TrueWE 1.0

Motivation

Human life has been significantly impacted by revolutions that happened in the past. The agricultural revolution allowed humans to understand the principles of growing, which resulted in more time being spent on the growing phase rather than consumption. This coexistence had the benefit of evolving human consciousness due to its new interaction with the cycle of life. The Industrial Revolution allowed humanity to expand and discover more, but inevitably small communities became more centralized, bringing new demands. As we transitioned from a natural to an anthropogenic world, we adopted a human-centered lifestyle and forgot about life's interdependencies. Despite our relatively short presence on Earth, our achievements as humanity are astonishing but not sustainable.

TrueWE is the collective consciousness that aims for sustainable development based on life, the most sustainable system that we can learn from. As part of TrueWE, it is our responsibility to create a sustainable system that makes our future more resilient and gives meaning to our lives. Together, we can grow and develop a sustainable and scalable system that evolves over time and becomes the best investment for future generations. We are life modelers and responsible users at the same time. We are TrueWE. Welcome to the responsibility era!

TrueWE as an individual

We are smart enough to realize the beauty of life and frustrated enough with a corrupted system that offers money as its true return value. We are individuals who want a better world but are also aware of our weaknesses against systematic corruption. We are ready to take responsibility for shaping and developing a fair yet productive system that is sustainable and brings meaning to our lives

TrueWE as a community

TrueWE, a registered community on the Transnational Community Federation (TCF e.V.), is focused on sustainable development with the goal of increasing life resilience for communities around the world. Our mission is to develop an interconnected and scalable system that provides meaningful jobs for ourselves and sustains our future. Time is the most valuable asset in our lives, and it should be spent wisely. Under our current corrupted global system, we often find ourselves in meaningless occupations just to survive. Unfortunately, there will be little time left for realizing the meaning of life and truly enjoying it. Focusing on a single task might bring perfection, but life is not about perfection – it's about diversity. Single jobs can be stressful and inefficient, which is why TrueWE encourages individuals to diversify their tasks and develop their own innovative and sustainable ideas while still supervising their original task. This is how we grow!

TrueWE as an organization

TrueWE develops and offers proposals that aim to increase life resilience in general and takes permanent responsibility for implementation. After community approval, the selected proposal will be publicly funded, and implementation will begin. Here is our first initial proposal:

Decentralized Singularity of a Resilient Biological Model (LIFETIME)

Title description:

Model: representation of a phenomena which can predict future scenarios.
Biological model: an organism or a fractal system representing different organism which could be modeled collectively (TrueWE).
Resilience: the equilibrium between self-sufficiency and decentralization
Singularity: common goal (increase resilience)
Decentralized singularity: common goal for each part of the biological model.

Introduction: A sustainable system should be environmentally, economically, and socially resilient (see **Figure 1**). Therefore, we will assess and analyze potential vulnerabilities related to the environment, economy, and social aspects of a biological model and offer sustainable responses that will be applied in the live lab simultaneously. In general, resilience occurs at the equilibrium between self-sufficiency and decentralization. Therefore, the live lab will be registered as an independent and freshly registered non-profit organization with the sole purpose of increasing the resilience of the biological model, while avoiding hypocrisy and systematic corruption.

Figure 1: 3 pillars of TrueWE

Environmental Resilience (WP1)

Motivation: The climate has changed dramatically in recent years due to the cascading effects of our unsustainable development, which began during the first industrial revolution. Our limited understanding of time and promoted consumerism have tricked us into producing and consuming more goods without considering the sustainability of this model. Conventional agriculture floods the market with cheap, low-quality food to secure its monopoly while destroying soil life, eliminating biodiversity, and ultimately causing more floods and droughts. Soil degradation, a common outcome of conventional agriculture and mismanagement, is happening all over the world and causing significant problems such as food and water shortages, leading to community migration – a significant vulnerability. Additionally, our current food system is globally interdependent, making it less resilient, while microplastics from required food packaging have made their way into our blood for the first time in history. Overall, the hidden and systematic corruption of the current system won't prioritize environmental vulnerabilities because they don't generate revenue.

Aim: holistic comprehension of fauna and flora as well as plant analyses for a sustainable design.

Procedure: Each location is influenced by a larger nexus of species and resources that should be understood for better management and adaptation planning. Therefore, this work package aims to assess the extinction and presence of any native fauna and flora in the studied area, which will be fundamental for later succession planting and biodiversity design management. Additionally, an extensive plant analysis and categorization will be offered, distinguishing different plant requirements such as temperature tolerance, life cycle, level of production, and water demand, which will increase the diversity and efficiency of the proposed design. **Figure 2a** illustrates a schematic box plot of annual and perennial plants, while **Figure 2b** demonstrates the T-t diagram for 5 annual and perennial plants in climatic zone 8a. The database created from this assessment will assist and improve the diversity of the proposed design, ultimately increasing its resilience.

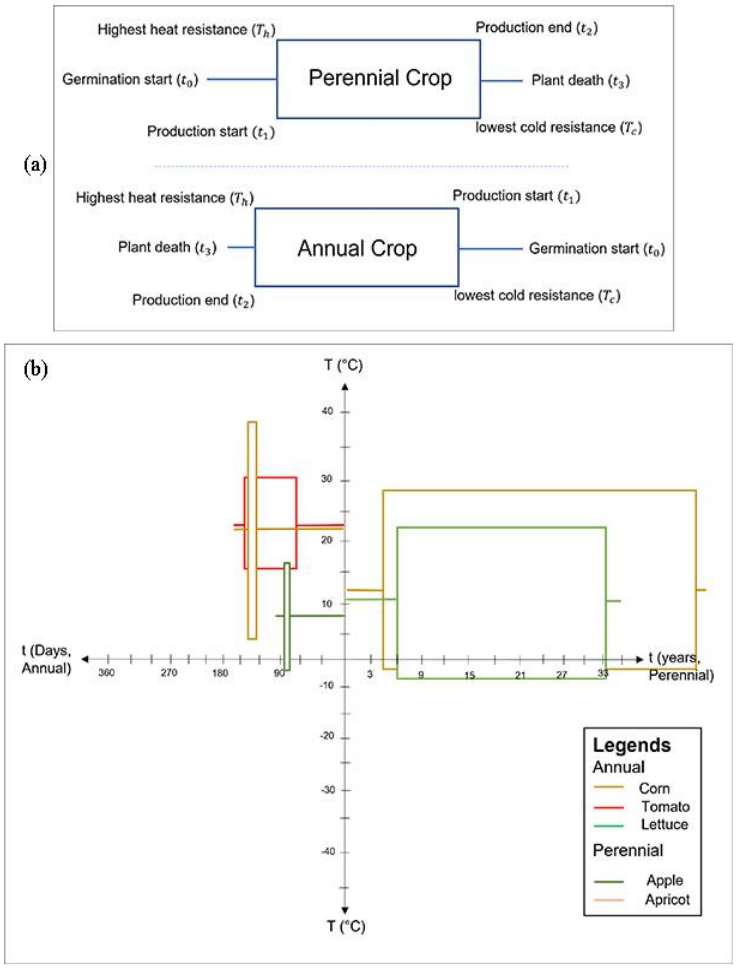

Figure 2: Box plot assessment of plants (a) and T-t diagram (b)

Economic Resilience (WP2)

Motivation: Overconsumption is the main contributor to climate change, and the only solution to fix this problem is to switch to a deflationary system that incentivizes saving over than spending. Economic resilience is mostly defined by three main qualities: the ability of the economy to recover quickly, to withstand shocks, and to avoid shocks. Money is the common tool used to implement these qualities. Commodity money, as a store of value, has a higher economic resilience due to its intrinsic value compared to fiat money. However, fiat money is more scalable as a medium of exchange because it can be issued faster. Issuing and increasing the money supply faster will, ceteris paribus, create inflation, which in extreme cases can cause the fiat currency to collapse. The linear economic model, which promotes GDP growth at all costs, is unsustainable and irresponsible. Moreover, unbacked and untraceable money collected by institutions will cause systematic corruption and increase wealth inequality. To increase economic resilience, the medium of exchange should be traceable, backed by a

commodity with a fixed supply, and have a trustless distribution protocol over time to avoid centralization. To avoid corruption and hypocrisy, it is crucial to implement the proposed method in a freshly registered non-profit organization.

Aim: To assess the resilience and investigate the feasibility of cryptocurrency as a medium of exchange, and to propose token distribution and budget allowance protocols.

Procedure: Extensive research on available blockchain technologies, as well as their resilience as a medium of exchange on a global scale, will be carried out. On the selected blockchain, a native token with a maximum supply (Smax) will be minted for micro-economic activities, while being backed by the mother coin of the selected blockchain. The mother coin acts as a store of value and will be unsalable. Furthermore, different game theory scenarios will be run on the proposed distribution protocol, and the economy's resilience will be assessed. Formula 1 describes the public token distribution over a 4-year period. As it is clear from the formula, 50% of the maximum supply will be available for public adoption (Spc) over time, which avoids mass adoption and acts as a deflationary distribution.

$$(S_{pc})_{n+1} = \frac{(S_{pc})_n}{2}$$ *Formula 1: Public token distribution protocol*

Where:

S_{pc}: Total Public Supply; $S_{pc} = \frac{S_{max}}{2}$

$(S_{pc})_{\mathrm{n}}$: Public Supply for period n

n: 4-years period; $\mathrm{n} = \{1,2,3,\dots,n\}$

Furthermore, the remaining tokens, excluding a one-time allocation for seed funding (15%) and administration (10%), will facilitate further cooperation and expansion over time. Table 1 represents the token distribution with a maximum supply (Smax) for different sectors. However, a series of game theory scenarios on token adoption will be implemented to assess the feasibility and resilience of the proposed method.

Table 1: Proposed token distribution

Years	n	Public investor	Seed Funding	Administration	Remaining
0 - 4	1	$\frac{S_{pc}}{2}$	15% (S_{max})	10% (S_{max})	50% (S_{max})
4 - 8	2	$\frac{(S_{pc})_1}{2}$	0	0	37.5% (S_{max}) ± Circulating Supply
8 – 12	3	$\frac{(S_{pc})_2}{2}$	0	0	31.25% (S_{max}) ± Circulating Supply
12 - 16	4	$\frac{(S_{pc})_3}{2}$	0	0	28.12% (S_{max}) ± Circulating Supply
$4(n-1) - 4n$	n	$\frac{(S_{pc})_{n-1}}{2}$	0	0	25% (S_{max}) ± Circulating Supply

Social resilience (WP3)

Motivation: Social resilience should occur at the individual and community level to cope with, tolerate, absorb, and adjust to introduced shocks of various kinds. The social resilience of a system increases when communities have a sense of involvement in the system, which encourages them to take responsibility. Moreover, driven responsibility from a sense of involvement has the highest chance of fulfillment and naturally leads the community to participate in more involvements. Although focusing on one job or responsibility increases precision and accuracy, life is about diversity, and centralization decreases its resilience. Furthermore, a circular economy should be partially considered as a factor of social resilience because it is interconnected with producers and consumers at the same time. Although the raw materials used for production should be regulated within a sustainable framework, consumers should also be educated to purchase goods wisely and willingly participate in the recycling process. In general, each individual or organization that sells any goods should be responsible for collecting and processing their waste. Although this proposed waste management strategy may seem impossible to implement in our current society, it can be assessed and applied in a newly established system that follows a bilateral relationship between the producer and consumer, as well as employee and employer. Therefore, in a resilient biological model, an employee should be able to become an employer by diversifying the demanded responsibility and increasing their chain of connection, while receiving support from the system. Increasing the chain of connection brings more participants and organically advances the responsibility being taken by the community, while being paid. However, to avoid systematic corruption, the chain of connection should be publicly available, and a known penalty should be considered for chain corruption and the responsible source behind it.

Aim: To gather, educate, and care for the local community within a decentralized pattern.

Procedure: A community will be gathered and formed to accept responsibilities and increase resilience. An introduction to permaculture design principles, which ultimately facilitates food sufficiency and resilience in the community, will be provided. Furthermore, sustainable designs will be provided for the community, and the local nursery will provide the demanded needs for design implementation. In the meantime, the community can develop ideas to increase their resilience and submit proposals with reasonable required budgets. If a proposal intends to increase the resilience of the community, it will be approved, and the required budget will be allocated after receiving a 50% deposit as a potential penalty for chain corruption. Each proposal should provide a budget plan with the required number of people as the proposal's weight, with a higher acceptance chance for higher weights. Additionally, the feasibility of the proposed method and budget allowance will be assessed through a series of game theory applied to Formula 2, and the resilience assessment will be carried out for different scenarios. Ultimately, Formula 2 creates a chain of connection that is traceable via Distributed Ledger Technology (DLT) and capable of detecting any chain of corruption, regardless of its length, because there will be a reward for it.

$$\left(Max(\beta_{i+1})\right)_{T_j} = \left(\left\lfloor\frac{\beta_i}{\alpha_i}\right\rfloor * F_{i+1}\right)_{T_j}$$ *Formula 2: Budget allowance for next proposal*

Where:

T_j= Participants= $(T_1, T_2, T_3, \ldots)$

$Max(\beta_{i+1})$= Maximum budget available for next proposal

β_i= Current total budget of the contract

α_i= Weight of the current contract

$F_i = \{1, 1, 2, 3, 5, 8, \ldots\}$

Employees

Employers	T_1	T_2	T_3	T_4	T_5	T_6	T_7	T_n
T_1		β_{1_1}=1K, α_{1_1}=1; β_{5_1}=10K, α_{5_1}=3	β_{2_1}=1K, α_{2_1}=1	β_{3_1}=2K, α_{3_1}=2	β_{3_1}=2K, α_{3_1}=2; β_{4_1}=2K, α_{4_1}=1	β_{5_1}=10K, α_{5_1}=3	β_{5_1}=10K, α_{5_1}=3	
T_2	β_{3_2}=15K, α_{3_2}=2		β_{3_2}=15K, α_{3_2}=2	β_{2_2}=6.5K, α_{2_2}=1	β_{1_2}=3K, α_{1_2}=2		β_{1_2}=3K, α_{1_2}=2	
T_3				β_{3_3}=6K, α_{3_3}=2	β_{2_3}=2K, α_{2_3}=1	β_{1_3}=1K, α_{1_3}=1	β_{3_3}=6K, α_{3_3}=2	
T_4						β_{1_4}=6.5K, α_{1_4}=2	β_{1_4}=6.5K, α_{1_4}=2	
T_5		β_{3_5}=12K, α_{3_5}=3	β_{3_5}=12K, α_{3_5}=3	β_{1_5}=2K, α_{1_5}=1		β_{3_5}=12K, α_{3_5}=3	β_{2_5}=4K, α_{2_5}=1	
T_6			β_{3_5}=4K, α_{3_5}=1					
T_7					β_{1_7}=4K, α_{1_7}=1			
T_n								

Figure 3: One possible scenario for chain of connections

Figure 3 illustrates one possible scenario for a chain of connection with 7 participants. As shown in the figure, employees can become employers (by submitting a proposal) and hire (supervise) other individuals, ultimately expanding their chain of connection. The proposal weight will increase the acceptance chance, while an accepted proposal will increase the budget allowance for the next proposal.

Live lab (TrueWE)

The outcomes from all work packages will be implemented in the live lab, a non-profit organization with a singular purpose of resilience for the biological model. WP1 defines the successional stages and assists with future demands of the community based on permaculture principles and the local resource nexus. WP2 and WP3 assess and offer a sustainable and resilient bioeconomy model that aims to become self-sufficient yet decentralized. Figure 4 simplifies and illustrates the permaculture-based, sustainable, and fractal design of a relatively small urban garden to achieve some degree of food sufficiency for two people. The proposed design will demand less maintenance over time while increasing productivity and soil health simultaneously.

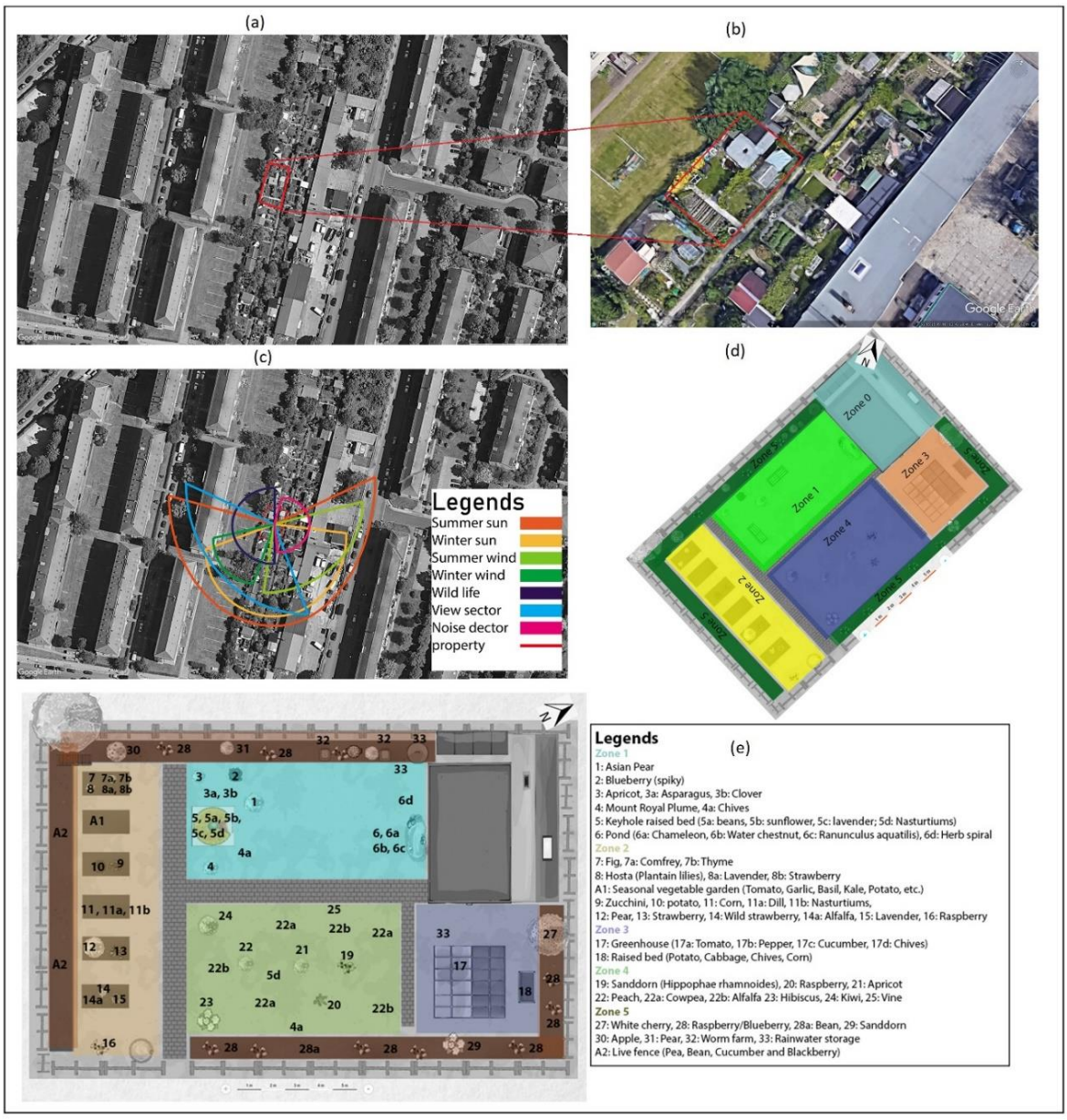

Figure 4: Sustainable design (e) of an urban garden (a, b) regarding to sector energy nexus (c) and proposed activity zones (d)

As illustrated in Figure 4, a sustainable design requires multiple zones with different functionalities and requirements, regardless of its size. The site's topography, geography, climatic zone, community demands, and other influencing factors should be considered for a sustainable design to provide some levels of food sufficiency and protection for the community. Moreover, as a direct impact of WP1, a local nursery will be established to gather local indigenous knowledge, as well as native species cultivation, to facilitate the design implementation. Furthermore, the proposed designs, as well as the community, will expand over time in a decentralized pattern and follow a singular purpose, which is to increase community resilience.

Time Schedule and financial planning

For a more specific proposal, here are the timetable and financial planning presented in Table 2 and 3, respectively, within a two-year framework. It should be mentioned that this planning section could be modified based on available conditions and situations.

Table 2: proposed timeline for different work packages

Work packages		Year1				Year2			
		i	ii	iii	iv	i	ii	iii	iv
1	Local Indigenous (extinct and extant) species identification								
1	Local T-t diagram and crop analyses								
1	Local resource nexus assessment								
2	Cryptocurrency feasibility as a global medium of exchange								
2	Feasibility assessment of the proposed economic model								
3	Community gathering and knowledge transfer								
3	Permaculture design principles meetings and workshops								
3	Call for proposal								
4	Design implementation (TrueWE)								
4	Maintenance and expansion								
Reporting & publishing									

Table 3: Roughly estimated expenses

Description	Amount (€)
Main supervisor	80,000
Supporting staff	20,000
Live lab implementation and monitoring	35,000
Travel and workshop expenses	10,000
Publication (Open access)	5,000
Total demanded	150,000

Your opinion and comments are deeply appreciated: truewe@transcf.org