



blueprint200

Design Solutions for Regenerative Settlements

A model site educating on alternative solutions for displaced people

We are at the confluence of resource depletion, climate instability and economic inequality where we all need solutions for regenerative living. The global refugee situation offers a chance to direct the potential of these solutions towards this pressure point of our time; serving some of the people most in need today.

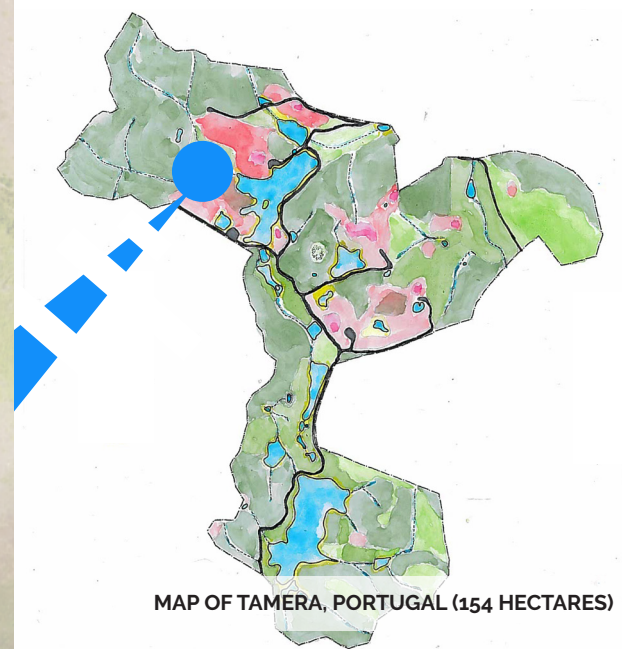
Our project will build an inspiring demonstration and training center in Tamera in the form of a temporary settlement for 200 people. This will serve as an evolving model for regenerative design which fosters trust and restores the surrounding landscape. The design integrates the elements of water, energy, shelter, food and social cohesion which can be used in emergency responses.

Those who stay in, visit and study the model will gain a new perspective, in a way that continuously influences camp designs, standards, and policies for displaced people and refugees.



SCHEMATIC DESIGN, DRAFT, SEPTEMBER 2017

- | | | | |
|------------------------|-------------------------------------|----------------------------------|-------------------------------|
| 1 Entrance | 10 Semi-permanent 10 people shelter | 19 Personal water tank | 28 Permanent 5 people shelter |
| 2 Information sign | 11 Semi-permanent 5 people shelter | 20 Communal space | 29 Communal building |
| 3 10 People tent | 12 Women shower | 21 Filtration area | 30 Communal garden |
| 4 Community garden | 13 Existing vegetation | 22 Large 30,000 liter water tank | 31 Water point |
| 5 Communal tea kitchen | 14 Laundry | 23 Greywater filtration | 32 Ping-pong table |
| 6 5 People tent | 15 Men shower | 24 Personal garden | 33 Communal tea kitchen |
| 7 Communal toilets | 16 Permanent 5 people shelter | 25 Large communal building | 34 Communal space |
| 8 Planter-box | 17 Personal toilet | 26 Communal building | |
| 9 Community garden | 18 Personal garden | 27 Existing vegetation | |



MAP OF TAMERA, PORTUGAL (154 HECTARES)

PUBLISHED SUMMER 2018

blueprint200 in a nutshell

“Refugees need comprehensive and long-lasting solutions to rebuild shattered existences and live in dignity and peace.”

UNHCR, stated needs, 2016
WWW.UNHCR.ORG/GLOBALTRENDS2016/

A 200 PERSON MODEL

Blueprint200 offers a set of regenerative design tools and the essence of solutions. These enable displaced people and those supporting them to improve their lives and the ecosystems they inhabit. These tools, along with the 200 person model site, form an educational platform for evolving

current practices of design and implementation for regenerative communities, ecosystems and livelihoods.

TAMERA, PORTUGAL

The set of regenerative design tools will be applied to a new part of the Guest Center in Tamera, Portugal. Tamera is a peace education research community establishing a social, ecological and economic framework based on cooperation and trust. By running seminars, conferences and online courses, Tamera hosts thousands of guests each year and has a wide global outreach. This, together with the model site, will allow settlement designers, practitioners and aid workers to come together and study in a safe and uplifting place.

THE BLUEPRINT ALLIANCE

The Blueprint Alliance is a task force of diverse and skilled individuals, dedicated to principles of cooperation with one another, nature and stakeholders. We consult, educate and practice in the areas of water, shelter, energy, food, education, and social cohesion. Our alliance supports living educational sites and decentralized, autonomous human-scale strategies.

BUILDING CAPACITY

As an international alliance we build capacity for governments, NGO's, communities and individuals. We support a progressive and integrated way of thinking about regenerative settlement design, with a current focus on the refugee crisis and displaced people.



Our committed team has entered into this project with curiosity and determination. We have a focused plan for designing and implementing the Blueprint200 site in Tamera.

Thank you for supporting our work!

www.blueprint-alliance.org

displaced people today

THE LATEST FIGURES

Millions of people are living under inhumane conditions with polluted water, unstable food supplies and denuded surroundings due to excessive firewood harvesting and overgrazing.

The standard reality of a refugee camp arises based on meeting urgent needs through reactionary responses to crisis. These conditions stem from basic unawareness of

**7.2 MILLION DISPLACED FOR
+5 YEARS** →

**4.1 MILLION DISPLACED FOR
+20 YEARS** →

the impacts of degenerative approaches to settlement design, eroding culture, community, identity and ecosystems. 65,6 million people are displaced worldwide, of which 10,3 million were newly displaced in 2016. This means that an equivalent of up to 20 people were displaced every minute during the course of the year, resulting in 1 person in 113 being displaced, globally.

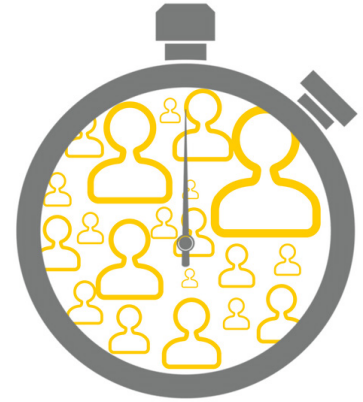
UN COMMITMENTS

By the end of 2016, 4,1 million people found themselves displaced for 20 years or more. In response, UN member states

committed to a Comprehensive Refugee Response Framework thus recognising that ***“situation specific and comprehensive approaches are required to find durable solutions.”***

SOLUTIONS EXIST

Regenerative settlement design methodologies and solutions are available and can be, though are not yet, applied in the context of emergency response. These allow for temporary settlements to transition to permanent solutions and have the potential, over time, to address the root climate and resource-based causes of displacement.



**20 PEOPLE DISPLACED
EVERY MINUTE IN 2016**

UNHCR report 2016



CAMP FLOODING, CALAIS 2016



TINDOUF CAMP, ALGERIA 2017



HAITI EARTHQUAKE, 2010



SHAMALAPUR CAMP, BANGLADESH, 2017

“ After 43 years in the camp, the Saharawi people are still predominantly dependent on food aid and donors are forgetting about their cause. They have no other solution but to figure out how to grow food in the desert. They are learning how to save seeds and experiment to see what grows here with the hope that one day they can carry this knowledge home. ”

GEOFFROY GODEAU

Consultant, Surplus Permaculture Design

“ Imagine an aid organization trained in understanding the water cycle. When there is no access to well water any more. No access to clean ground water anymore. They would know that in the air there is a lot of water. There are very simple techniques to condensate this water into drinking water during the night, without chemicals, according to natural principles. ”

BERND MÜLLER

Director, Global Ecology Institute

“ Camps are on the rise everywhere with displaced communities living across many camps for decades on end, as is the case for the Rohingya population. With such long term needs, we need interesting and viable approaches to implementing and teaching on how regenerative systems work and how they are integrated. Integration is the key. ”

MAGNUS WOLF MURRAY

International Development Consultant,
Department for International Development



BLUEPRINT EXPERIMENT WEEK, TAMERA 2015

our aims

Our aims as human beings and change makers are:

OUR HUMANITY

To come closer together as an international alliance and lean into the emotional undertaking of working closely with the issues of homelessness and belonging. We do this both within ourselves as individuals and together as an alliance of peace-workers and change-makers. We have a heartfelt wish to contribute in a world that is coping with a growing system of dependency and displaced people.

MERGING DISCIPLINES

To merge the disciplines of permaculture, architecture, renewable energy systems, settlement and regenerative design with dynamic governance structures.

CHANNELING VOICES

To channel the voices of those forcibly displaced from their homes, volunteers in existing camp systems, as well as the local communities and governments, into an expression of a regenerative camp.

SYSTEM CHANGE

To initiate change by focusing on the humanitarian aid sector. We believe that a relatively small group of people can influence and significantly change the whole system of dependence into regeneration. Future camps will leave behind green tracks, empowered individuals and rekindled communities.

and how we will achieve them

COLLABORATION

We collaborate with governmental organizations and humanitarian aid workers, camp managers, designers, engineers, ecovillage representatives, permaculturists and other thinkers of today while integrating prior Blueprint Alliance work.

We conduct stakeholder interviews, review literature and complete site visits. This harvests the breadth of intellectual and experiential knowledge available today. These are merged into a set of design principles and guidelines which allow for a new method to camp design.

DESIGN TOOLKIT

This methodology toolkit contains Pattern Cards, a Regenerative Continuum and a set of Contradictions. This enables decision making on

how to integrate water, shelter, energy, food and social cohesion into a humanitarian aid context. Both to ensure protection & safeguarding as well as a harmonious sense of wellbeing. A design most aligned to the human soul which fosters intimacy while building community.

RECORDED KNOWLEDGE

Through careful documentation and organization of the acquired and digested material, we will initiate the first draft of the Living Manual, which will encompass a website, the educational output of the model camp in Tamera, as well as a growing database of best practices. This will enable the information to be made available across several platforms; at varying degrees of complexity.

A report of our existing research is available for review.

DESIGN & IMPLEMENTATION

In order to influence system change, we will coalesce many disciplines into a functioning and scalable model site; the target for present fundraising efforts. We will apply the formulated principles, guidelines and patterns to create the design of the 200 person model site in Tamera.

This step of the project will look at the different schematic designs as well as explore the details of the model site. A final design will incorporate elements such as rainwater harvesting features (swales), sewage Wetland Ecosystem Treatment (WET Systems), urban farming through permaculture principals and gender equality layouts, ensuring safety is addressed..

By allowing for constant evolution through monitoring

and evaluation of the inter-connected systems, we will channel the voices of those who experience our design. This step applies feedback given by those who stay in the camp, as well as those who use the generated output to design and implement their own projects.

EDUCATION

At the model site in Tamera, informational signs and imagery will narrate the technological potential of solutions and stories of displaced people today. This will bring awareness to our own questions of belonging and homelessness. These narratives will become the backbone for all educational lines in Tamera as this is where people will live during their stay. This experiential knowledge will eventually connect to a website and database of best practices, forming the Living Manual.

what has been done

Relevant experts for camp design are interviewed to map needs and experience. The existing solutions archive of the Blueprint Alliance is reviewed for this project.

STAKEHOLDER INTERVIEWS

LAUNCH
MAY 2017

PATTERN LANGUAGE DEVELOPMENT

36 patterns for problems and solutions are formulated for the regenerative approach to refugee camp design. Together they form a pattern language, which is part of a wider toolkit for regenerative design.

Face-to-face review of interviews, preparation for Algeria, presentation of the toolkit's first iteration.

7 DAY PLANNING SESSION JUNE, TAMERA

TINDOUF CAMP RESEARCH AUGUST, ALGERIA

Surplus team visits camps in Algeria where over 150,000 Saharawi people from Western Sahara are living in refugee camp situations. Interviews held with local population, government representatives and experts. An award is won for business incubator concept.

Five day work meeting with the whole Blueprint Alliance. Review of past work and pattern language, schematic designs and Living Manual proposals. Expert input in design and solutions.

BLUEPRINT ALLIANCE MEETING, SEPTEMBER

SCHEMATIC DESIGN PROPOSALS

Preliminary designs for camps and the model site in Tamera are developed for the conceptual design. The detailed design for the Tamera demo site will come after review and finalization of the general design.

The beginnings of the pattern language were presented at the Pursuit of Pattern Languages for Societal Change Conference. Gaining academic feedback & support.

PURPLSOC CONFERENCE OCTOBER

The Pattern Language and other toolkit components are presented to CAFOD in London while their programme managers delve into some existing camp situations. Setting the frame for our continued collaboration.

CAFOD MEETING FEBRUARY 2018

FUNDRAISER OCTOBER

Grace Foundation fundraiser in Berkeley, CA, presenting the Blueprint200 Project. \$50,000 fundraised for Phase II

what is to come

The Pattern Language cards, the Regenerative Continuum & Contradictions evolve in their iterations. Integrating feedback from CAFOD & PURPLSOC amongst others.

CONTINUATION OF THE TOOLKIT

Determining templates for filming, still images and written updates of the building process. For future use in the Living Manual.

DISSEMINATION STRATEGY

Principles, guidelines, design methodology and solutions are integrated into a final design for the Tamera site. At the same time laying out a blueprint for other temporary settlements. A detailed implementation plan is formulated.

FINAL DETAILED DESIGN WINTER 2018

The site is opened as part of the Tamera Guest Center. Official inauguration with humanitarian stakeholders and the wider public.

INAUGURATION SUMMER

Continued development of the Living Manual. Hosting further education programs using the model site. Potential for Blueprint Alliance meetings to combine with conferences and workshops for aid workers.

OUTLOOK

BLUEPRINT ALLIANCE MEETING, APRIL

Six day work meeting with the Blueprint Alliance and the International Development Director & Humanitarian Director from CAFOD. Review of & feedback on the updated toolkit. Work session on earthwork design for Tamera.

EARTHWORKS & BASIC INFRASTRUCTURE SEP/OCT 2018

Terraces, swales, access and footpaths are constructed. Water and electricity supplies are installed. Soil, vegetation, and gardens are prepared.

SITE CONSTRUCTION SUMMER 2019

Shelters, sanitation, kitchen, and meeting spaces are put in place, step-by-step. A WET System for sewage treatment is established. All practical activities are incorporated into workshops and educational programs.

MONITORING & EVALUATION

Visitors of Tamera's education center move into the demonstration site and provide feedback. Monitoring of installed systems begins. Feedback from aid workers on toolkit application in existing camps.

budget

	PREP	PHASE 1	PHASE 2	PHASE 3
Research & Design team	€9,000	€20,000	€21,000	€24,000
Coordination & Implementation team	-	€16,330	€12,000	€21,973
Living Manual team	-	€3,600	€3,600	€3,600
Project Management	€5,000	€1,000	€10,400	€42,329
Travel (site & camp visits/face-to-face meetings)	-	€11,500	€9,000	€16,500
Implementation (terraces/access paths/shelter/sanitation)	€8,000	-	€22,000	€145,000
FUNDRAISING	COMPLETE	COMPLETE	€35,000	€253,402
TOTAL	€22,000	€52,430	€78,000	€253,402

PREPARATION

In March 2016, the wish to work together and focus all of our skills on one project came to life. We met face-to-face and planned how to form a team, what our design process should be, who would focalise each project path, and how to secure funding. We also continued to build and test various energy and sanitation systems with funding from the Sustainable LUSH fund.

PHASE 1

The eleven member team started work in May 2017. This phase was funded by the Grace Foundation and is complete.

PHASE 2

Design & Implementation of Tamera's Earthworks. \$50,000 has been fundraised for Phase II. We continue to fundraise for the remaining €35,000.

PHASE 3

The team will expand significantly during implementation, causing project management costs to increase accordingly. Implementation of the final design will require the greatest input of funds. More detailed work-steps are provided on the timeline.





BIOGAS INSTALLATION, GLOBAL CAMPUS, FAVELA DE PAZ, BRAZIL, 2013



blueprint alliance members and their work

WATER

Water restores ecological health and is needed for drinking and sanitation. **Tamera** utilizes the concept of Water Retention Landscapes through various rainwater harvesting methods, such as swales and terraces; replenishing natural water bodies, rebuilding healthy soil, and restoring vegetation. Consulting and implementation has been carried out internationally.

Aqueous Solutions produces clean drinking water using biochar water treatment systems in southeast Asia. **Biologic Design** creates "integrated, multi-species constructed wetlands", called WET Systems for sustainable wastewater purification, biodiversity enhancement and resource production. They have proven to be highly effective, energy

efficient and sustainable waste water purification systems.

SHELTER

In collaboration with government and NGO's, **Strawbuild** has so far completed two workshops in Pakistan and Nepal, building climate appropriate and adaptable homes. This has embedded natural building knowledge in remote communities and enabled over 100,000 flood and earthquake-resistant buildings to be constructed, using lime stabilized adobe bricks, straw, and lime stabilised soil cladding.

ENERGY

The Scheffler mirror, a biogas digester built by **Solar C³ities**, and the Sunpulse, a Stirling engine application by **Jürgen Kleinwächter**, are used in Tamera's **Solar Testfield**. They provide mechanical and

electrical energy, as well as, energy for food preparation, demonstrating that they fit perfectly with the concept of decentralized energy self-sufficiency.

FOOD

Surplus consults on permaculture-based food production around the world, in both rural and urban settings. Surplus is also the lead design team for the Blueprint200 site in Tamera. The Lemon Tree Trust, in partnership with **Coventry University** published a guide to urban farming in refugee camps, using projects in Iraq, Uganda, USA and Jordan, as practical examples.

EDUCATION

Printed resources including The Farmer's Handbook, produced by the **Himalayan Permaculture Centre**; Natural building

programs and educational courses, such as Ecovillage Design Education and Water Retention Landscape courses are offered worldwide.

SOCIAL COHESION

Tamera embeds tools for creating social cohesion in all its workshops, and seminars; enabling hundreds of people each year to experience what it means to build community. **Bioinspiral** has consulted on collaborative governance and project design for non-profit businesses and governmental institutions in Brazil. **Blueprint members** have also consulted on women's empowerment and gender equality in conflict zones and international aid projects, including longstanding camps in Jordan, Burkina Faso, and Congo.