

A large center pivot irrigation system is shown in a field at sunset. The system consists of a long metal arm supported by a series of truss-like structures, with large wheels at the ends. The sun is low on the horizon, creating a warm orange and yellow glow. The sky is filled with soft clouds. The foreground shows green crops in the field.

TERRA

TRANSFARM

Symbiotic Design for Productive Territories

<https://uni.xyz/competitions>



img 1: technological advancements has led automation in the field of agriculture

Premise

The very foundation of the human transformation of Earth can be traced back to the beginning of farming - which compelled our nomadic ancestors to settle. As human population rapidly approaches the 8 billion mark, **agriculture returns to be one of the key issues of territorial development and its infrastructure boldly shapes immense surfaces of our planet.**

Recent academic interest (i.e. [AMO exhibition on The Countryside](#)) as well as geopolitics (i.e. the well documented investments of China in African land) clearly point out how the management of agricultural territories is going to be one of the crucial battlefield for securing a sustainable existence on planet Earth.



img 2: Series of greenhouse setup to multiply the production rate in Netherlands, Tom Hegen's The Greenhouse Series

Evolution

Not only agriculture is growing, it's also changing at incredible speed. On one hand the mutation of our dietary habits, on the other the robotization of production, are resetting the very notion of what cultivation looks like

Gone are the idyllic vistas of the rural landscape, replaced by infinite planes of high-tech greenhouses tended by remote-controlled drones.

The well justified demand for plant based products asks for more intense production which unfortunately results in **monoculture and deforestation:**

Sustainable balance is an extremely tricky goal.



Img.3: Replacing farms into factoritories by vertical farming

Issue

The urgent needs of efficient agriculture are threatening the ecological balance of the entire planet. Simultaneously, those same territories are becoming more and more inaccessible to humans themselves - fenced off like hi-tech factories. **Therefore, the current design of high-productive farms is not only depleting biological diversity, but also depriving us of the enjoyment of the landscape.**

Architecture, with a contemporary focus on both human-centred design and multi-species coexistence, can provide an alternative vision and more nuanced approach.

Can Architecture help agriculture to speculate on a more equitable balance between human sustenance and natural resources? Can we imagine highly efficient infrastructure which also provides amenable spaces for visitors? Can multiple species coexist in harmony on a intensely farmed territory?



img 4: How would the future farm look like?

Brief

The competition challenges you to reinvent a typology which has been with us since the beginning of times.

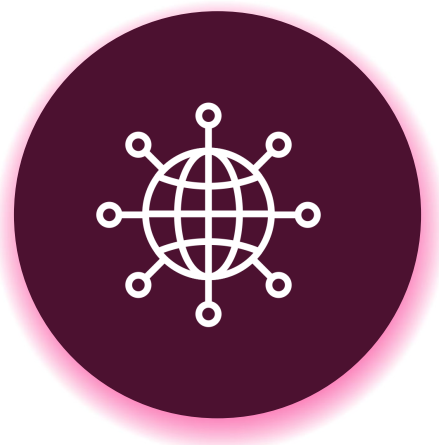
Under these conceptual premises we ask you **to design a holistic proposal for a “farm” as unit of territorial transformation. This may comprise enclosed structures for humans, machines, plants and animals, production of energy and spaces for storage, as well as the overall organization of open land.**

The farm we are looking for takes on a different approach to the use of the land: instead of exploiting resources to the maximum, it aims at **repairing the damages caused by our species**. It leverages the natural symbiotic interactions of the surrounding ecology. It contextually makes the best use of natural resources and renewable energy.



Transform

Establish a category to
augment synchronised living



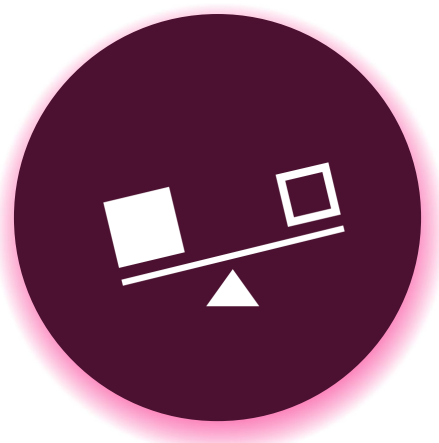
Connect

Filling the gaps amongst the
key Components of the
Biosphere



Mindset

Changing the perception on
agriculture by education and
self experience



Balance

strike balance between our own
enjoyment and a respectful
treatment of all creatures

Objectives

The following objectives can be a point off beginning to conceive this design. The user group for the conception should be able to house 150-200 families (a family of 2-4). Other facilities maybe designed in accordance to the user group in the same structure or in different zones.

Synthesis

Utilising the produce to **create a self sustainable Biosphere.**
Creating areas to educate on new formed typology



20%

Production, energy conversion, water storage, infrastructure, water systems, stores

Symbiosis

Primary goal; Spaces that are amalgamating of farming and living



65%

Garden/foodsource, homes, livestock, powersource, community farms, community space, social facilities

Services

The backend areas that help in working of the estate



15%

Storage spaces, surveillance room, electrical room etc

Programmatic Outline

The above can be used as a point of reference to bifurcate different functions of the complex. However, new functions and categories can be added as per design requirements.



Img 6: Site location

Site Plan

The site chosen for this design exercise is hypothetical and can be associated with a peri-urban region around any city of the world. The design context is independent of the site context and a detailed study is not required; you may assume a certain place in the world on your choice.

Allowable ground coverage: 40% | Site Area 8000sqm |
Height restrictions - 100m, Set backs of 10m on all 4 sides,

Guidelines

You have to deliver an architectural outcome on the following site, based on the given outlines.

- Recommended number of sheets/presentation images/boards:

5 (Five) of size [**2800px x 3500px**] in portrait digital format (**JPEG only**).

Minimum 3 (Three) & No maximum sheet limit. Each image should be less than **15MB**. (Do not submit PNG format)

Minimum requisite submission are sheets/boards + Cover image containing:

- Site plan (Compulsory)
- Key conceptual sections x 1 (Minimum)
- 3D views x 4
- Cover image / Thumbnail of size 2000px x 1000px or larger in aspect ratio 2:1.
- Answering 6 FAQs #
- This is the link for new file sizes, [here](#).

#The FAQ's have to be answered as instructed in the FAQ document in the 'additional resources folder'.

Deadlines

Discover the competition schedule and deadlines on the competitions page or on this link - [Schedule](#).

Resources

This competition contains additional resources that contains a set of files useful to complete the competition submission. This folder is made available on your profile dashboard automatically as soon as you register.

This additional resources folder of this competition contains: Submission Format files in PSD | AI | InDD, FAQs

Rules

- + The competitions is open for **students and professionals** from all the disciplines of design.
- + The team limit for this competition is **4 members maximum per team**.
- + You can register more than one team but they have to be registered separately.
- + Ensure that the final sheets submitted **do not include your name or any other mark of identification**. Your submission is linked to your user account which stands as your identification.
- + This is a design **ideas challenge only**. There is no built commission/realization associated with the problem.
- + In case of publication in yearbook we will reach out separately for selected entries.

Pro-Tips

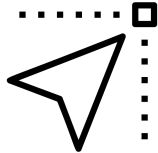
- + Use exploded views to discuss multi levelled conceptual models better.
- + Mention sheet number on corner of every sheet.
- + Plagiarism of any idea / form / design / image will be disqualified with a notice.
- + All the sheets or images will be viewed on a digital device. **e.g.** Laptop screen or projector. Uploaded sheets or images will not be physically printed for evaluation. The submission hence should be prepared for digital viewing only.
- + Submit JPEG images only. (PNG will not function)



Awards

Grants of up to a total of **24,000\$** can be won on this challenge. Learn more about the full conditions on the competition page [here](https://uni.xyz/competitions).

The entries will be judged by an international jury of the competition on the following criteria:



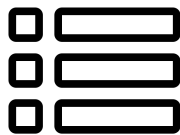
Presentation

The fundamental to a good entry is a good presentation.



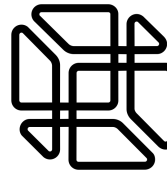
Concept/Idea

Quality of thought and intent in pre-design phase.



Spaces/Programme

How the spaces are calculated and ordered.



Design Outcome

The final architectural outcome of the solution.

Judging Criteria

The judging panel can also add other criteria based on their internal discussions - which will be in line with the problem statement. Participants are advised to fulfil above given criteria first in their design.



Curator | Gianmaria Socci

Co-founder & Director of Space Saloon

www.spacesaloon.com

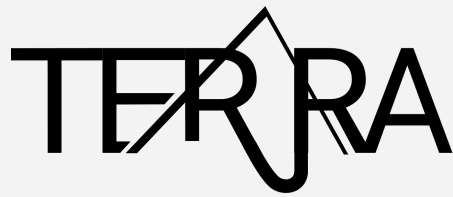
Gian Maria is an architect, researcher and educator committed to spatial justice in multiple forms and scales. He has worked independently across Europe and received awards in numerous design competitions.

He has been research assistant at ETH Zürich, adjunct professor at INDA and Mentor for CanActions School.

In 2018, Gianmaria co-founded Space salon.

a research-oriented practice that explores innovative methods of design and education based on a multidisciplinary understanding of contextual conditions.

About



Terra serves as a unit block for UNI in the field of nature centric design. It intends to break the fusion of traditional design barriers and methodologies by making it a platform for experimentation. It embarks on exchange of ideas between architecture and nature. It is a research initiative dedicated to provide opportunities for designers from all domains to explore ideas that go beyond the boundaries of architectural discipline and enrich our built environment; thereby opening up possibilities for promotion of architectural thought at a global level.

Queries: support@uni.xyz

Discover other competitions: <https://competitions.uni.xyz>

Facebook: <https://www.facebook.com/unidesigntogether/>

Instagram: <https://www.instagram.com/uni.xyz/>

Discover FAQ's about this competition on our help forum here: <https://help.uni.xyz/>

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