



# **Memorandum**

# **DAO Paykiken Geo**

**(Created January 2023)**

# Contents

	Page
<b><u>Introduction</u></b>	3
<b>Part 1. Structure of DAO Paykiken Geo</b>	
Chapter 1. Legal structure	
1.1. <a href="#"><i>The Universal Declaration of Human Rights</i></a>	5
1.2. <a href="#"><i>The model of mutual investment fund</i></a>	6
1.3. <a href="#"><i>Control and management</i></a>	7
Chapter 2. Technical structure	
2.1. <a href="#"><i>The TRON ecosystem</i></a>	8
2.2. <a href="#"><i>The Web 3.0 platform</i></a>	9
2.3. <a href="#"><i>Forum Web 3.0</i></a>	10
<b>Part 2. Basic internal principles of DAO Paykiken Geo's operations</b>	
Chapter 3. Ownership	
3.1. <a href="#"><i>Government tokens Paykik</i></a>	12
3.2. <a href="#"><i>The sale/purchases of Paykik tokens</i></a>	13
3.3. <a href="#"><i>The distribution of the tokens</i></a>	14
Chapter 4. Management	
4.1. <a href="#"><i>The management system</i></a>	15
4.2. <a href="#"><i>The mechanics of cooperation</i></a>	16
4.3. <a href="#"><i>The blockchain voting</i></a>	17
Chapter 5. General principles of the DAO's investment policy	
5.1. <a href="#"><i>The selection of the investment projects</i></a>	18
5.2. <a href="#"><i>Utility tokens emission</i></a>	19
5.3. <a href="#"><i>Staking</i></a>	20
<b>Part 3. The activity of DAO Paykiken Geo</b>	
Chapter 6. Projects of extraction or/and processing of natural resources	
6.1. <a href="#"><i>The extraction of natural resources</i></a>	22
6.2. <a href="#"><i>The investment policy</i></a>	23
6.3. <a href="#"><i>Algorithms for natural resources extraction or/and processing</i></a>	24
Chapter 7. Blockchain of resources and crypto commodity exchange	
7.1. <a href="#"><i>The Global Trade in natural resources</i></a>	25
7.2. <a href="#"><i>Commodity crypto exchange</i></a>	26
7.3. <a href="#"><i>The commodity blockchain GeoChain</i></a>	27
Chapter 8. Non-fungible industrial tokens (NFTi)	
8.1. <a href="#"><i>NFT technology</i></a>	28
8.2. <a href="#"><i>NFTi</i></a>	29
Chapter 9. GeoSpace	
9.1. <a href="#"><i>The concept of GameFi</i></a>	30
9.2. <a href="#"><i>The GeoSpace gaming space</i></a>	31
<b><u>Conclusion</u></b>	32

## Introduction

*The Dao that can be expressed in language,  
is not the constant Dao.  
Laozi “Tao Te Ching”*

In 2008, the developer Satoshi Nakamoto gave the world a solution to the major challenge of mediating trust between parties in the context of information exchange in situations where there was a lack of it by the counterparty, as well as in the open, unprotected communication channel through which the information was shared.

The “blockchain” technology invented by Satoshi, which is based on an algorithm involving a continuous, consequential chain of information blocks, became the first practical tool for transferring direct ownership to a counterparty via the internet. The process did not require information verification by administrators or the involvement of external guarantors, making it completely decentralized.

Since its invention, blockchain technology has been actively integrated into different areas of the global economy, although there is considerable variation in the extent to which this has been carried out. It took a long time for the financial, gaming, and entertainment sectors to start actively using blockchain technologies. Meanwhile, there has been widespread concern among traditional companies and conventional investors that there is no planning or monitoring for such technologies and that they do not include a comprehensive management and decision-making system. Furthermore, they are often considered to be used only for fraudulent and criminal purposes.

This situation started to change after the release of publicly accessible, decentralized blockchain networks (DeFi) that have provided everyone with the ability to monitor and analyze all of the data within the blockchain. This, in turn, has enabled ownership transparency and the management of projects that are hosted on these networks. The reliability of such networks is comparable, or even superior, to traditional, corporate business models, and they allow considerable transparency and democratization.

Today, the development of decentralized blockchain networks (DeFi), decentralized exchanges (DeX), and the release of new decentralized applications (DeApps) form the foundation of the crypto economy, which can be considered an evolution of the global economy. Among other aspects, it includes traditional, economic concepts associated with the production, distribution, and consumption of goods and services.

The result of this evolution is the emergence of decentralized autonomous organizations within the scope of conventional businesses operating in the industrial and trading sectors. The concept of Decentralized Autonomous Organization Paykiken Geo described herein is a specific example of this evolutionary integration of the traditional business model of the industrial enterprise and blockchain technology.



# **Part one.**

## **Structure of DAO Paykiken Geo**

## Chapter 1. Legal Structure

**1.1. The Universal Declaration of Human Rights**, which was accepted by the General Assembly of the United Nations during its third session on 10 December 1948, and the International Covenant on Civil and Political Rights, supported by 172 countries, defines the rights of a person to participate in associations.

Freedom of association refers to the right of a person to voluntarily unite with other people to accomplish mutual goals. The exercise of such a right is not subject to any restrictions, except those that are essential to maintaining a democratic society in the interest of national security and social order.

DAO Paykiken Geo is a virtual association of people who interact through the blockchain network using smart contracts. The objective of the people brought together by DAO Paykiken Geo is the realization of their freedom to participate in a collective investment and management association, which has been described in this Memorandum.

Differences in terms of nationality, gender, or religion among DAO Paykiken Geo members do not affect their rights, as everyone is granted absolute anonymity based upon respect for their democratic rights and freedom of identity.

DAO Paykiken Geo is a decentralized organization that does not fall under any particular jurisdiction and adheres only to International Law and multilateral agreements. The organization's projects are regulated according to the norms and laws of the territories of the specific countries in which they are executed.

The fundamental principles of DAO Paykiken Geo's activity on a global scale are the strategy of target planning and development in compliance with the Sustainable Development Goals (SDGs) of the United Nations<sup>1</sup>. This includes responsible production and consumption, clean and accessible energy, innovation in industry and infrastructure, action against climate change, and the preservation of ecosystems.

The main steps in the formation of DAO's legal structure are working on recognition of DAO Paykiken Geo as a decentralized autonomous organization that acts in the interest of the people and with strict adherence to International Law. This also entails cooperation with NGOs, Trade unions, and Chambers of Industry and Commerce to realize it as a legal concept.

<sup>1</sup> Sustainable Development Goals (SDGs) is a set of 17 interrelated goals formulated by the General Assembly of the United Nations in 2015 as "the plan to achieve a better and more sustainable future for all".

**1.2. The model of a mutual investment fund**, which is a common corporate type of organization, is the closest juridical structure that can define the legal concept of DAO Paykiken Geo based on several attributes.

Table 1

*Similarities*

	<b>Mutual fund</b>	<b>DAO</b>
1	The ownership structure is complex and does not have an established legal entity.	
2	A fund share is a nominal security that certifies the right of its holder to a share of the mutual fund's assets as well as to the settlement (redemption) of the owned security by the rules of the fund.	A DAO token is a unique, digital code in the blockchain network that certifies the right of its holder to a share of a DAO's assets as well as to the settlement (redemption) of the owned token in accordance with the Memorandum.
3	The purpose of a mutual fund is to provide profit from the fund's consolidated assets and to distribute the generated profit among the investors (shareholders) according to the number of shares they own.	The purpose of a DAO is to provide profit from the fund's consolidated assets and to distribute the generated profit among the investors (members) according to the number of tokens they own.
4	Each fund share grants its owner an equal number of rights.	Each DAO token grants its owner an equal number of rights.
5	The accounting of the fund's shareholders registry is done by a designated, independent organization.	The accounting of the DAO's tokens holders registry is done by the decentralized blockchain network.
6	A mutual fund's operational activity is not subjected to tax as a legal entity, and it is the responsibility of each member to declare their profit and pay tax accordingly.	A DAO's operational activity is not subjected to tax, as there is no regulation for such legal entities, and it is the responsibility of each member to declare their profit and pay tax accordingly.

Table 2

*Differences*

	<b>Mutual fund</b>	<b>DAO</b>
1	A mutual fund is governed and managed by a designated, trust management company.	A DAO is governed and managed by its members.
2	A mutual fund requires a mandatory KYC procedure for all shareholders.	DAO token owners have the right to remain anonymous.
3	A mutual fund's scope of activity is regulated and strictly controlled by government agencies.	A DAO's scope of activity is not limited or regulated.

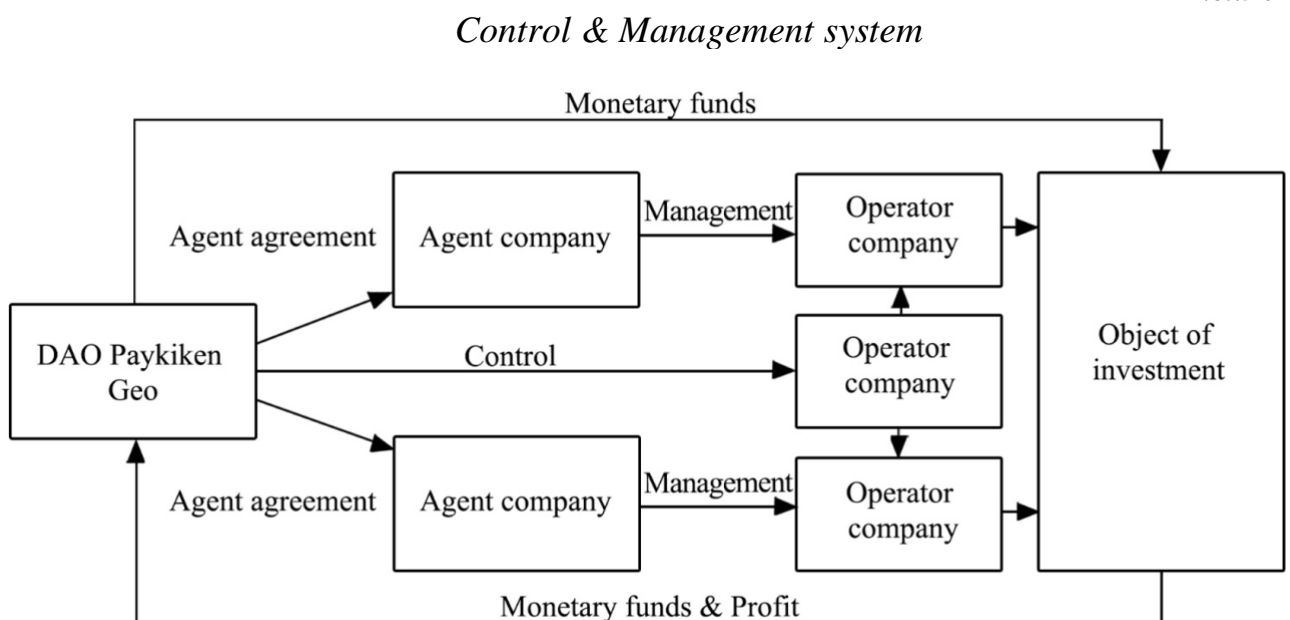
**1.3. Control and management** of mutual funds and decentralized autonomous organizations (DAOs) are significantly different (despite some similarities in their corporate structure). A mutual investment fund is administered by a trust management company, which is a specialized, legal entity that is competent in asset management. In a DAO, the responsibility of management lies within its community, which is not a professional administrative body due to its structure.

Currently, an effective, unified model does not exist, nor does the technology for the administrative management of DAOs. Digital technologies and artificial intelligence (AI) automate most of the administrative processes of a DAO in a blockchain network and also during online operations, which leaves the issue of its interaction with the real world unaddressed.

DAO Paykiken Geo recruits specialized companies on a contract basis for performing tasks that require a professional approach in the areas of strategic planning and analysis, operational management and control, collaboration, and cooperation with external entities and the public.

Agent contracts are commonly used in International Law to determine the legal relationship between two parties; they bind the “Agent” in exchange for some form of compensation to conduct legal and other operations according to the directions of the “Principal” on their behalf or behalf of the “Principal.” This kind of representation allows DAO Paykiken Geo to connect with the traditional legal and financial fields.

*Picture 1*



The community structure of DAO Paykiken Geo combines traditional methods of management and collective administration, facilitates the realization of the democratic principles of governance without deteriorating management quality, and boosts control over development projects.

## Chapter 2. Technical structure

**2.1. The TRON ecosystem** is a native blockchain ecosystem of DAO Paykiken Geo. Developed with a structural design that enables highly abstract modularity, the TRON network has a high level of decentralization and bandwidth. Currently, it is one of the biggest and most reliable blockchain networks in the world. The DPoS (Delegated Proof of Stake) algorithm of the network eliminates mining, which corresponds to DAO Paykiken Geo's policy of maintaining a rational and responsible approach to the environment.

TRONSCAN is a blockchain explorer and a part of the decentralized TRON ecosystem. It provides its users with unlimited access to the information on the blockchain, including search tools for transactions, accounts, blocks, links, smart contracts, and the data in the chain. The high transparency, provided by the blockchain, allows DAO members to monitor and review all the transaction chains, from contract creation and token emission to the real-time observation of the decision-making processes and movements associated with DAO Paykiken Geo funds.

The DAO members can interact with the web platform DAO Paykiken Geo or directly with the TRON network using the TronLink wallet, which is currently one of the simplest and most convenient decentralized crypto wallets available. The foundational technology that it uses (AES-ECB) supports a multilayer, encryption algorithm that guarantees information safety. TronLink can be used on mobile devices that run on Android or iOS or a computer as a special extension in the Google Chrome browser.

The concept of the bandwidth TRON Virtual Machine (TVM) allows DAO Paykiken Geo members to interact with the DAO and each other in the blockchain network free of charge. This can be done by making a temporary deposit of TRX tokens and receiving the necessary resources of bandwidth and energy in exchange. In relation to the DAO funds, this feature of the TVM significantly reduces the transaction costs for DAO Paykiken Geo, thus eliminating the need to constantly pay for gas (energy) and the blockchain transaction commission.

DAppChain is a sidechain project of TRON that enables unlimited network expansion through a low-cost system. It creates a considerable number of opportunities for solving the administrative objectives of the DAO, where a large number of transactions are essential while keeping resource consumption to a minimum. In particular, the process of token voting (token voice)<sup>2</sup> is carried out by DAO Paykiken Geo through DAppChain.

<sup>2</sup> Token voting is a management system in which special "voice" tokens are distributed to the members. The process includes the creation of two independent wallets (named, for example, "for" and "against") that the participants can send their tokens to, thereby, submitting their vote. It is the most transparent and democratic voting method, that is free of distortions.



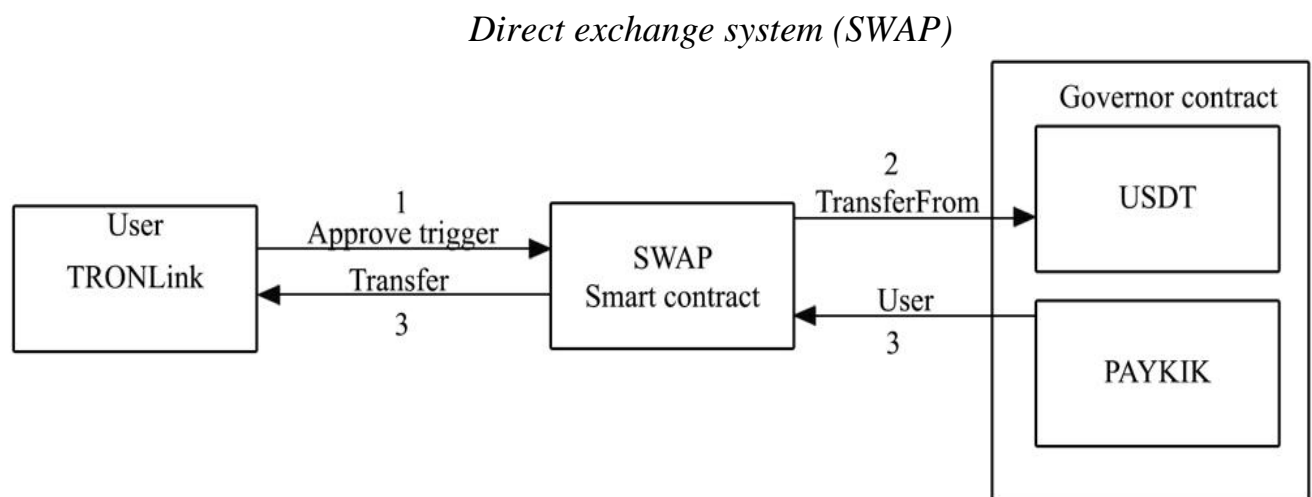
**2.2. The Web 3.0 platform** is an interactive website for DAO Paykiken Geo (<https://paykiken.io/>) that represents a new level of crypto and real-world interaction. The platform can autonomously receive data from the blockchain network, analyze it, and issue logical inferences to the users, effectively maximizing decentralization while remaining secure and anonymous.

The platform's code is executed in the environment outside the browser Node.js 16.18.1., fulfilling the paradigm "JavaScript for everything." Being an event-driven model, Node.js uses non-blocking input/output architecture, which makes it lightweight and effective and provides a high level of scalability and versatility.

The interaction between the DAO Paykiken Geo platform and the TRON blockchain network is carried out using the Web 3 library (<https://www.npmjs.com/package/web3>). The algorithms used monitor the blockchain network in background mode. This allows the platform's users automatic authorization with their personal TronLink wallets without requiring any additional verification or sharing of personal information.

The DAO Paykiken Geo platform allows the direct exchange (SWAP) of Paykik and USDT tokens in the blockchain network without depending on any external servers. By using their personal TronLink wallet, the user engages with the SWAP smart contract in the blockchain, and the exchange is made completely autonomously.

Picture 2



1 (*Approve trigger*) - initiation of SWAP smart contract;

2 (*TransferFrom*) - trigger of Governor contract;

3 (*Transfer*) – the SWAP transaction is carried out, and Paykik or USDT is sent to the user.

The DAO Paykiken Geo platform is an evolving system for user and blockchain interaction, where the principles of freedom, self-regulation, and decentralization are incorporated through smart contracts. This allows DAO members to buy and sell tokens, and receive dividends and rewards securely and anonymously.

**2.3. Forum Web 3.0** is a decentralized communication method that was selected by Paykiken Geo's Telegram channel subscribers (<https://t.me/paykik>) in an open-ended voting poll that received more votes than the centralized forums of Reddit and Discord. The internet forum DAO Paykiken Geo was created for communication and information exchange and is integrated into the main Web 3.0 platform as the “discussion board” or “discussion group” for its members.

The forum and the DAO Paykiken Geo web platform interact with the TRON blockchain network. Users are authorized to use their TronLink wallet with an entry condition of DAO Government tokens Paykik stored on their balance. Companies that are interested in cooperation and partnerships with the DAO Paykiken Geo interactive platforms are required to provide additional documentation to verify their status.

The forum uses a distributed IPFS database that incorporates blockchain principles, where DAO Paykiken Geo has its own raised node that, in live mode, is synchronized with the network via file storage. For information and message exchanges between users, the Axios library is used along with a WebSocket connection. This prevents dependency on a particular server by providing the capacity to migrate to a different network at any moment without the loss of key data.

Architecturally, the DAO Paykiken Geo forum has a tree-like structure and is divided according to themes, which are separated into topics based on the first messages of the users. Other users can comment on these, so the overall weighting of a topic is determined by the total number of users who discuss it. The higher the weighting of a topic, the higher its position in the overall rating, which leads to the formation of an endless discussion chain. Thus, the concept of Forum Web 3.0 is an extension of the blockchain ideology, as each new message is a continuation of the previous one and the beginning of the next one.

The administration of the DAO Paykiken Geo forum is carried out by a specialized, elected Agent company that provides the services of performance and security maintenance, hack prevention, and IRC flood protection. The Agent does not have access to the user's personal data and cannot participate in the topic discussions. However, they reserve the right to monitor the credibility of the posted information and report violations to the community guidelines in a specific administrative feed.

All DAO Paykiken Geo members have the right to make any proposals on the forum. They can form new topics, comment on/promote existing ones, share information, and initiate voting polls on any questions or points related to the DAO sphere of interest, regardless of their share of Government tokens.



## **Part two.**

# **Basic principles of DAO Paykiken Geo's operations**

## Chapter 3. Ownership

**3.1. Paykik Government tokens** are digital certificates and instruments of DAO Paykiken Geo that provide their holders with ownership rights over all the assets, projects, and development of the DAO. Like a digital key for a web platform and forum, a Paykik token is a mechanism for direct participation in the management of DAO Paykiken Geo, providing its bearer with voting rights and the ability to make proposals or suggest any initiatives.

The smart contract of the tokens was made using Solidity 0.51-c8a2 and fulfills the Tether TRC20 standard, inheriting a set of interfaces and libraries from the TRON blockchain network. The overall quantity of Paykik tokens released in mainnet is equal to 2 000 000 with full circulation deliverance. The maximum number of decimals supported by the token is equal to eight.

Interactions between the Paykik Government tokens holders and the digital platform DAO Paykiken Geo are done using the decentralized crypto wallet TronLink. For platform authorization, the user requires access to either a mobile version of the wallet in the form of an Android/iOS app or a special TronLink extension in the Google Chrome web browser.

The platform and the DAO Paykiken Geo forum do not request or collect personal information about the Government tokens' holders, only identifying them with their crypto wallet number in the TRON network. The verification process for the DAO platforms is performed autonomously by verifying the user's ownership of balance Paykik tokens in live mode without any requests for private keys or passwords, thus maintaining the anonymity of the Government token holders.

Authorization of the Paykik Government tokens holders provides them with access to the back end of the platform (<https://paykiken.io/>) and a closed section of the forum as a part of their rights as stockholders and managers of the DAO Paykiken Geo. The information is accessible only to the authorized users of the platform and includes key financial and technical data about current DAO projects, their legal and strategic components, commercial proposals, and pending business plans.

Paykik Government tokens are a component of the “multi-signature withdrawal” algorithm of the DAO Paykiken Geo. This algorithm allows the initiation of a transaction of DAO financial assets only after a platform vote (signature collection) is conducted and supported (signed) by a simple majority of the Paykik holders. The multi-signature-withdrawal algorithm safeguards DAO Paykiken Geo assets against embezzlement and irresponsible usage by providing the DAO members with direct access to the asset control tools, without the involvement of a third party.

**3.2. The sale/purchase of Paykik tokens** of DAO Paykiken Geo is available through the platform (<https://paykiken.io/>), which uses the SWAP principle for the Paykik/USDT pair. The decision regarding the initial offering of tokens from the DAO platform was made by the subscribers of Paykiken Geo’s Telegram channel (<https://t.me/paykik>) as a result of an open vote, that received more votes than the centralized and decentralized crypto exchanges.

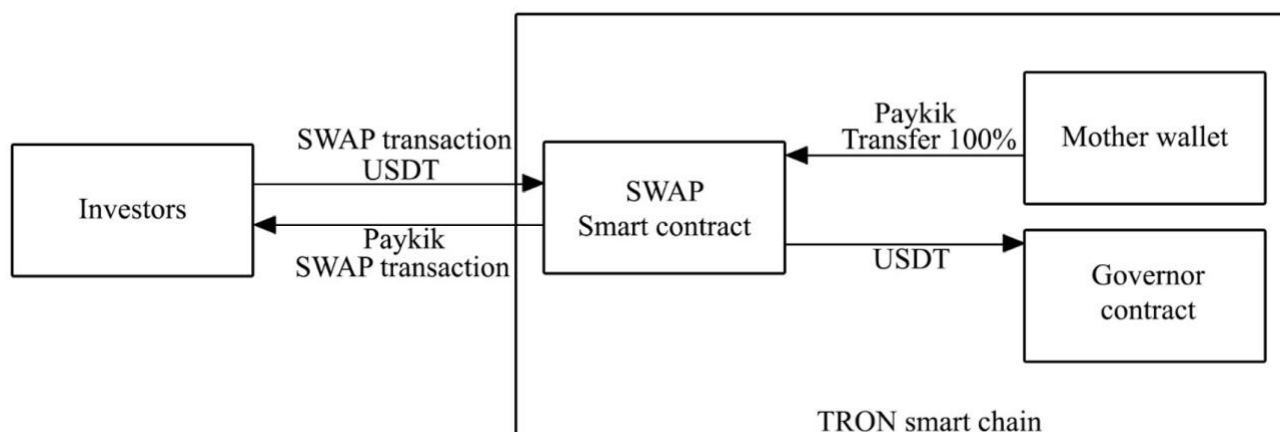
The sale/purchase of DAO Paykik Geo tokens is possible after a user’s TronLink wallet has been connected to the DAO platform <https://paykiken.io/> or <https://paykiken.com/> according to the algorithm described in detail on DAO Paykiken Geo’s YouTube channel (<https://www.youtube.com/@paykiken1343>). The network commission for the SWAP execution is paid by the buyer in the TRON network using TRX tokens or resources such as “Energy” or “Bandwidth” if available.

The mechanism of sale/purchase on the platform (<https://paykiken.io/>) is executed through the SWAP smart contract using the Paykik/USDT pairing with open-type variables. This allows anybody to validate the actual liquidity and linked smart contracts.

The primary sale of the whole Paykik DAO Paykiken Geo emission is made after the transfer of Paykik tokens from the mother wallet to the SWAP smart contract, which forms an initial trade pool. During the sale of the Paykik Government tokens, the USDT tokens received are automatically transferred to the Governor smart contract DAO Paykiken Geo in the TRON network for storage and management purposes.

*Picture 3*

*Sale/purchase mechanism of Paykik tokens*



The Governor smart contract has a public address in the TRON network and automatically hosts a function of the decentralized SWAP mechanism on the platform (<https://paykiken.io/>). It is controlled by a decentralized algorithm called multi-signature withdrawal, which allows the initiation of asset transactions that are stored in it through a voting process (signing) by the owners of no less than 50% + 1 of the Paykik Government tokens in free circulation.

**3.3. The distribution of the tokens** of DAO Paykiken Geo in their full emission amount is as follows:

- 200 000 Paykik – Team smart contract (10,00 %);
- 1 800 000 Paykik — SWAP smart contract (90,00 %).

10,00 % of the overall emission of Government tokens (200 000 Paykik) is deposited by the Team smart contract in the TRON network as a reward for DAO founders' team. The smart contract algorithm releases a function of Paykik tokens freeze that makes payouts from the deposit in proportion to the Government tokens quantity that enters into free circulation. The deposit mechanism limits the founders' team involvement in DAO activity and protects the interests of other DAO Paykiken Geo token holders.

90 % of the Government tokens emission (1 800 000 Paykik) are distributed through a decentralized SWAP mechanism on the DAO Paykiken Geo platform. In the foundation of the price algorithm lies a formula of geometrical progression ( $b_{n+1} = b_n * q$ ), as well as its arithmetic progression representation ( $a_n = 1 + (q-1) * S$ ) in the code of the smart contract. The price of each token is determined by the price-forming formula:

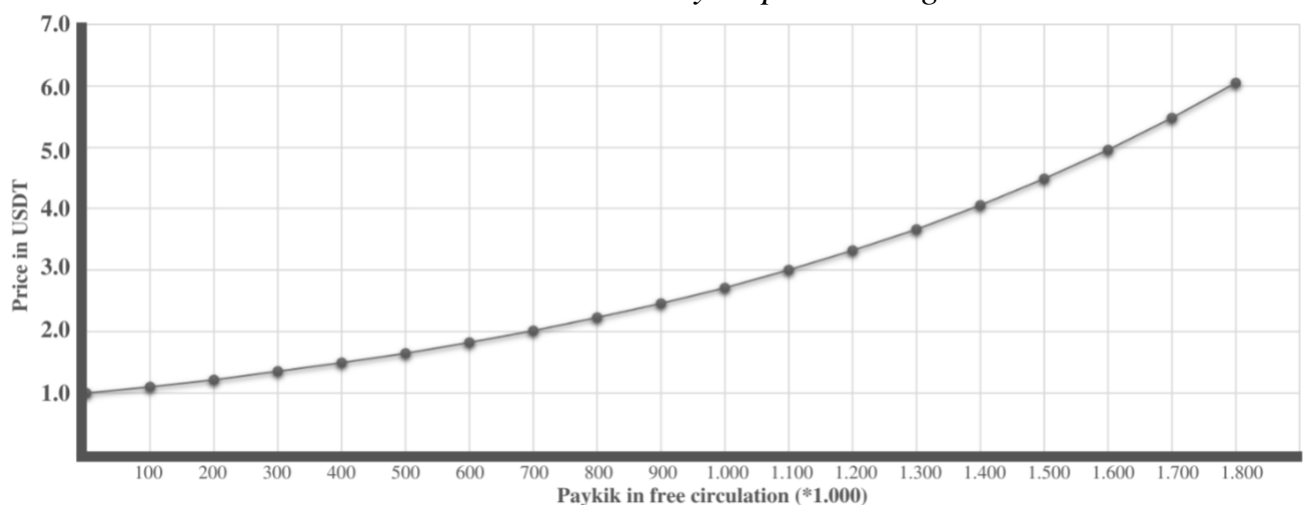
$$P = 1 + 0,000001(USDTPool),$$

where  $P$  – current token price,  $USDTPool$  – current Governor smart contract balance.

The initial balance of the Governor smart contract is 1 USDT and has a growth in proportion to the Paykik tokens that enter free circulation and profits generated by DAO Paykiken Geo. The initial distribution of the Government tokens stipulates automatic price correction by the decentralized SWAP algorithm in a range from 1 USDT for the first token up to 6.05 USDT for the last token available for exchange.

Picture 4

*Government tokens Paykik price change chart*

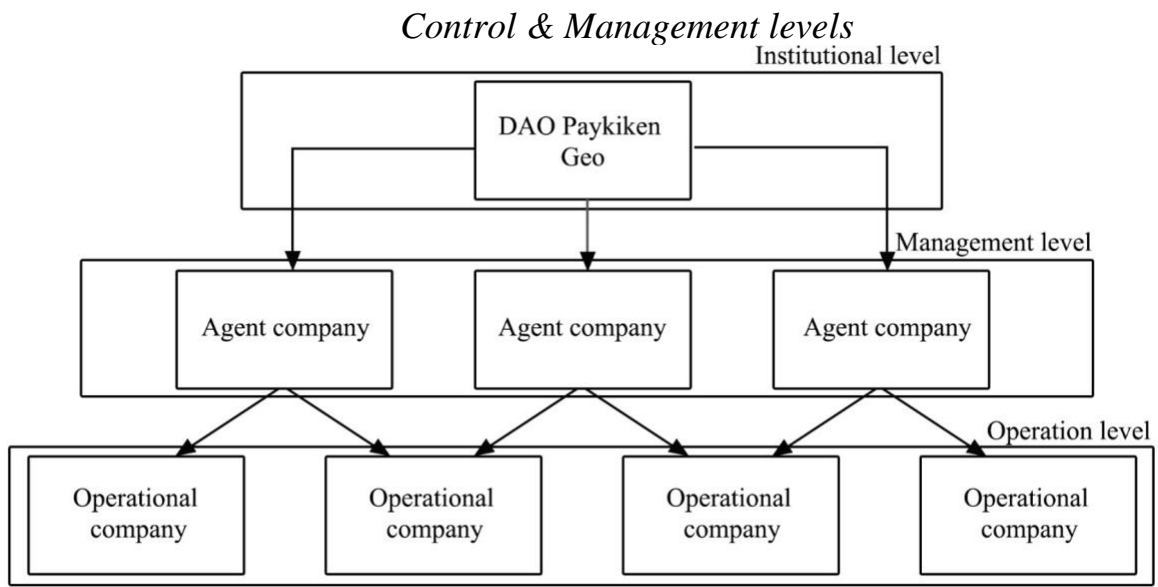


In order to keep Paykiken Geo decentralized, the maximum purchase amount is limited to 7 999 Paykik per one user. To decrease speculative activity, the USDT payout amount from the reverse sale of the Government tokens is subjected to 1% commission hold.

## Chapter 4. Management

**4.1. The management system** of DAO Paykiken Geo follows a vertical vector hierarchy, which secures the authority and responsibility associated with making and implementing decisions at different levels of the DAO's administration. The three-tier structure makes it possible to separate strategic and control-management tasks from operational activities and to clearly distinguish issues that fall within the competence of the owners of Government tokens from those delegated to Agents and contractors.

Picture 5



The institutional level is the level of decision-making available exclusively to the owners of Paykik Government tokens. Their authority includes: determining long-term plans and perspectives, managing relationships within the DAO and with the external environment, adapting to various kinds of changes, formulating goals, and making strategic decisions regarding the activities and development of all the projects of DAO Paykiken Geo, investment management and dividend distribution.

The managerial level is the level of decision-making available to the companies involved in specific tasks through direct contracts with DAO Paykiken Geo. Issues related to operational management, including the administration and execution of the financial and legal orders of the DAO within the framework of the agency contracts, belong at this level. Management-level companies are authorized to suggest business plans, commercial proposals, and developments, options for technical and legal solutions for consideration of the DAO Paykiken Geo community.

The technical level is the level at which the organizations and people perform technical tasks under the control of Agent companies. An obligatory condition for their participation in DAO projects is relevant experience, qualified personnel, and necessary technical equipment. The choice of the executors involved at the technical level is made on a competitive basis and is the responsibility of the management-level companies.

**4.2. The mechanics of cooperation** in the structure of the DAO Paykik Geo management are based on a combination of traditional and electronic methods of document-flow organization as well as interactive decisions made on the blockchain network and business processes that occur in the real world. Algorithms are integrated into the hierarchy of the DAO management system and have unique features at different levels.

The cooperation between the institutional and management levels occurs in a special section of the DAO Paykiken Geo forum, where the company chosen as the Project Agent signs the Agent's agreement using an electronic digital signature. The agreement outlines all the conditions of the partnership. The signature from the DAO's end, as the "Principal," is an electronic protocol that conveys the results of the blockchain voting by the Paykik Government tokens holders as a collective investment cooperative.

Cooperation between the management and technical levels is realized using the traditional methods of document flow, where the companies that represent the interests of the DAO Paykiken Geo act as the "Contractors," noting the DAO as the third party. In sales/purchase agreements, DAO Paykiken Geo is the ultimate beneficiary of any product distribution or any other legal form of collaboration that entails receiving ownership rights of the developments, profits, products, properties, and other material and non-material assets.

The feedback from the companies at the management level and the DAO happens in the Profile section of the DAO Paykiken Geo forum and provides a continuous information flow to the DAO about the current business processes, technical data, achieved results, and production plans. DAO Paykiken Geo can choose their representatives from among the Paykik Government token holders. The companies at the management level must provide them with the required access to all the necessary documentation related to the project.

Management-level companies are responsible to DAO Paykiken Geo as Agents and as direct executors in charge of the activities of technical-level companies. To secure its interests, the DAO can recruit auditing and legal companies to inspect the management-level and technical-level companies.

In the case of a conflict between DAO Paykiken Geo and management-level companies that is not resolved by negotiation between the representatives, the DAO reserves the right to file a lawsuit as an Investment Cooperative as well as individual lawsuits on behalf of the Paykik Government tokens holders. In any other scenario, the relationships between the parties are regulated by International Law and this includes force majeure circumstances.



**4.3. The blockchain voting** procedure using special voice tokens, which is the most transparent and democratic mechanism for the DAO's management, was chosen by the subscribers of DAO Paykiken Geo's Telegram channel (<https://t.me/paykik>) by an open vote. Simplicity and security are the main advantages of this type of voting over off-chain and on-chain models.

The DAO Paykiken Geo blockchain voting process is initiated by the owners of Paykik Government tokens in the Voting section of the DAO forum if the issue at hand falls within the competence of the institutional level of governance. Information about putting the issue to a vote is duplicated in the DAO social networks and, if the initiative is supported by more than 10% of the DAO community in the DAO Paykiken Geo forum, the general voting procedure is initiated.

The technical part of the blockchain voting procedure includes the issuance of voice tokens with a one-step distribution to the current owners of Paykik Government tokens to their TronLink wallets. On social networks and the DAO Paykiken Geo forum the time of voting is announced and two blockchain addresses "Yes" and "No" are provided. The voice tokens are to be sent to either one of these addresses to express an opinion on the issue and put to a vote.

With a quorum of 50% or more, the vote is considered valid for all issues at the level of institutional governance, except for issues related to DAO Paykiken Geo capital migration to other networks or assets, for which the quorum has to be 75% or more. The result of the general vote is determined by a mathematical majority of the tokens sent to the "Yes" or "No" wallets. Furthermore, the results are public and available in real-time via the TRONSCAN blockchain browser.

Government token owners who do not take part in the vote are considered to have cast a vote for the majority and cannot challenge the results. Unique tokens are generated for each issue that is put to a vote, eliminating the possibility of someone using a previously received token to participate in subsequent votes.

The number of voice tokens issued for the voting procedure always corresponds to that of the Government tokens issued (2 million). Also, the security of the general voting procedure is based on the transparency of the blockchain network at all stages, from the generation of the voting tokens to their distribution until the results are tallied.

The general voting results are announced on the DAO forum as well as via messages on social networks, and the publicly held vote, which is secured by the blockchain network, officially confirms the decision of the DAO Paykiken Geo community on all issues of collective management of assets and capital.

## Chapter 5. General principles of the DAO's investment policy

*5.1. The selection of the investment projects* of DAO Paykiken Geo is made in the sectors of extraction, processing, and trading of natural resources, as well as in projects with the primary aim of popularizing decentralized business models. The algorithm used for this involves a set of consecutive steps that start with the initial investment proposal on the forum and end with a voting procedure by Government token holders.

Investment offers are made by the DAO Paykiken Geo members and companies that have contractual relationships with the DAO in the “Offer” section of the forum. The proposals consist of all the necessary legal, technical, and economic information about the projects offered for realization, including expert ratings, and photo and video information. A compulsory condition for investment offers is their compliance with the SDGs formulated by the UN and the general principles of DAO Paykiken Geo.

The offers, proposed for discussion on the DAO Paykiken Geo forum, go through an algorithm for automatic rotation that ensures the display of the most relevant and popular offers from the general forum chat. The algorithm is based on the reaction analysis and activity of Paykik Government token holders and is distributed in a prioritized manner. Investment offers that receive the most attention and positive reactions are promoted in the “Portfolio” section of the forum. This initiates a voting process for the selection and approval of the specialized companies and the qualified professionals required for the technical/legal/financial audit of the investment project, as well as drafting a strategic plan for its development.

In such a case where there is a positive decision after the voting procedure, this voting protocol acts as the official acceptance of the contract by the DAO as the contracting authority. The service payment to the executors of the contract is made from funds stored in the Governor smart contract of DAO Paykiken Geo in the TRON network by a decision of no less than 50% + 1 of the Government tokens holders. After the work of the specialized, appointed companies and field experts is complete and includes a feasibility study, business plan, technical offers, and solutions, the audit result is obtained. This forms the final “Portfolio” of the investment project, which is the DAO's intellectual property after the payment.

Based on the contents of the final “Portfolio,” the Government tokens holders decide whether to be involved in the fundraising for the investment project through a general vote. If they decide to refuse the initiation of the fundraising, the project is transferred to the “Archive” section of the forum and cannot be brought up for discussion for a minimum of 180 days from when the decision was made. In contrast, if they decide to start fundraising, the project is transferred to the “Invest” section of the forum, and DAO Paykiken Geo initiates an emission of utility tokens.

**5.2. Utility tokens emission** is a fundraising instrument for DAO Paykiken Geo projects that have been accepted by Government tokens holders and are at the financing stage. Utility tokens are an investment that allows the investors to receive a share of the profits from the projects without receiving any ownership rights to the assets, projects, or developments of DAO Paykiken Geo. Utility token holders do not have access to the administrative section of the web platform and the forum, and cannot participate in the DAO voting. However, they reserve the right to a guaranteed share of the DAO Paykiken Geo activity profit.

The issue of fundraising through the emission and sale of utility tokens is reviewed by the Government tokens holders in the “Invest” section of the DAO Paykiken Geo forum. The key parameters of the planned listing are discussed and put to a general vote. The number of tokens issued for free turnover and that remain under DAO ownership is verified, and initial Agent listing offers are reviewed. The voting protocol, involving the Government tokens holders in the TRON network, is employed for the official acceptance of a selected Agent company offer. Agent companies are paid according to the Governor contract of DAO Paykiken Geo in the TRON network, or from a part of the next utility tokens emission.

An Agent company is appointed by DAO Paykiken Geo for the emission and placement of utility tokens, based on the crypto exchange requirements and the crypto market conjuncture. It prepares and delivers a finalized offer for the Paykik Government tokens holders’ acceptance, which is transferred to the “Placement” section of the DAO Forum. The offer includes emission details such as the blockchain network, emission volume, stablecoin trade pairs, initial sale price, declared yield, the proportion of realization and distribution of the tokens, marketing plan, liquidity calculations, exchange forecasts, and other details about the initial placement. The final offer is put to a general vote among the Government tokens holders and, in the case of a favorable vote, utility tokens emission is carried out. On the contrary, if the vote goes against the initial placement, the project is transferred to the “Archive” section of the DAO Paykiken Geo forum and cannot be reconsidered for a vote until at least 180 days from the moment the decision was made, or unless the conjecture of the crypto market changes.

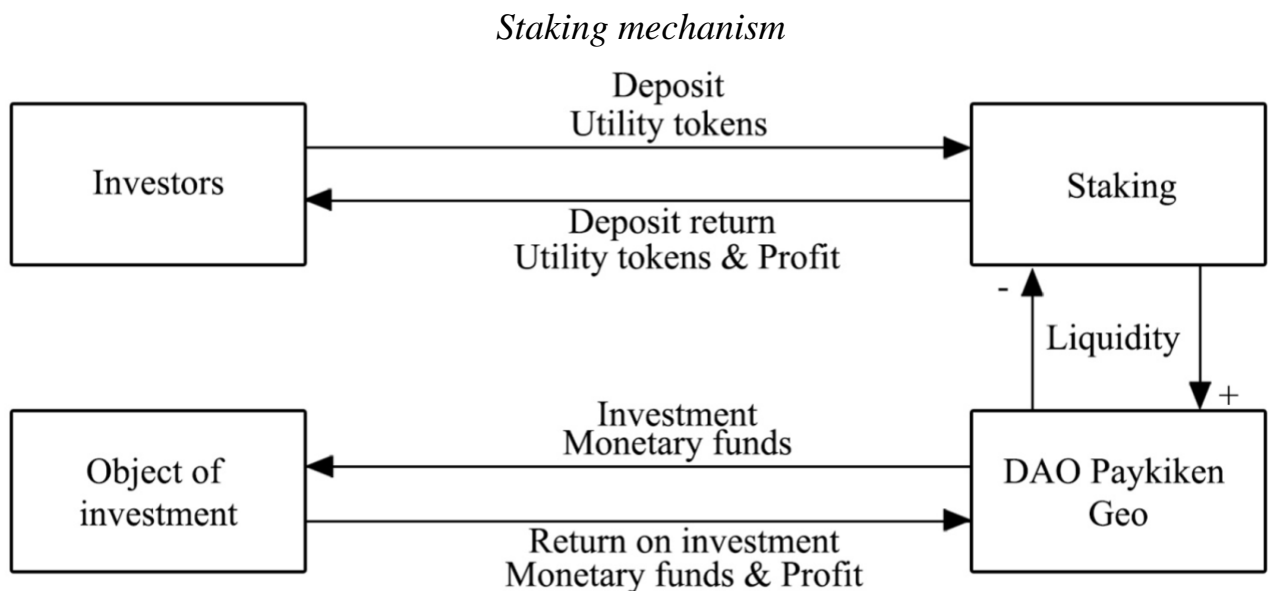
The emitted utility tokens are distributed in a proportion approved by Government tokens holders to the Governor smart contract of DAO Paykiken Geo in their emission network, or a special trade account in the exchange or the Agent company exchange account for their realization on the cryptocurrency market. The DAO’s utility tokens’ liquidity is provided by the stablecoins obtained through their realization and, in the event of a drop in the market, the price is regulated by “burning” a part of the emission after such decisions are made through the voting procedure by the Government tokens holders. Utility tokens of DAO Paykiken Geo that remain in free turnover are included in a staking algorithm, ensuring DAO projects’ funding and profits for their holders.

5.3. **Staking** of the platform DAO Paykiken Geo (<https://paykiken.io>) implements a decentralized algorithm that involves receiving fixed payments for depositing DAO utility tokens for a certain period of time by their holders based on smart contracts in the blockchain network. Fixed staking is used to finance ongoing projects of DAO Paykiken Geo without a decrease in the liquidity of the DAO utility tokens that are in free circulation, ensuring a guaranteed payout to the investors.

The reward receivable and deposit period of the assets for fixed staking for DAO Paykiken Geo are directly influenced by the financial indicators of a particular project that they were initiated for and fully correspond to the investment program that is outlined in the organization's business plan and white paper. Staking includes a feature that allows users to deposit DAO utility tokens before the project reaches ROI and starts to generate profit, as well as offering different time periods and return rates. The maximum return is received by the depositor who stakes their DAO Paykiken Geo utility tokens at the earliest stage and for a longer period.

The staking mechanism is realized through the network of utility tokens emission and incorporates an enabler allowing the owner to transfer the utility tokens to a smart contract for deposition on the DAO Paykiken Geo platform (<https://paykiken.io/>) as well as receiving the deposit and reward payouts automatically in a fixed term. The token staking tutorial is available on DAO Paykiken Geo's YouTube channel (<https://www.youtube.com/@paykiken1343>).

Picture 6



The DAO Paykiken Geo staking algorithm incorporates the principles of democracy and openness, all the information about the deposit-allocated tokens and profit payment processes related to them is available to the users with the blockchain observer. The decentralized mechanism of smart contracts does not allow the withdrawal of tokens before the end of the deposit period and prevents liquidity drops of DAO Paykiken Geo utility tokens.



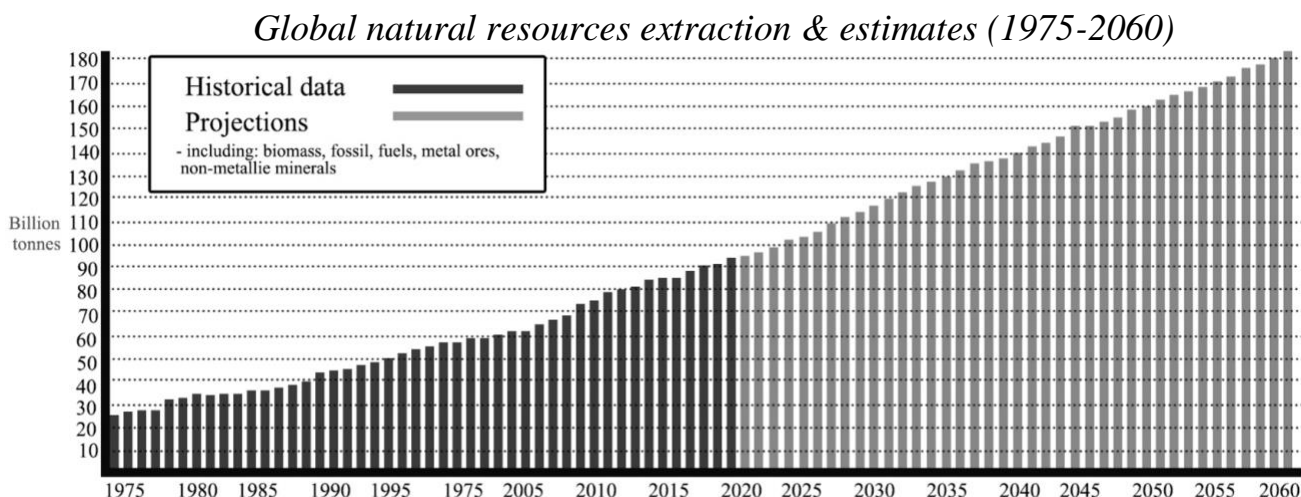
## **Part three.**

# **The activity of DAO Paykiken Geo**

## Chapter 6. Projects of extraction or/and processing of natural resources

**6.1. The Extraction of natural resources** has grown from 27 to 92 billion tons over the last 50 years, and, according to UN estimations<sup>3</sup>, the yearly raw material extraction volume will double, whereas the number of natural resources consumed per human capita will grow by 7–12 tons each year.

Picture 7



The rapid increase in natural resource consumption is depleting the supply of large extraction fields, leading to active growth in the development of small fields in developing countries. In most of these countries, extraction is carried out by local companies that use outdated technologies, and heavy human labor and that is inefficient and ecologically harmful. The high demand and rising costs of raw materials in global markets do not meet the capital-investment needs of these companies. Limited access to investment and technology does not allow them to unlock the full economic potential of their deposits, to create modern production enterprises and infrastructure facilities.

It is possible to improve the efficiency of the mining and processing of natural resources by small and medium-sized companies in developing countries. This can be achieved by consolidating into industrial clusters around a single production and logistics center. The combined resource base of the consolidated raw material sources could significantly increase their investment attractiveness, allowing the companies participating in them to bring their operations to a new level of development, provide an influx of investment in the creation of production facilities and infrastructure, to adopt modern production technologies.

DAO Paykiken Geo's investment policy is implemented in the projects of the extraction and/or processing of natural resources, with the aim of solving the problem related to the efficient development of small and medium-sized raw material deposits in developing countries by consolidating such deposits and creating new industrial enterprises.

<sup>3</sup> The UN [Global Resources Outlook 2019](#) report, prepared by the International Resource Panel, has examined the trends in natural resources and consumption patterns since 1970.

**6.2. The investment policy** of DAO Paykiken Geo includes a set of rules and principles that are necessary for the effective implementation of projects involving the extraction and/or processing of natural resources. The priorities of the DAO investment policy are to protect the interests of Government token owners in the physical world and to fulfill the staking conditions of DAO Paykiken Geo utility tokens for depositors in the blockchain network.

The basic principle of the DAO Paykiken Geo investment policy stipulates the entrenchment of the legal rights related to any investments and products of the DAO. The financial investments of DAO Paykiken Geo in equipment, machinery, and raw and analytical materials (including geological, technical, and surveillance data) are made under the condition that DAO becomes its beneficiary. The investment policy of DAO Paykiken Geo does not include any loan and credit provision or subsidies to third parties.

In projects related to investments in the construction or thorough modernization of production and processing enterprises of the capital type, the legal status of the DAO, with respect to the land on which they are based, is fixed. Obtaining the ownership rights for DAO Paykiken Geo to the land and/or entering into long-term lease agreements is a prerequisite for such investments. The DAO's investment policy limits the participation of DAO Paykiken Geo in construction projects or territories that are under the economic management of third parties.

Technologies associated with natural resource extraction and/or processing projects that have a high degree of scalability, mobility, and autonomy most closely correlate with the investment policy of DAO Paykiken Geo. The possibility of a step-by-step increase in the production capacity and processing grade of raw materials reduces the project risks for the DAO. The investment policy of DAO Paykiken Geo focuses on the progressive development of projects and does not stipulate one-time, large-scale investments.

The UN SDGs regulate the investment policy of DAO Paykiken Geo. The application of environmentally friendly technology, use of renewable energy sources, and post-project land reclamation are mandatory conditions for the projects implemented by the DAO. The economic activities carried out during the extraction and/or processing of natural resources and the creation of infrastructure by DAO Paykiken Geo are conducted while taking into account the interests of the local population. This includes the provision of support and development measures for territories of their residence.

The investment policy of DAO Paykiken Geo stipulates the potential transfer of production and infrastructure facilities to the local companies upon completion of projects. As a practical tool for facilitating cooperation at the initial stages, the transfer is carried out only after the completion of investment projects, the full achievement of economic goals, and the realization of the planned financial results.

**6.3. Algorithms for natural resource extraction and/or their processing** traditionally include the period of investment, reaching the break-even point, and profit generation. The concept of DAO Paykiken Geo, which is based on the idea of merging traditional business and blockchain technology, establishes uniform planning principles and the general rules of execution in the algorithms of the DAO's investment projects.

The investment period of DAO Paykiken Geo projects is directly related to the current condition of the global cryptocurrency market. High market volatility significantly affects the results of DAO utility tokens placement with regard to the exchanges and staking volumes. To adapt investment projects to the cryptocurrency market, DAO Paykiken Geo uses principles of flexible planning and a progressive technical approach. These principles stipulate the simultaneous use of several financial models and technical solutions within one DAO investment project. The financial models consider a wide range of investment and capital investment volumes, while the technical solutions enable the scalability of production capacities and the progressive development of technological cycles.

DAO Paykiken Geo projects in the break-even point period stipulate cash flow planning, taking into account the payments required for staking on the DAO platform. The priority target in this stage is to fulfill the obligations related to the depositors of the DAO utility tokens and to eliminate short-term financial liabilities. The achievement of the technological and production levels stipulated by the investment projects serves as a trigger for the creation of further development programs. During the period of self-sufficiency, DAO Paykiken Geo determines the action algorithms necessary for maximizing the potential of the projects to expand and increase their production capacity.

The net profit obtained from the realization of natural resource extraction and/or processing projects is subject to distribution among the owners of the Paykik Government tokens. The investment policy of DAO Paykiken Geo does not stipulate the reinvestment of profits, the formation of reserve funds and capital, or the direction of profits to cover possible losses of other projects. The net profit is converted into stablecoins that support the TRC20 standard and sent to the decentralized distribution mechanism. The payout algorithm is implemented by the InCome smart contract function, which performs a one-time transfer of tokens to the TronLink wallet addresses of the DAO participants according to the number of Government tokens owned by them. The network commission for the execution of the transfer is deducted from the payout amount to the recipient.

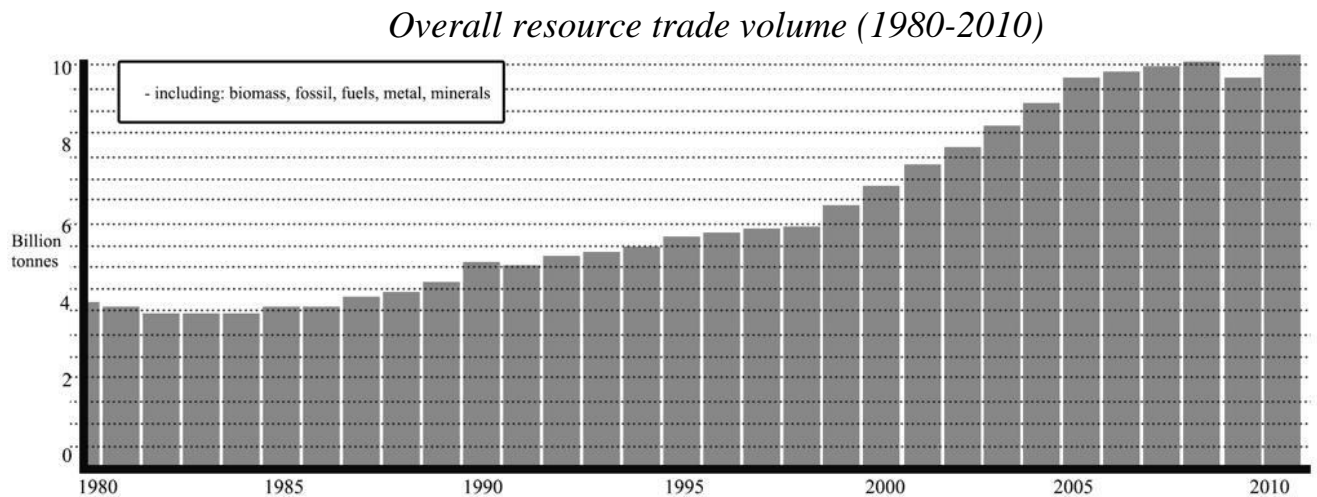
The investment projects of DAO Paykiken Geo are different in terms of their development mechanisms, which are associated with the individual features and specifics of each project. Compliance with the general principles and rules, stipulated for the DAO's natural resource extraction and/or processing projects, is an integral condition for any DAO Paykiken Geo investment project.



## Chapter 7. Blockchain of resources and crypto commodity exchange

**7.1. The Global Trade in natural resources** has significantly increased in recent decades due to growth in the demand for them. According to the UN<sup>4</sup>, the overall value of trade has increased by more than six times and the volume of trade has more than doubled during the period of 1980 to 2010.

Picture 8



The decline in international trade, directly or indirectly related to the COVID-19 pandemic, was completely offset in the following years. The recovery of the demand for natural resources and the surge in their value between 2022 and 2023 illustrated the growing vulnerability of the global trading system, which relies on fewer and fewer resource producers. The decrease in the number of net exporters, the trade restrictions as a result of the current international policies, and the instability of the global financial system are the prerequisites for the development and implementation of blockchain technologies in the sphere of natural resource trade and management.

Blockchain technologies can increase the transparency, security, and efficiency of commercial and administrative, trading algorithms. Blockchain mechanisms allow one to track the ownership and transfer of assets, create and sign digital contracts, automate settlement and payment processes for transactions, and confirm the authenticity and origin of natural resources. Blockchain technologies will reduce the need for intermediaries, lower transaction costs, save money, reduce waste, and ensure compliance with ethical and environmental standards in the production and trading of raw materials.

The DAO Paykiken Geo development concept includes the creation and implementation of innovative models of natural resource administration and trading based on blockchain technology. Digital commodity exchanges and blockchain network tailored specifically for natural resources are tools that can allow the integration of decentralization principles into international resource trading algorithms, the expansion of commodity markets, and the attraction of new participants.

<sup>4</sup> The UN report “[International Trade in Resources: Biophysical Assessment](#),” prepared by the International Resource Group, examines global resource trade and the biophysical assessment of the global market.

**7.2. Commodity crypto exchange**, as a part of the DAO Paykiken Geo development concept, is designed to enable the decentralized trading of natural resources for all producers and buyers of raw materials anywhere in the world without exception.

The existing centralized commodity exchanges have a single center of control and management and, therefore, can be associated with a set of significant drawbacks:

- lack of transparency and independence;
- limited confidentiality and security of data;
- vulnerability to censorship and manipulation;
- corruption risks.

The electronic platforms of centralized exchanges are subject to a single point of failure, entailing security vulnerability to hacking or malicious attacks, where a breach in one part of the system could compromise the entire system.

The decentralized algorithm of the commodity crypto exchange, offered by DAO Paykiken Geo in the blockchain network, eliminates the disadvantages of centralized platforms and guarantees trading transparency, security, reliability, and immutability. One of the key advantages of a blockchain-based exchange is the possibility of realizing direct settlements, which includes the use of cryptocurrencies. The traditional instrument of letters of credit, which are used to guarantee payment in international trade transactions, can be replaced by the digital currencies' deposit algorithm, which will significantly speed up settlement processes and reduce the costs and volume of the supporting documentation. The absence of access restriction measures to the platform of the DAO Paykiken Geo commodity crypto exchange makes a significant contribution to the liberalization of the global market of natural resources.

In developing the administrative structure of the commodity crypto exchange, DAO Paykiken Geo's primary objective is to integrate the principles of decentralization into the algorithms of trading transactions. The fundamental, democratic principles of the DAO must be taken into account in the implementation of the measures for combating money laundering and the illicit trafficking of raw materials. The legal concept of the DAO Paykiken Geo commodity crypto exchange requires a flexible approach that complies with international trade regulations and restrictions.

The technical structure of the DAO Paykiken Geo commodity crypto exchange stipulates a user-friendly interface for the online trading platform that will allow users to easily access the exchange and make transactions on it. The functionality of the platform should include live price information, transaction history, an order book, and statistical analysis. The trading mechanisms of the DAO Paykiken Geo crypto exchange will be based on the decentralized algorithms of the GeoChain blockchain network.

**7.3. The commodity blockchain GeoChain** is a specialized blockchain network that DAO Paykiken Geo created to meet the needs of the producers and processors of raw materials as well as the buyers of natural resources. GeoChain is the future architecture of the DAO platform. It is the infrastructure of all its projects, the basis of the DAO Paykiken Geo commodity crypto exchange, and an open-for-all tool for the production, supply, and financial management of various areas of natural resources use.

The technical development of the GeoChain platform involves the creation of a decentralized ecosystem built on an open-source blockchain protocol with a Delegated-Proof-of-Authority (DPoA) consensus mechanism. The delegation algorithm, in addition to the basic PoA mechanism, enables the token holder to transfer the right to verify and validate blocks in the GeoChain network to validators appointed by DAO Paykiken Geo from among specialized companies. The validators will be selected based on their reputation and experience related to the mining, processing, and logistics of natural resources. Evaluation and consultation companies, including major specialists in the field of natural resources management, can also be validators in GeoChain and receive remuneration from each transaction in the network.

The DAO Paykiken Geo ecosystem is a general system of products that connect and support each other in the GeoChain network. The evolutionary development of the ecosystem involves the development of multiple, decentralized services and applications (DApps) along the following lines of activity:

- corporate blockchain solutions;
- geological and geophysical solutions;
- financial and trading solutions;
- transportation and logistical solutions;
- environmental solutions.

A promising prospect for the development of the DAO Paykiken Geo ecosystem is the integration of other digital technologies with the blockchain, such as AI and IoT.

The development of the GeoChain platform and blockchain includes the creation and emission of native Geo tokens. The Geo token is the unit of value of the ecosystem and a tool for user–platform interaction. The DAO Paykiken Geo concept stipulates the use of native tokens as a payment method for network fees, transaction fees, and the conversion of tokens. Geo tokens do not provide their holders with the right to participate in the management and stacking algorithms. Their liquidity is maintained by the GeoChain treasury under DAO control.

The DAO Paykiken Geo development concept involves the initial integration of the specialized GeoChain network into the natural resource extraction and/or processing projects, which are released by the DAO’s operations. As the GeoChain architecture is created and developed, the platform and the emerging ecosystem will be made publicly available.

## Chapter 8. Non-fungible industrial tokens (NFTi)

8.1. **NFT technology** is a technology for creating cryptographic certificates (tokens) in a blockchain registry to prove ownership and/or copyright over some unique object. The abbreviation NFT stands for 'non-fungible token'. Non-fungible means that something is unique and can't be replaced. An NFT's uniqueness in the blockchain network eliminates the possibility of it being counterfeited or copied, making it possible to trace when, and by whom, it was first created, and to see the entire history of its transactions.

NFT technology has become popular worldwide and is used in various fields, including the following:

- art & collectibles;
- music and entertainment;
- games and sports;
- education and charity.

An NFT is used to confirm the ownership and authenticity of objects and for the creation of digital certificates in various applications and services. NFT technology is also used for security and safety as a method of identification and authentication.

In 2021, the market volume for tokens, created using NFT technology grew rapidly, reaching an annual turnover of \$44.2 billion.<sup>5</sup> In 2022, amid the collapse of the Terra ecosystem and the FTX exchange, the NFT market collapsed by 97%. The sharp drop in value and the actual depreciation of most NFTs reduced user interest in the technology, and the number of active wallets fell by 88%. The market collapse revealed a direct correlation between the price of non-fungible art and collectibles tokens and market sentiment and confirmed the resilience of NFTs with functional value. Market turmoil has affected the further development of NFT technology, shifting the vector of development towards their utilitarian use.

DAO Paykiken Geo's development concept stipulates the deployment and utilization of NFT technology. The use of this technology as a practical tool with a unique set of qualities in relation to the DAO's activities opens up new opportunities. The specialization of DAO Paykiken Geo on projects related to the extraction, processing, and trade of natural resources involves the creation of special algorithms and rules for NFT technology use. The minting (creation) of non-fungible DAO Paykiken Geo tokens is designed to ensure the connection of tangible DAO assets with the blockchain network. The utilitarian functionality and operational algorithm define them as non-fungible industrial tokens (NFTi).

<sup>5</sup> The trading volume of the Ethereum network according to the report "[The 2021 NFT Market Explained](#)" by the Chainalysis platform.

8.2. **NFTi** are DAO Paykiken Geo tokens that have a material equivalent in the physical world. As digital certificates of a blockchain network, NFTi can confirm the owner's participation in the industrial chain (resource–raw material–commodity) of natural resource extraction and/or processing projects as the rightful owner of the end product.

The ideology of non-interchangeable industrial tokens is to match each token with a certain number of tangible assets at key technological stages. In the first stage (at the moment of minting), an NFTi is equivalent to the volume of the initial resources; in the second stage, it is equivalent to the raw materials prepared for processing; finally, in the third stage, it is equivalent to the end products obtained after the processing is completed. The correspondence coefficient of material assets at different stages is determined by the production program of the project and depends on its technical and economic indicators.

An NFTi is minted by DAO Paykiken Geo based on a commodity digital certificate (CDC), which entitles the NFTi owner to participate in the development of a certain amount of natural resources. The CDC is located in a decentralized IPFS storage. It contains all the parameters of the corresponding resource, the time frame of the raw material production, as well as the production of the finished product. The NFTi smart contract ensures each token's correspondence with its certificate in the storage and automatically updates the information about its material equivalent according to the project's technological program. The final result in the NFTi smart contract algorithm is a digital confirmation by DAO Paykiken Geo of the NFTi owner's rights to a fixed share of the end product.

The initial sale of NFTi will be conducted through an auction on the Web 3.0 platform of DAO Paykiken Geo. The starting price of the tokens depends on the timeframe for the end product acquisition, its value, and volume. NFTi turnover in the secondary market is not regulated by the DAO, providing for the possibility of their owners to present tokens for redemption upon the completion of all the technological stages of production. The redemption mechanism involves the ability to obtain the physical volume of production and/or payment equivalent to its value by DAO Paykiken Geo. The costs associated with the transfer of the end product and/or its sale and payment to the owner of the NFTi are paid by them separately.

Each NFTi minted by DAO Paykiken Geo is unique and unconditionally guarantees the holder the right to a trademark digital DAO certificate corresponding to it. As an investment tool, the industrial token allows the holder to generate income from direct participation in natural resource extraction and/or processing projects. The integration of NFTi into the DAO Paykiken Geo digital architecture stipulates the introduction of the technology into commodity projects, GeoChain blockchain algorithms, and GameFi gaming applications.

## Chapter 9. GeoSpace

**9.1. The concept of GameFi** is based on the fusion of blockchain technologies, online game processes, and decentralized financial mechanisms. A distinctive feature of the concept is the ability to earn and monetize the in-game experience. Some GameFi applications and games also include the possibility of the ownership and disposal of game attributes in the blockchain network or a distributed public registry.

The basic principle of earning in GameFi is P2E (play to earn). Players are rewarded according to their playtime, in-game actions, or achievements. Additional income in GameFi can be earned through betting, stacking, crypto farming, or lending to other players. GameFi projects developed on DAO platforms involve users in the decision-making processes, invite players to make changes and updates to the project, and guarantee the preservation of in-game experiences and achievements.

The rapid growth of the GameFi market occurred during the COVID-19 pandemic when blockchain games became people's primary income source in some countries. In 2021, P2E-based games and apps attracted more than a million active users. Amid the collapse of the Terra ecosystem and the FTX exchange and the general collapse of the crypto market in 2022, the GameFi sector maintained its popularity and increased its influence in the gaming market. Analysts<sup>6</sup> predict that the blockchain gaming segment will grow at an average annual rate of 20.4% over the next five years and that the GameFi gaming market could reach \$2.8 billion by 2028.

As the GameFi market has evolved, some of the shortcomings of the P2E concept have become apparent, such as the focus on making money without paying enough attention to gameplay quality and the entertaining aspect of it. Many P2E games are perceived by players as jobs or challenges that must be overcome to earn money. The second significant drawback of games and applications in GameFi is the capitalization or liquidity formation algorithm. This algorithm implements an internal liquidity growth function by attracting more new players paying entry fees. This significantly limits the development of games in the GameFi applications sector, creating risks of collapse in the value of the games' finances.

The concept of DAO Paykiken Geo development is built on the participation of the DAO in real projects of extraction and/or processing of natural resources, trading of raw materials, and development and integration of blockchain technologies in the material world. The wide range of activities and multi-level architecture allow the DAO Paykiken Geo development concept to include the creation of the GeoSpace gaming space.

<sup>6</sup> According to the analytical report “[Play-to-Earn NFT Games market](#)” by Absolute Reports.

**9.2. The GeoSpace gaming space** is a publicly accessible gaming part of the Web 3.0 (<https://paykiken.io/>), DAO Paykiken Geo platform was specifically created for gamers and gaming applications as a place for users to communicate with each other and relax. The gaming space has its own ideology and technical concept based on the DAO Paykiken Geo blockchain architecture.

GeoSpace ideology is based on the idea of creating an environment for developing and publishing games that support the P&E (play and earn) principle. In contrast to the P2E principle, the platform functionality does not use algorithms that require the players to perform repetitive and monotonous actions to gain profit. Instead, P&E involves incorporating elements of fun and recreation into the gameplay in a way that the monetization of game time or achievements, represents a way to earn rewards while having fun. The incentives and payments to GeoSpace players are provided from the GeoChain treasury and the DAO Paykiken Geo marketing budget.

A key aspect of the technical concept of GeoSpace is the introduction of AI technology, which makes it possible to personalize and administer gameplay. By analyzing players' behavior and preferences, AI allows the development of individual tasks and rewards that are specifically tailored to each of the players and the detection of cheating and fraud attempts. A promising use of AI technology in GeoSpace is the development of game design, graphics, and visualization. By automating and improving many aspects of game processes, AI contributes to creating a balanced and pleasant game space.

The implementation of the GeoSpace technical concept involves the use of the GeoChain network as a cryptographic basis for games, guaranteeing players absolute ownership of in-game assets and their protection. A native Geo token can act as in-game currency, while utility tokens and NFTi can be used as elements of in-game economies. The DAO stacking, auction site, and commodity exchange extend the GeoSpace infrastructure, providing users with additional opportunities for investing, earning, trading, and exchanging their tokens.

DAO Paykiken Geo's investment activities do not involve investing in the gaming sphere as a source of profit. GameFi represents a tool for the DAO's marketing goals and a way to promote blockchain technology and decentralization ideology. GeoSpace, integrated into the architecture of DAO Paykiken Geo, will allow users to use GeoChain's capabilities more fully and test and implement the new algorithms of smart contracts, mechanisms of stacking and exchange of cryptocurrencies, as well as NFT technologies. GeoSpace, which is an element and tool of the blockchain infrastructure, can be used by players and game developers to create their game DAOs and develop and implement new technologies.

## Conclusion

DAO Paykiken Geo is the first decentralized autonomous organization that implements the unique concept of collective investment in the commodity sectors of the global economy using blockchain technology and artificial intelligence.

The idea for DAO Paykiken Geo was born in 2021 among an international team of geologists and engineers during a work trip to gold mines in the mountains of Peru. A detailed analysis of the local companies' operations in the sectors of gold, silver, and copper extraction and processing revealed a major problem: The full potential of natural resource deposits is not being fully realized in developing countries. Limited access to financial investment forces them to use backward, unsustainable mining and processing technologies along with hard and dangerous human labor. As a result, the efficiency of mining remains very low despite the growing demand and prices of natural resources in global markets. As a solution to this problem, it was proposed that the potential of the rapidly growing cryptocurrency industry could be used in the traditional business of natural resource extraction and processing. This would enable the necessary influx of funds required for small and medium-sized mining companies to achieve maximum efficiency and profitability. The reason for Paykiken Geo's creation is to develop an innovative business model that would serve as a bridge between the digital and material worlds.

The foundation of Paykiken Geo's organizational structure is a model for a decentralized autonomous organization deployed in the TRON ecosystem. DAO Paykiken smart contracts issued in a blockchain network provide absolute transparency and democracy with regard to collective investment activity. Everybody can join the Paykiken Geo community by becoming a Paykik Government tokens owner. This DAO digital certificate provides its holder with unconditional ownership rights over all the assets, projects, and developments of Paykiken Geo and serves as a digital key to the web platform and forum. The Paykik token is an instrument for direct participation in the management of DAO Paykiken Geo, granting its holder voting rights and the ability to propose any initiatives for discussion.

Today, DAO Paykiken Geo is an evolving digital corporation that uses advanced technologies and solutions. Its unique investment approach includes the development of a personal blockchain, a commodity crypto exchange, NFT tokens tied to real resources, and gaming applications that promote the idea of decentralization. Going forward, as a tool for attracting investments for DAO Paykiken Geo projects, the DAO plans to issue and sell utility tokens on centralized exchanges, which will enable crypto investors to participate in mining and processing projects and receive guaranteed dividends.

Join the DAO Paykiken Geo community to gain access to the natural resources of our planet and earn money through them—all while making the world a greener, fairer, and better place!