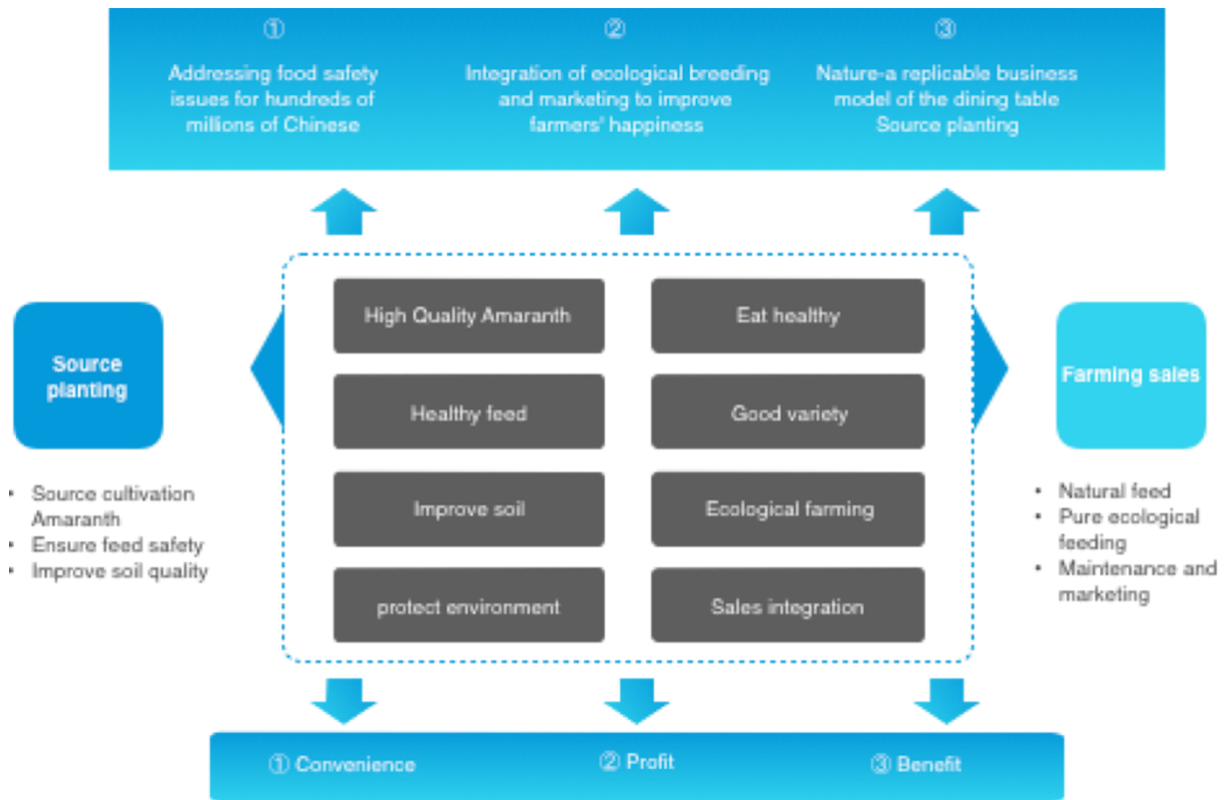
2.3 Sales Channel: Unbalanced Supply and Demand

From the supply side, many agricultural products are not sold well and there is no market for products. From the demand side, consumers are struggling to buy safe food, there is no demand for supply, and they rely heavily on imports. From the perspective of the industry, these are mainly due to the imbalance between supply and demand of agricultural products, and the main reason for the imbalance between supply and demand is due to the lack of sales experience and sales channels for producers in the three major links of agricultural production, distribution and consumption. Too fragmented and weak, the two sides cannot achieve information symmetry, cannot directly dock, and cannot determine the price. The two sides can only make rational but wrong choices: producers use all methods to reduce costs, the product is necessarily unsafe, and there is naturally no market; consumers can only choose products with lower prices, and distributors can only fight price wars. Create a vicious circle. In order to solve the above problems, agricultural product enterprises have created agricultural product e-commerce platforms through Internet technology, but customers of traditional agricultural product e-commerce platforms have difficulty retaining, converting, and expanding.

3. Agriculture chain - Ecological breeding agriculture supply, production and marketing integrated blockchain solution



3.1 Advanced planting and breeding ecology



3.1.1 Organic feed cultivation



3.1.1 Organic feed cultivation

Amaranth:

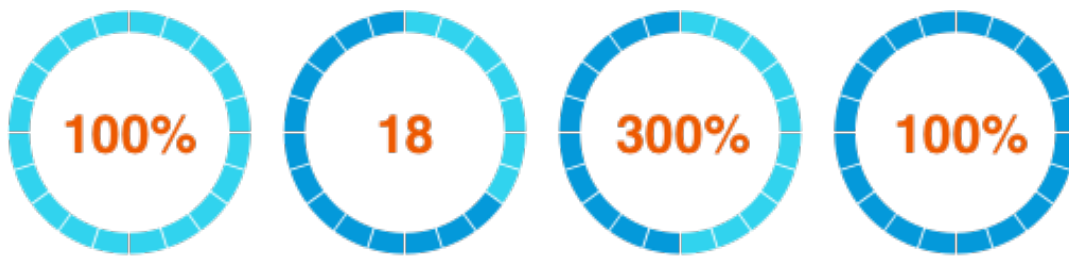
Since ancient times, grass feeding has been a tradition of domestic livestock and poultry. Grain feeding was born along with the needs of large-scale intensive industrial production. Therefore, grass feeding is in line with the natural habits of livestock and poultry. We provide forage feed that is most conducive to large-scale farming of livestock and poultry, amaranth non-GMO feed, which is a registered species of the Ministry of Agriculture, an annual high-quality food and herbaceous crop in amaranthaceae, dozens of senior agricultural experts have carefully studied it for more than 30 years. It is the research result of the Academy of Agricultural Sciences for fifteen years. It can be widely used in livestock and poultry fisheries and has great economic and social value.

Economic value: As a good grain and forage crop, it can adapt to different breeds of breeding, and carry out good breeding and purification projects of agriculture, livestock, animal husbandry and fishing.

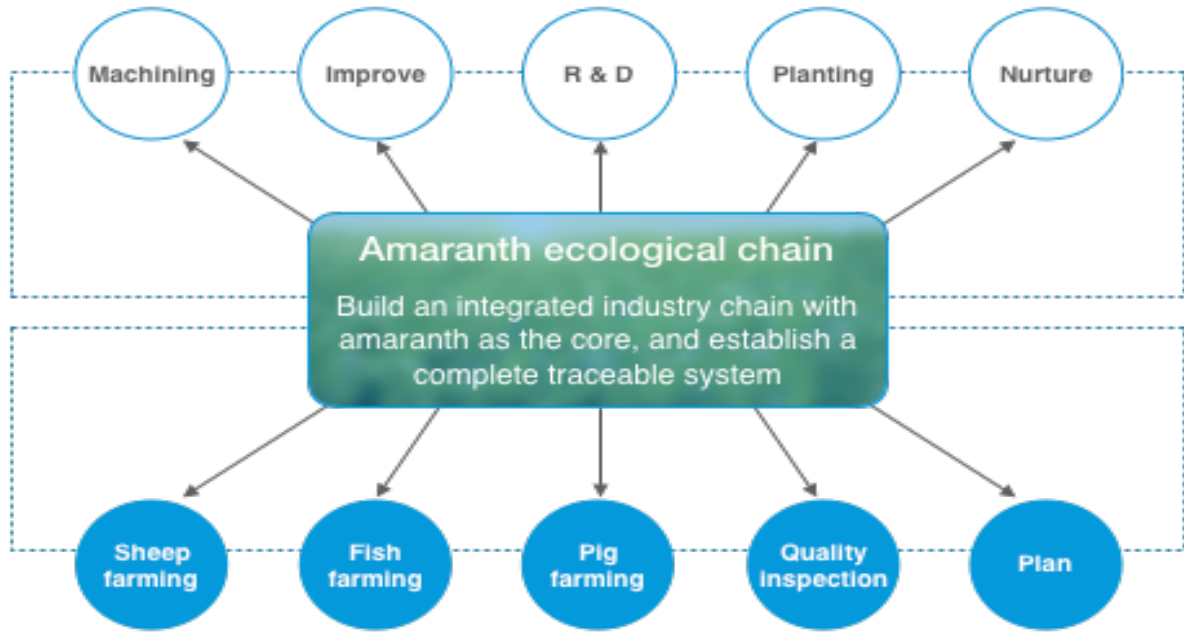
Social value: improve soil environment, repair land pollution, and effectively restore natural environment and water quality safety.

From the best-known protein feed- Amaranth and the best-known energy feed-whole plant corn, the two feeds are combined, plant nutrients are added, processed by non-ecological herb-free breeding technology, and microorganisms and enzymes are added. Using modern technology for package fermentation, it is made into the highest quality ecological full-price feed—amaranth fermented feed, which achieves zero residues, zero hormones, and antibiotics in livestock and fishery products. It contains 7% -8% squalene.

The amino acid composition, rich protein and various vitamins can establish intestinal health for livestock and poultry, improve digestion and absorption of feed nutrients, detoxify and enhance animal immunity based on traditional Chinese medicine theory, without antibiotics and any harmful additives, so that grass-fed the cost of aquaculture tends to be equal to that of grain-fed.



National Green Food Standard	Eighteen amino acid vitamins	Global leading level	Excellent taste
The Guangdong Provincial Green Product Certification and Testing Center and the nationally recognized inspection and testing agency have determined that the quality of pigs fed by ecological biological forage based on yarrow is fully in line with national green food standards.	Contains unsaturated fatty acid free radical ingredients, eighteen kinds of amino acids and various vitamins, and rare elements of minerals required for human health (calcium, iron, zinc, magnesium, Copper) ingredients.	Grazing pork has 60% lower cholesterol and 3 times more protein than regular pork! Calcium content is 1.68 times higher than ordinary pork! Various indicators surpassed Japan and the European Union with the strictest quarantine data, leading them to the world.	Amaranth fed pig, with 0 antibiotics, 0 hormones, and 0 drug residues. The meat is fragrant, the taste is pure, the nutrition is healthy, and the taste is delicious.



3.1.2 Ecological farming

Taking pig breeding as an example, we introduce excellent Spanish black pig breeds and crossbreed with high-quality breeding pigs to improve disease resistance and eliminate the abuse of antibiotics; scientific feed ratios, green feeding and high nutritional value; optimized breeding models and large-scale ecological breeding , Change the traditional captive culture to free-range combination, radically improve the meat quality and enhance the taste.

		
<p>Organic cultivation</p> <p>A natural high-quality amaranth base, from amaranth seeds, cultivation, planting research to breeding, is fully responsible by professors and academicians. No pesticides, no pollution, green planting, ecological cultivation, upholding the original intention to produce healthy and good feed.</p>	<p>Ecological farming</p> <p>Introduce excellent pig breeds, crossbreed with high-quality breeding pigs, improve disease resistance, and eliminate the abuse of antibiotics; scientifically match the feed, and maintain green feeding; optimize the breeding model, and change the traditional captive breeding to free-range combination to fundamentally improve meat quality and taste</p>	<p>Farming and marketing integration</p> <p>Our unique ecological breeding sales system has innovated the sales model, and can directly sell "grazing pigs, assured meat" to nearly ten million people directly through the platform to the dining table! The sales are fixed and the whole process is tracked to ensure that each mouthful of meat is safe and accessible.</p>

Modern and systematic pure green ecological farming

Using amaranth grass and ecological cycle is a strategic plan with more investment, larger scale, higher cost and harmonious ecology.

Use healthy feed to lay the foundation for livestock and poultry health

- Return to herb feeding to restore the immune system of livestock and poultry
- Add fermented feed to maintain gastrointestinal health
- Use probiotics and other microbial technologies to bring the flora into play



Amaranth planting	Feed processing	Pig breeding	Delicious pork
Continuously improve breeding technology, carry out variety improvement, and carry out large-scale amaranth planting	With its own packaging machinery technology and feed fermentation technology, the success rate of feed packaging fermentation is over 98%.	The young pigs are concentratedly raised, and the adult pigs are free-range. The pigs can achieve zero antibiotics, hormones, and pesticide residues, which are recognized by the market.	Rich in nutrition and good taste, real natural white pork, leaving out the extra impurities, and reminiscing the true taste of the food

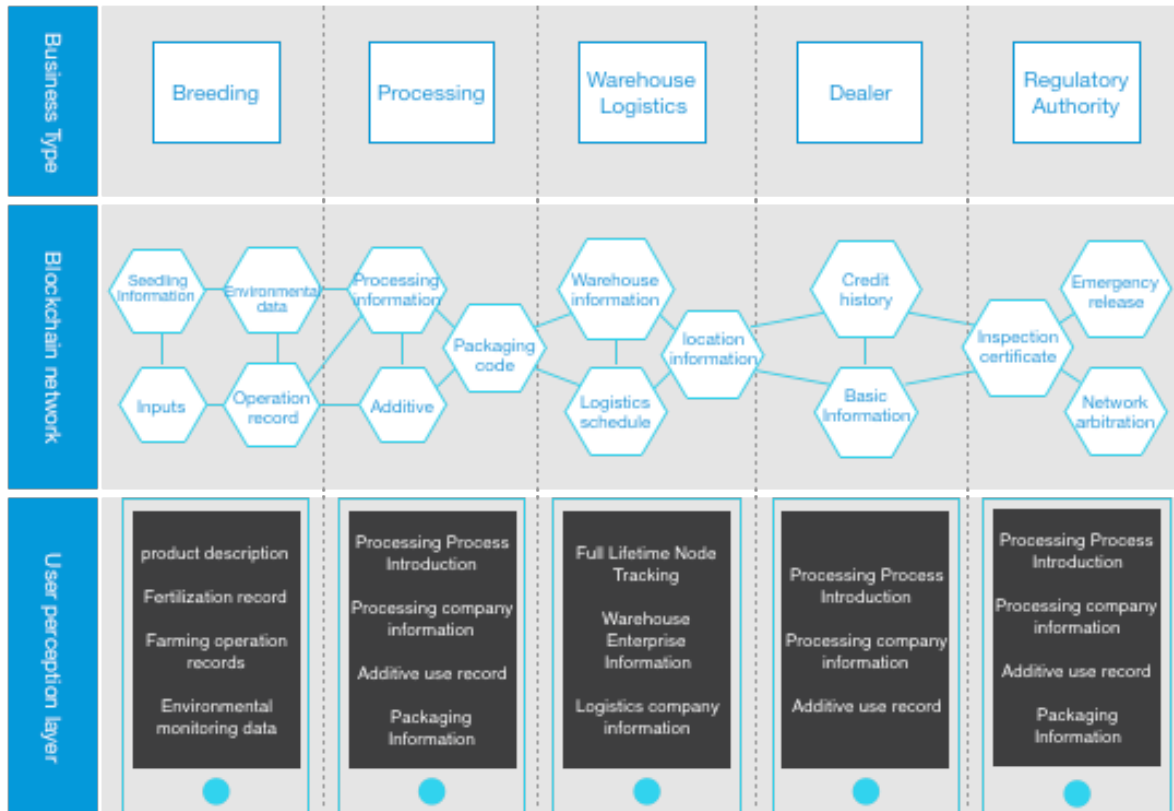
In the future, the breeding business within the agricultural chain ecology will expand from pig breeding to various livestock and poultry such as cattle, sheep, horses, chickens, ducks, and fish.

A main focus of the projects is the importing feedstock and breeding stock from the International community to build a strong animal husbandry program with top genetics and selective breeding to adapt the regional conditions of deployment and create the best quality stock to serve our consumers. The other vertical will be the importation of organic produce from different points on the globe with the AC in secured contracts to supply the organic produce long term and under our blockchain.

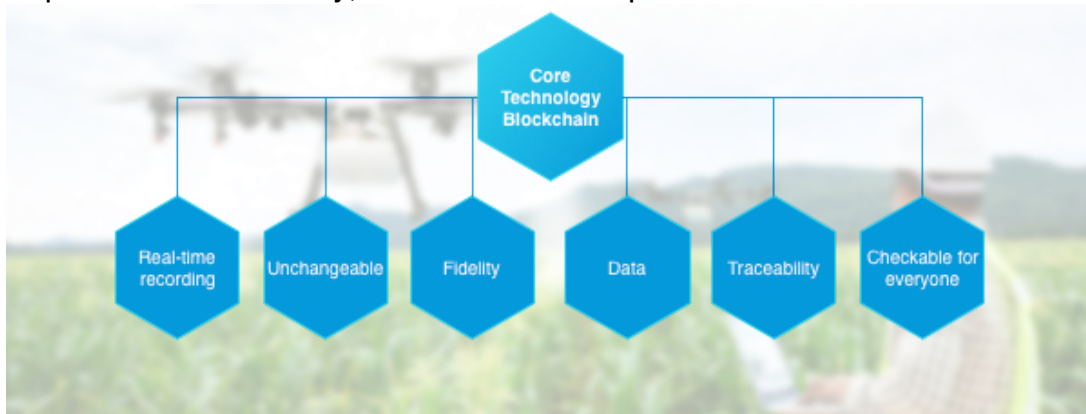
3.1.3 Core: Blockchain Technology

The agricultural product chain traceability system of agricultural chain is a brand-new traceability solution deeply integrated with blockchain technology. The system introduces planting and breeding enterprises, agricultural material sellers, storage enterprises, processing enterprises, logistics enterprises, and sales enterprises into the alliance blockchain network in a node manner. Because of the large number of nodes in the alliance chain, data security is guaranteed. Information on the transfer and delivery of goods between different enterprises will not be tampered with. The system provides data docking interfaces with different types of Internet of Things (IoT). Through the IoT deployed by each node enterprise, the traceability data will be automatically uploaded and stored in the blockchain, forming a complete closed-loop security information traceability source with true traceability, verifiable direction, and accountability. Through the unique identification code on the packaging, consumers can inquire the entire information of the product from seedlings to planting, livestock and poultry from birth to delivery, processing to transportation and sales, and product certification certificates. Government regulators can achieve deeper information inquiry and batch traceback and inspection through higher-level business authority.

Business Type	Breeding	Machining	Warehouse Logistics	Dealer	Regulatory Authority
Blockchain network	Seedling Information Environmental data Inputs Operation record	Processing information Packaging code additive	Warehouse information location information Logistics schedule	Credit history Basic Information	Emergency release Inspection certificate Network arbitration
User perception	product description Fertilization record Farming operation records Environmental monitoring data	Processing Process Introduction Processing company information Information on the use of additives Packaging Information	Full Lifetime Node Tracking Warehouse Enterprise Information Logistics company information	Processing Process Introduction Introduction Processing company information Additive use record	Processing Process Introduction Processing company information Additive use record Packaging Information



Full digital image recording, application of blockchain technology, transparency from cultivating seeds to terminal consumption, innovative technology to ensure healthy living, make products more fidelity, and make consumption more secure



With the deep integration of blockchain with financial capital and the real economy, the value of traditional industries will circulate in the digital world, which will build a blockchain industry ecology and promote industrial transformation and upgrading. Our ecological farming integration also introduces blockchain technology, distributed storage of images, using machine vision technology, infrared temperature measurement technology, etc., to establish a set of files for each pig, real-time recording of quick storage, and every action is chained, and finally achieve transparency in the process of planting grass, breeding, and cultivation. Rebuild the human safety food chain from the source, so that people can enjoy natural, safe, healthy and high-quality meat food. Everyone can check the source data, and everyone can eat with confidence.

3.1.4 Innovative integrated marketing model

In the ecological breeding system, our unique ecological breeding sales system has innovated the sales model. We have built our own sales platform, which can directly sell "grazing fed pigs and assured meat" to nearly 10 million citizens through the platform. The current platform flow reaches tens of millions. It uses sales to determine output, tracking throughout the process, and using data to formulate standardized production to ensure that each mouthful of meat is safe and accessible.

A new business model that can be operated in real situation. Large-scale operations, specialized production, and efficient supply can greatly reduce losses and production and operation costs, promote regional economic development, and increase farmers' income in various aspects. The introduction of blockchain technology in each process can significantly reduce the cost of counterfeiting, increase sales efforts, and have obvious economic advantages.

3.2 Production and sales integration-quantum e-commerce platform



3.2.1 Local market

After the production of high-quality pork, we rely on our innovative sales platform, Quantum Foods, to sell it. At present, the local market has a mature sales system with daily active volume of nearly one million.

3.2.2 Surrounding market

In 2020, we will develop new sales areas, expand the sales crowd, and gradually build quantum models in more than 600 cities across China to explore surrounding markets and maximize sales.

3.2.3 Member Market

The sales platform is becoming more and more mature. The Quantum Food platform provides members with deeper and better products and services, enhances user stickiness and trust, and relies on data to provide visual and scientific integrated marketing services. With big data, any sales will be more effective.

3.2.4 Blockchain empowers community ecology

At present, the blockchain industry is developing rapidly. Technology research and development and community users are the two core sections of the blockchain. However, the current construction and operation of the community is seriously behind the development speed of the blockchain industry.

Community construction has become the most important and intractable problem faced by various blockchain institutions and community users.

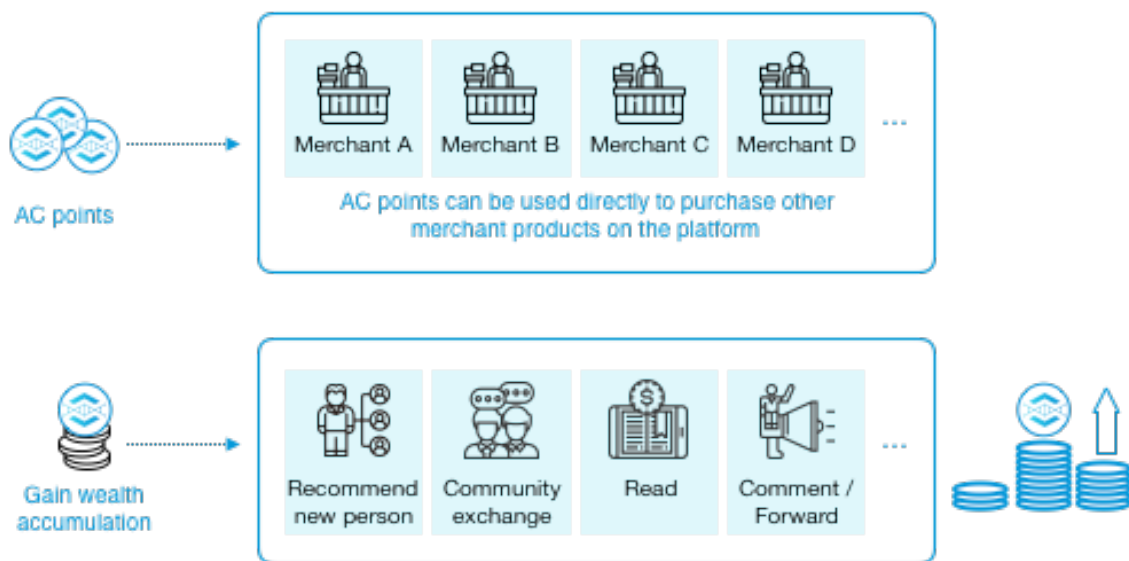
Quantum uses blockchain technology and digital certificates to build a blockchain-based autonomous community platform for urban community users to better create communities, manage communities, increase community stickiness, and increase community activity. Ecological consumption achieves commercial returns and builds a sustainable blockchain community ecosystem.

Quantum divides the city into communities. Each community has a webmaster. The webmaster is both a resident of the community and a service provider of the quantum platform. As a neighbor, the webmaster has a natural and irreplaceable trust. It can provide residents with comprehensive pre-sale, sale and after-sales service. It can also help the platform open up multi-channel sales and achieve the optimal optimization of resources such as amaranth-fed pork in quantum mode. The configuration has far-reaching strategic significance for realizing market data to guide production.



Users can only purchase natural green amaranth-fed pork from the source and transparent process on the quantum platform. This is also the direct sales channel of the amaranth-fed pork project. In addition, the platform also has a large amount of fresh food, daily fruits and vegetables for users to choose; After the purchase is completed, the system will automatically calculate and send the corresponding points to the user's personal account. The more products you buy, the more points you get; the points are not ordinary business point deductions but exist in the entire ecological chain. The construction of the community chain is completed, and the points can be transferred to multiple merchants without any difference, which has commercial value of investment growth.

Consumers become users through (Distributed application) Dapp registration on the quantum platform, enter the community, earn points based on activity, recommend newcomers, read, forward, comment, and consume can all generate varying degrees of revenue and bring huge traffic through social fission.



3.3 Insurance

After adopting livestock on the agricultural blockchain platform, the user signs an adoption contract, puts in a valid chip, provides relevant certifications, and insures the platform with a cooperative insurance company. The insurance policy is registered on the blockchain platform, and the IoT device is connected through the blockchain technology to realize the traceability management of the entire industry chain. The value of the compensation target can be traced to the source and a permanent audit trail can be achieved. Blockchain technology can write business rules and automatically process claims through digital certificates. At the same time, it can also provide permanent records, upload policy related information such as policy updates, premium payments and claims records to the blockchain, it simplifies the transaction process between parties. The digital certificates in the blockchain converts paper contracts into programmable codes, achieves accurate judgments of underwriting and claims, realizes automatic and rapid claims settlement, and saves a lot of procedures and labor costs.

3.4 Combined with the incentive mode of digital currency

3.4.1 Digital currency adoption

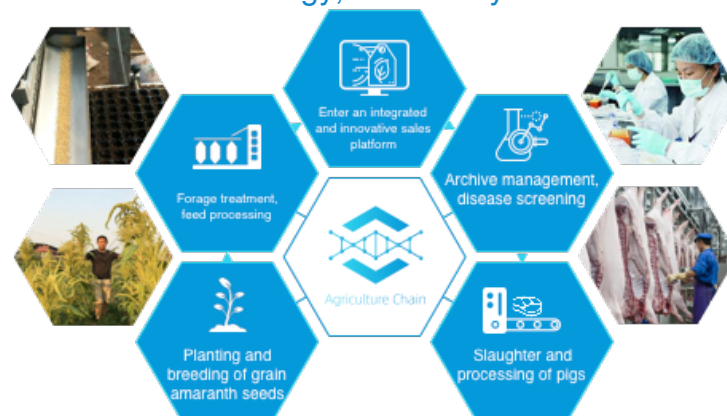
Agricultural Coin holders are investing into agricultural coins as an investment into the AC project to adopt various types of livestock raised by various breeding companies in the agricultural chain ecology at preferential prices and enjoy corresponding rewards. Agricultural products convert the value of farmed livestock into tradable financial assets, and they can be settled in real time through digital certificates on agricultural chain exchanges, just like tradable financial products. In terms of transactions, after the digital certificate is reached, the contract execution process will be triggered automatically once the conditions agreed in the contract occur, so that real-time transaction settlement is achieved, eliminating the lengthy transaction process in traditional transactions, saving manpower and material resources.

3.4.2 Incentive mode of digital currency

When a customer who owning agricultural coins will be an investor in the project with a ROI and Profit Sharing (called AC Points) is used as the point reward. The points can be exchanged for buying more AC or equivalent products on the quantum food e-commerce platform, and can also be exchanged for other ecological points (shared revenue cannot be superimposed).

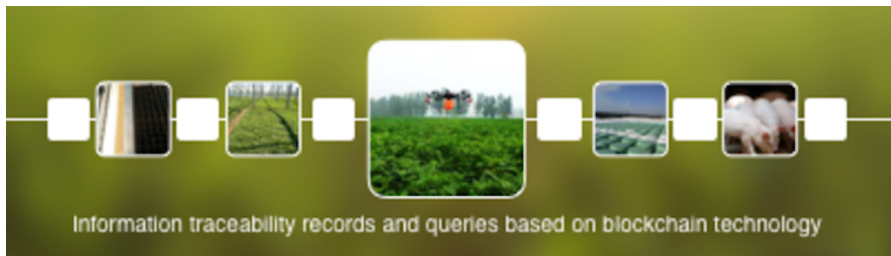
3.5 Combining the traceability of the blockchain

Full application of blockchain technology, traceability entire chain of ecological breeding



Blockchain technology makes source tracing fidelity a reality. Everything is transparent during the whole process. There are data and image data to check, to ensure food safety and improve the happiness of residents. With the continuous development of miniaturization and localization of food production, the food system in China and the world has become more and more complex. For pig farmers, pork is sent to processing companies for processing and then to warehouses or distribution centers, and from there to retailers, restaurants or families. Traditionally, these data are recorded on paper at every link. To trace the origin of food purchase, it may take several days to check the paper record. With blockchain technology, you have the answer in seconds.

Safe and reliable	The data transmitted by it cannot be tampered by any participating link, and each link can save a permanent information record to achieve accurate full digital tracking
privacy protection	Its encryption mechanism can ensure that the core data content of one party in the supply chain is only visible to some specific interested parties.
high transparency	Shared ledgers and open source programs ensure that information and data can be reviewed by participants across the chain
Easy to share	It can prevent errors in the transmission and sharing of information, because consensus needs to be obtained from all parties before the ledger is updated, and the information can always be consistent
Decentralized	There is no centralized hardware or mechanism throughout the chain, and data storage is secure, relying on consensus mechanisms / algorithms to ensure the authenticity of the data



When using blockchain technology to obtain information, it includes not only information for traceability, but also information such as production time, current temperature, whether there is food safety certification, and whether it is organic production. Blockchain technology has played a positive role in promoting the establishment of a safer, more economical, and more sustainable food system. Blockchain technology solutions can benefit every link in the supply chain, including raw material suppliers, producers, retailers and consumers of food.

Farmers	Producers	Retailers	Consumers
Know the flow of produced products and better plan planting and breeding species	Obtain product information data, determine whether its shelf life can be guaranteed, and understand the flow of processed products	Focus more efficiently on the flow of food from farm to store	Get fresher, more reliable products

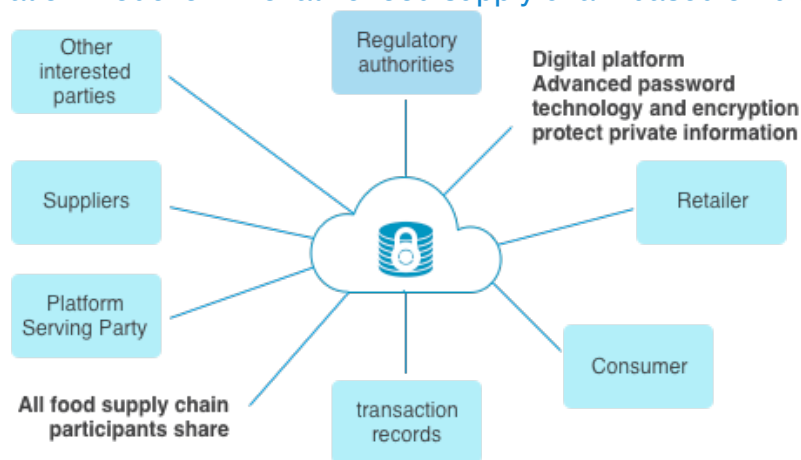
Take pork supplier chain system as an example:

1. Place the cut pork in a box and label it. In the blockchain solution, the project team created a QR code and uploaded all necessary product details to the blockchain through this code. In this way, any authorized user can get trusted information to confirm the operation details of any node in the operation.
2. As an employee at a supplier shipping point, responsible for shipping to the fresh food store distribution center. Create a transportation record, enter the truck license

plate number, scan a pallet to be loaded, and then the system will display the distribution center to which the shipment will be sent and the corresponding purchase order. Through the solution of the blockchain technology, only need to upload the pictures of these documents to the blockchain to create a digital file that cannot be tampered with for each authorized user to log in at the same time.

3. These documents can be read by any authorized food safety manager. This is very important. Because in the past, if errors were found, food safety managers had to manually check each document to find out the scope of the problem. In this pilot, we have continuously shortened the time to find documents, and also increased the credibility of these documents, effectively preventing integrity issues such as unauthorized tampering with information.

Collaboration model of innovative food supply chain based on blockchain



Results and significance:

1. **Achieve the tracking of the source of food safety issues and improve the transparency of the supply chain:** Food safety related documents can be shared electronically, and pork products can be traced back to the pilot farm in Linyi, with information such as production date and batch within a glance;
2. **Build a reliable food safety digital storage platform:** authorized users can update the data, and the updated data will be displayed to all users of the blockchain within 5 minutes;
3. **Achieve efficient and fast food recalls:** Locating a batch of products takes less than 10 seconds, and can retrieve relevant documents for a single product in half a minute;
4. **Achieve full chain traceability:** When searching using product information data, it only takes a few seconds to display the information of the product from the farm to the current circulation link.

Blockchain technology has greatly accelerated the speed of product tracing and product recall, improved the transparency of the food system, reduced the quality risk of products and the risk of consumers being infected with foodborne diseases, and established a more transparent, efficient and safe food industry ecology system, this technology brings great economic benefits, people's livelihood significance and ecological significance.

Economic benefits
A new business model that can be operated with large-scale operations, specialized production, and efficient supply, which can greatly reduce losses and production and operation costs, promote regional economic development, and increase farmers' income in various aspects. The introduction of blockchain technology in each process can significantly reduce the cost of counterfeiting, increase sales efforts, and have obvious economic advantages.

Livelihood meaning
Blockchain technology makes traceability and fidelity a reality, everything is transparent throughout the process, and data and image data can be checked. This technology guarantees food safety and improves residents' happiness.

Ecological significance
The cultivated high-quality amaranth has a developed root system, which is conducive to regional soil and water conservation. As a feed for pigs, it can also reduce secondary pollution from fecal discharge and restore the ecological authenticity.

4. Digital currency ecology

4.1 Agricultural foundation

We have registered the non-profit Agricultural chain foundation in Australia. The main task of the foundation is to be responsible for the construction and operation of the Agricultural chain platform, the formulation of the strategic direction of the Agricultural chain project, the issuance and management of Agricultural coins, etc., which can be open and transparent to the community for information disclosure and communicate.

4.2 Digital Currency Applications

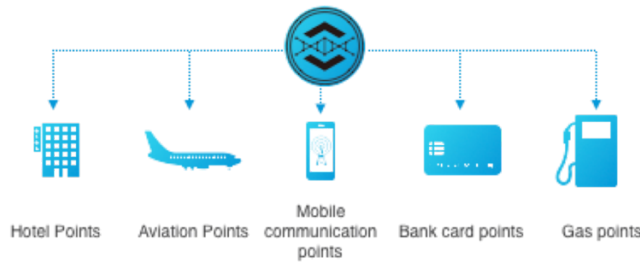
4.2.1 Buy Products-Quantum Food

Users can use agricultural coins to purchase a variety of agricultural products and customized services on the quantum platform and enjoy platform privileges exclusive to agricultural coins.



4.2.2 Points conversation

Users can also use AC Points and agricultural coins to directly exchange other ecological points, such as agricultural chain cooperative enterprise points, bank points, aviation points, mobile communication points, gas platform points, Ctrip points, etc. By opening up ecological points that are closely related to all aspects of people's lives, all holders of agricultural coins in the ecology can enjoy the benefits and convenience brought by the agricultural chain.



4.3 Coins distribution

4.3.1 Distribution plan:

The total issued amount of Agricultural coins (AC) is 1 billion, and it is guaranteed that the amount will never be added again. Initially, AC were based on decentralized blockchain digital assets issued by Ethereum, an ERC20 standard coin. The AC development team will continue to develop its own public chain. After the development of the public chain is completed, the AC will be mapped to the Agricultural public chain.

Coin Name	Agriculture Coin	Abbreviation	AC
Total Circulation	1,000,000,000 (never reissued)	Total Liquidity	400,000,000
Total Locked Up	600,000,000		

4.3.2 AC Distribution

4.3.2 Distribution



Foundation management and business development	10%
Team motivation	15%
Technology development	25%
Ecological maintenance	50%

5. Overall technical architecture

5.1 Agricultural Public Chain

The public chain is the underlying protocol of the blockchain and the "operating system" of the blockchain world. The technical team of the Agricultural coin Foundation has created a public blockchain dedicated to Agricultural coins trading- Agricultural public chain. The blockchain Agricultural platform and Agricultural coins projects run on the Agricultural public chain. Agricultural public chain builds distributed data storage space, network transmission environment, transaction and computing channels for the blockchain, uses encryption algorithms to ensure network security, and implements the normal operation of node networks through consensus mechanisms and incentive mechanisms. The API interface provided by the public chain can be called by developers to develop applications that conform to the Agricultural public chain ecology.

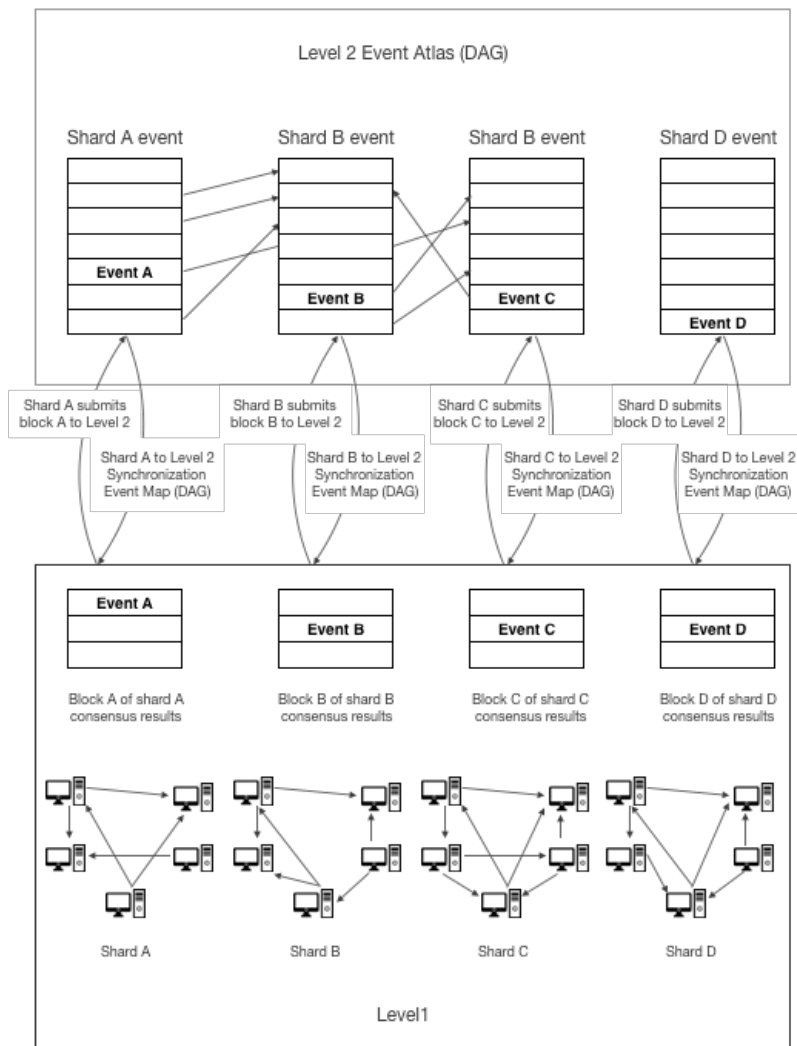
Agricultural public chain is positioned for large-scale commercial use, and high-performance DApps are integrated on the network. By implementing the connection between the Agricultural public chain platform and the Agricultural industry ecology, the high-speed link of the blockchain world is set up, which is related to actual assets and real value. It truly connects the industry's information, people, things, and value, and at the same time helps solve business scenario problems with high-performance DApps, effectively improves production efficiency, and promotes the development of the real economy. The Agricultural public chain will become a connector between the real Agricultural market and the blockchain world, and can be connected to other blockchain systems to form a universal blockchain technology platform and support large-scale transaction processing requirements. In the blockchain system, there will be more blockchain applications, and a complete blockchain application ecosystem will be established. The blockchain technology will truly enter into real life, and ultimately create a future world of interconnected information and value. Each node of the Agricultural public chain can join and exit the network freely and participate in the reading and writing of data on the chain. The runtime is interconnected with a flat topology. There is no centralized server node in the network, and anyone can join the network write and access data, anyone can participate in consensus at any geographic location.

The Agricultural public chain provides a reliable expansion solution for the blockchain development team and solves the performance and security issues through a unique toolkit, allowing developers to focus on implementing blockchain applications, reducing the existing difficulty of applying chain technology to actual scenarios. The Agricultural public chain provides developers with the basic blockchain framework, module components and a community or communication platform, to connect blockchain participants to a greater extent. In addition, it provides efficient, flexible, and interoperable next-generation blockchain infrastructure services for DApps and builds a neutral and trusted platform for DApps users and developers, providing integrated, personalized, and reliable services.

5.2 Core technology

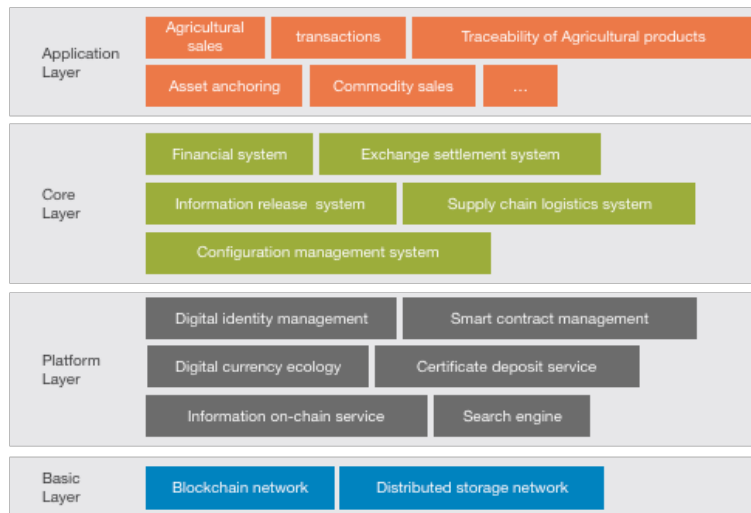
The two-layer network structure adopted by the Agricultural public chain is called Level 1 and Level 2, respectively. Level 1 is an open architecture, allowing compatible consensus mechanisms to be selected for applicable scenarios, reaching consensus on a local scale in shards, and providing a stable licensing consensus environment for Level 2; Level 2 can asynchronously process the output of multiple Level 1 network fragments to reach a wider range of consensus. The Level 2 consensus mechanism provides consistency guarantee for Level 1 networks.

In practical applications, the fragmentation mechanism provides a sandboxed environment for Level 1, which limits the behavior of the consensus mechanism in an open architecture and ensures the consistency of the behavior of multiple network fragments. Combined with the constraints of the protocol interacting with Level 2 defined in the framework, multiple different consensus mechanisms can be implemented to run in Level 1 in parallel, providing architectural level support for different application scenarios using different consensus. This also provides the possibility for the coexistence of public chain and alliance chain in the same network. In addition, the use of network sharing to achieve parallel processing of data improves the efficiency of the network to a certain extent.



5.3 Structural design

In order to make full use of the advantages of blockchain technology, to realize an open, high-trust digital ecosystem that covers all aspects of daily life, including clothing, food, housing, transportation, financial services, asset anchoring, etc. At the same time, taking into account future technical requirements for easier expansion, the Agricultural public chain adopts a hierarchical architecture design idea, including four layers of application layer, core layer, platform layer and basic layer, as shown in the following table.



5.3.1 Basic Layer

The base layer provides basic blockchain network and storage network services. The blockchain network is located at the lowest level of the system. It provides blockchain-related interface services for upper-layer modules and is the core component of the entire system. The information of important data is stored in the distributed ledger of the blockchain, but the original image data is stored in the storage network. In this way, the advantages of the blockchain network ledger, information cannot be tampered can be used, and at the same time, the disadvantages of bloated ledger caused by writing the original mirror data can be avoided. The storage network and the blockchain network interact with each other to provide a complete blockchain system platform.

5.3.2 Core Layer

The core layer abstracts many business scenarios in reality, extracts common services, and forms a core functional system application layer to provide services.

5.3.3 Platform Layer

The platform layer expands the services of the base layer and combines the six modules of digital identity system, digital certificates management, digital coin ecology, digital certificate storage service, information on-chain service and search engine to provide functional interface support for the core layer.

5.3.4 Application Layer

The application layer uses the technical capabilities given by the core layer, the platform layer, and the base layer to develop services / DApps that meet the actual needs of users such as clothing, food, housing, transportation, beliefs, etc., and any organization / institution can provide corresponding Services / DApps. The Agricultural public chain platform will support the monetization of assets with built-in "asset anchoring" system.

Core team members

Farrukh Uddin - Managing Director

PhD in Supply Chain Management from Zhejiang Gongshang University

MBA (Human Resource Management) from International Islamic University, Bangladesh 4 years working experience in supply chain department, 2 years management information system and marketing experience.

Meni Rosenfeld - Chief Scientist

Chairman of the Israeli Bitcoin Association

Graduated from the Department of Mathematics, Weimann Institute of Technology, Israel, and established the first Bitcoin exchange Bitcoil

Maya Zehavi - Chief Marketing Officer

Former senior vice president of QED-it, responsible for developing distributed ledger based on zero-knowledge proof.

Has many years of working experience in the field of blockchain, with the business development of token scientist and supply chain finance.

Arderm Herrison - Breeding Expert

Senior planting + breeding expert

More than 10 years of practical experience in in-depth development of amaranth feed, twelve years of experience in cultivating and planting amaranth, with deep skills and experience reserves for amaranth planting and livestock and poultry breeding.

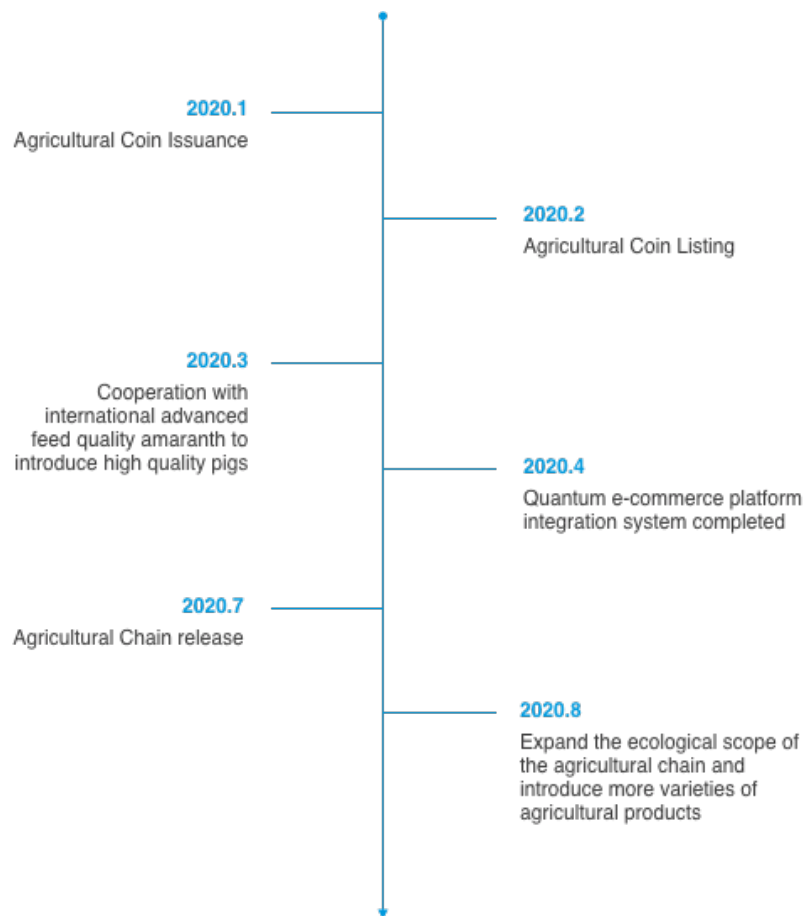
Dan Lambert - Planting Expert

Pioneer in the amaranth industry, leading the team to work on the amaranth cause for many years, with a cumulative output value of 50 billion US dollars.

Joseph Ali - Veterinary

Experienced veterinarian with years of experience working on black pig farms and veterinary pharmacies. Good at veterinary, animal welfare, animal nutrition, animal health, animal behavior and powerful medical services.

7. Development route



8 Notice of Risk

All investments imply risks, and the value of the coins will be affected by a series of factors, some of which are not controlled by the project team and cannot be completely eliminated, which may affect the interests of investors. The following is an incomplete list of major risks:

8.1 Liquidity Risk

Although the real estate market is relatively stable, the market risk of Agricultural chain. Project also comes from: inflation, the conditions that may be considered unfavorable to the real estate market, the behaviors of other investors, the economic cycles and environments, changes in interest rates and exchange rates, changes in domestic and international economic situations, political and natural events, government monetary policies, taxation and other legal and regulatory developments. These factors may all affect the value of the coins and affect the returns of coin holders. In addition, as the encrypted currency market itself fluctuates greatly, the volatility of the encrypted currency and encrypted asset market may lead to profit fluctuations, thus causing the risk of coin holders.

8.2 Market Risks

Although the real estate market is relatively stable, the market risk of Agricultural chain. Project also comes from: inflation, the conditions that may be considered unfavorable to the real estate market, the behaviors of other investors, the economic cycles and environments, changes in interest rates and exchange rates, changes in domestic and international economic situations, political and natural events, government monetary policies, taxation and other legal and regulatory developments. These factors may all affect the value of the coins and affect the returns of coin holders. In addition, as the encrypted currency market itself fluctuates greatly, the volatility of the encrypted currency and encrypted asset market may lead to profit fluctuations, thus causing the risk of coin holders.

8.3 Compliance Risks

At present, the policies in the international community on virtual currencies are not clear, and there are compliance risks in coins. The approaches of the policies towards virtual currencies may affect the price of virtual currency and may also restrict the operation of Agricultural Project Team.

8.4 Security Risks

Based on Cryptocurrency's nature, hackers and other cyber criminals may destroy the security of digital assets, which may lead to significant losses for the holders of the coins.

9 Disclaimer

This White Paper is for general information only and is not intended to be a prospectus, offer document, investment solicitation, securities offer or offer to sell any product, article or asset. Nothing in this White Paper constitutes legal, financial, commercial or tax advice. You shall consult your own legal, financial, tax or other professional advisors before participating in any activities related to this White Paper. This White Paper is for informational purposes only and is not an offer or invitation to buy or sell any securities or other financial instruments.

This White Paper does not constitute any form of prospectus or offer document. The above information may not be exhaustive and does not contain any elements that constitute a contractual relationship. Agricultural team does not guarantee the accuracy of this White Paper and its conclusions. This document does not provide investment or professional consultation. Agricultural does not guarantee or accept any legal liability arising from or in connection with the accuracy, reliability or completeness of the materials contained in this

document. Agricultural does not expressly disclaim all representations and warranties expressed, implied, statutory or otherwise.

Under no circumstances will Agricultural or its subsidiaries bear any direct or indirect losses, liabilities, costs or expenses of any kind to any person or entity, whether direct or indirect, consequential, compensatory, incidental, actual, exemplary, punitive or special use, citation or reliance on this white paper or anything contained herein, including but not limited to any loss of business, income, profits, data, use, goodwill or other intangible losses.

No regulatory authority has reviewed or approved any information listed in this White Paper, and no such action has been or will be taken in accordance with the laws, regulatory requirements or rules of any jurisdiction. The publication, distribution or dissemination of this White Paper does not mean that any applicable laws, regulatory requirements or rules have been observed.

According to the information provided herein, participants and potential Agricultural project coin holders should seek appropriate independent legal, financial, tax and other professional advice before taking any action or participating in any promise or transaction through the White Paper. This white paper is for reference only.

The sales and purchase agreements of Agricultural chain platform coins and the holding of any Agricultural chain platform coins shall be subject to independent coin Sales Agreements or Terms and Conditions, as the case may be. If there is any inconsistency between the Terms and Conditions and this White Paper, the Terms and Conditions shall prevail.

You acknowledge, understand and agree that: if you are a citizen, national, resident, household register and/or green card holder of the following relevant countries, jurisdictions or geographical regions, you are not eligible to purchase an Agricultural platform coin, (i) selling an Agricultural coin will be interpreted as selling securities or investment products, or (ii) the applicable laws, decrees, regulations, treaties or administrative laws prohibit the purchase or participation in the sale of an Agricultural coin.

Americans, Japanese and Chinese, i.e. natural persons residing in the countries mentioned above or any entity, citizen and/or resident (whether or not taxed) organized or registered in these countries are not eligible to participate in the Crowdfunding Coin Contribution.