

# Permaculture

## For Refugees in Camps



**Permaculture eco-villages as an integrated  
humane response to refugees in camps**

February 2018  
[www.PermacultureForRefugees.org](http://www.PermacultureForRefugees.org)

**Dedicated to Eng. Bilal Hashimi  
18 Nov 1991 - 6 Sept 2016  
much loved Afghan refugee  
who helped create a school  
in Oinofyta Refugee Camp in 2016**

Image credits: Hushyar Salih, Bilal Hashimi and Ruth Harvey

# This time of forced mass migration brings an opportunity to

Shape positive transitions and reciprocal relationships  
within and between new and existing communities  
and

Restore and repair land, water and soils to abundant  
sustainable landscapes.



**The current migration situation is not unusual or temporary,** and permaculture is well-placed to embrace an uncertain global future that includes the mass movement of people.

Permaculture strategies can transform physical and social spaces into supportive and restorative systems.

## Time spent in camps may range from months to years

and, in some cases, a lifetime. This time has value only when camps are purposeful places. They can become sustainable and self-regulating communities which develop a viable economy, without the need for external management.

## Refugee camps are frequently set up in degraded, often toxic, environments, and many lack one or all of the following:

- Permanent safe drinking water
- Greywater treatment systems
- Shelter from a harsh climate
- Nutritious food
- Adequate schooling and learning opportunities
- Safe places
- Economic systems

## Refugees want respect and self-determination,

and need freedom of choice to participate in, and take responsibility for their food, housing and the education of their children.

To achieve this, camps must provide opportunities to:

- Grow and cook food
- Locate suitable materials for building and personalising their homes and other structures
- As a priority, establish schools and learning centres, preferably staffed by the residents and with parental participation
- Open Non-Formal Education (NFE) classes as people require them
- Encourage 'pop up' businesses to meet camp needs and create an internal economy
- Support arts and cultural expression

## Camps can become productive educational ‘transition communities’

Instead of being places of isolation and need, camps can become **ecovillages** (GEN\*) where refugees’ human and creative potential is realised, so that, if they depart, the land will be restored through permaculture, and the departing refugees will take away with them transferable skills and positive experiences of community and learning. \* Global Ecovillage Network (see Useful references p.14)

## Ecovillages are intentional communities that:

- **Encourage** maximum responsibility with maximum personal freedom and use all prior experience
- **Meet basic needs for** renewable, clean food, energy and water, and minimize waste
- **Restore** natural healthy environments and prevent further degradation

## Basic Ecovillage Design Principles

- **Cultural** - base the design on cultural context and sensitivities while incorporating understanding of trauma displacement and loss
- **Economic** - design regenerative livelihoods that restore human dignity and restore social and natural systems.
- **Ecological** - plan for sustainable resourcing of needs using appropriate technologies that regenerate ecosystems for the long term.
- **Social** - ensure inclusive and consultative decision making in the design process that engage the needs of all sectors as a whole.

## Basic Permaculture Principles

- Harvest water and recycle and re-use all grey water
- Provide more than one source for each major function and need e.g. food, water, energy, safety
- Use zones to locate energy, resources, access and reduce work
- Plant food crops in private and community gardens.
- Add productive fruit and nut trees for shade and management of harsh environments and especially dust
- Reduce, recycle and minimise waste
- Create an internal economy to meet needs through LETS, markets, swapping and savings groups
- Work with the principle that *The Problem is the Solution* – look at the problem from a different angle, can you use it to your advantage?

## To apply permaculture

### *Take an integrated design approach*

Undertake sector and site analyses for an overview of the camp site as it is. Observe and note climatic factors, landforms, water, structures, animals, pollution and vegetation. Put these onto a plan.

Use site plans as talking points for the community, and to begin a public reference document for building ideas and relationships between the camp's functions/needs.

Audit the skills and experience of all residents i.e. all elements of the society and environment. Form working groups based on these.

Design housing, land use, social and cultural activities concurrently. Keep conversations ongoing among representatives from each sector.



### ***Carry out a needs analysis***

Use the needs analysis to match needs of refugees with the potential of the site. This can include creating shade, building meeting places, making gardens, houses and schools, planting trees, cleaning water.

Identify zones of use and access. Build relationships between zones.

Use permaculture tools to record inputs, outputs, yields and behaviours to develop future planning.

### ***Develop communication networks***

Find interpreters in the refugee group to ensure that everyone has a voice.

Hold regular meetings to reinforce understanding and build relationships. Talk about goals and priorities for the camp.

Establish group management teams to develop short and long term goals for each aspect and/or sector of the community. These groups need to network regularly. Include permaculturists from within and outside the refugee community in the working teams.

Discuss mutual interests and needs with the whole community. Possible channels include: What's App messenger, LETS exchanges, social media, posters and hardcopy newsletters. Encourage the young people in the camp to initiate these. Provide community noticeboards.

### ***Establish community interaction and cooperation***

The most powerful tools for community co-operation are working together on common projects and sharing knowledge and experience. Use gardening and craft to set goals

Encourage people to choose projects that unite people with a variety of skills and capabilities.

## ***Respond to residents' initiatives***

Encourage pop-up schools and services to provide opportunities and tools for non-formal education and build the economy.



Locate informal classes near housing to reach women, elderly and other isolated people.

Respond with few controls to initiatives for building structures and growing foods.

Provide resources for locally-appropriate ecological building techniques, such as hay bales, which are particularly useful.

Encourage creative personalization of living spaces and provide building materials and garden elements.





Freely supply basic functional materials and essential tools and liberty to transform any discarded materials or other unused resources to meet their needs.

***Teach design solutions and strategies to meet social and economic needs.***

In site design meetings, offer training so teams develop their own solutions and research others.

Build skills for adults and children in areas such as: water harvesting, composting, locating shade trees or placing trellises for privacy of meeting points, security of food sources and stacking for high yields.

Give priority to courses on the economics of marketing, small business management and credit, and local customs.

## Introduce permaculture thinking

**Reinforce a cultural perspective that *'the problem points to the solution'*.**

Include permaculturists in project teams and camp administration.

Offer short and long courses in permaculture and GEN ecovillage development. Include management and camp staff where possible.

Train refugees to teach permaculture in their own camp, and other camps.

Show films introducing the basic principles and practices of permaculture.  
(See list)

Introduce and discuss ethics and principles and always refer back to them, then teach and explore strategies and techniques of problem-solving for sustainable solutions.

Teach 'big picture' design systems to build camp prosperity through education, skill-sharing and income generation opportunities to grow internal and external economies.

Present case studies to give an overview of GEN ecovillages as functional communities

Facilitate meetings and decisions using consensus models for decisions. Develop a person-centred, 'bottom up' approach using consultation and responsiveness to enlist active participation and grow personal capabilities.

## Basic permaculture strategies

Permaculture strategies with solutions include:

- \* Finding ways to bring together newly arrived people and the local community to explore constructive, win-win solutions to deal with problems
- \* Involving camp residents in all aspects of design, management, and participation in modifying their situation
- \* Water harvesting and capture systems from existing surfaces e.g. roofs, sealed surfaces and land runoff, and safe treatment and storage for later use by humans, plants and animals
- \* Waste minimisation, and reuse of residual waste
- \* Tree planting for multiple medium to long-term functions and benefits e.g. tree crops, shade, windbreaks, firewood, timber, weather mitigation
- \* Designing climate appropriate housing and other buildings using locally available materials e.g. clay, wood pallets or plastic bottles
- \* Create polyculture gardens.

## Design process

Identify suitable sites: Not so degraded as to make rehabilitation impossible, not required by local communities, yet reasonably close to existing villages and populations and resources.

Carry out site assessment including climatic factors, and broader context, note existing communities and surrounding land use.

Elicit and use 'previous life' community development knowledge and experience of the refugees.

Design the layout and infrastructure to meet essential needs for shelter, shade, warmth, water, food, sanitation, first aid.

Arrange living quarters around central community facilities close to communication and transport routes. This helps to integrate with existing communities. Adapt sites if needed.

Design registration areas, welcome areas and safe 'buffer spaces' for rest and recover and, where camps already have a large population, place the newer group dwellings closer to the safe spaces, and earlier camp dwellings further away either within the camp or in towns (if possible).

Repair and restore existing structures, buildings and land.

For long term benefits of the local community and region, collaboratively develop goals and visions to transform the landscape and integrate everyone.

Include spaces for classes, special celebrations, cross cultural discussions and exchanges, and new mother and baby spaces.



## Ideas that work to build communities

Design and arrange communities in network clusters rather than the Roman camp grid.

Encourage self-organisation. Assist people with skills for meetings and communication of all types. Encourage responsibility and helping with tasks. Facilitate networking.

Encourage skill-sharing in different types of groups e.g. cooking, sewing, knitting repairing, building where they talk and find friends and support.

Use DVDs as learning tools, as well as for entertainment and community building.

Fund and facilitate sporting activities with mixed teams to relieve tension and assist with tolerance and acceptance. Group and individual sports assist emotional release and promote teamwork, e.g. volleyball courts in camps in Greece. Assist residents to apply for funding for sports equipment and/or playgrounds.





Offer educational opportunities with volunteers, professionals and refugees according to their requests and need for knowledge or skills.

Offer short practical courses and workshops as requested e.g. to establish seed banks and nurseries, or support the design and retrofitting of their living spaces, the creation of public shade and meeting places and multipurpose herb gardens.

Provide coaching in the establishment of small businesses with knowledge of credit, interest and marketing.

Teach practical skills to enable people to re-engage in life especially when they are in grief or uncertainty. Permaculture offers people multiple opportunities to utilise existing skills, build self-respect and enable self-expression.

Encourage culture and arts because they all foster co-operation and a sense of belonging.

Assist camp residents to apply directly for funding or assistance in self organised projects, e.g. sports equipment, art shows, dance groups, choirs, plays, circus skills.



Invite local people to participate in concerts, markets and rehabilitating land.

Promote parallel and alternative camp economies to meet needs. Introduce bartering, recycling, Local Exchange Trading Systems (LETS), markets, swapping, etc. Create interest-free credit systems (micro-financing).

Encourage 'gift economy' community activities and exchange of human resources.

## Useful community resources

### Films to introduce permaculture

*Global Gardener* - Permaculture with Bill Mollison (intro clip)

<https://www.youtube.com/watch?v=upmAMD8GDco> 3:25

*What is permaculture?* why permaculture is important an increasingly complex world with Michael Pilarski <https://www.youtube.com/watch?v=4D9Q7yhD3s0> 6:20

*Inhabit* - a feature length documentary introducing permaculture

<http://inhabitfilm.com/> (trailer) 3:34

*Green Gold* - documentary on rehabilitation of large-scale damaged ecosystems." Environmental filmmaker John D. Liu 47:30

<https://www.youtube.com/watch?v=YBLZmwIPa8A>

*Seeds of Permaculture* - permaculture and climate change 88:00

<https://topdocumentaryfilms.com/seeds-permaculture/>

*A Quiet Revolution* - Zoning in Permaculture design 27:00

<https://topdocumentaryfilms.com/permaculture-quiet-revolution/>

*Permaculture- the Documentary*: the thinking reconnecting the expanding gap between humans and nature (trailer) 4:71

<https://www.dogsgowoof.com.au/permaculture-documentary>

*Syrian refugees turn Jordan's water-starved desert green* 4:31

<https://www.youtube.com/watch?v=Navt2AtnfrA>

*Soils Permaculture Association Lebanon* with Rita Khawand (In French with English subtitles) <https://www.youtube.com/watch?v=znfYxYltu0w> 2:25

## Useful general references

Permaculture Principles <https://permacultureprinciples.com/>

The Global Ecovillage Network at Findhorn - about GEN  
[https://www.youtube.com/watch?v= NjRdM1noGE](https://www.youtube.com/watch?v=NjRdM1noGE)

Global Ecovillage Network (GEN) \*  
<https://ecovillage.org/projects/what-is-an-ecovillage/>

PRACTICING AND PROMOTING SOUND ENVIRONMENTAL MANAGEMENT IN REFUGEE / RETURNEE OPERATIONS. UNHCR Geneva Conference proceedings, 2001. It has a chapter on the use of PC in refugee camps in Macedonia and Honduras: <http://www.unhcr.org/406c34174.pdf>

*Permaculture as a Refugee Camp Design*  
<https://permaculturenews.org/forums/index.php?threads/re-designing-refugee-communities-settlement-design-large-community-site-design.14340/page-4>

*Permaculture in Refugee/IDP Settings* - Malcolm Johnstone  
<https://www.permaculture.co.uk/readers-solutions/how-permaculture-refugee-camps>

*Permaculture Relief Projects* - Refugee camps (Andrew Jones)  
<https://www.greenkashmir.org/>  
[www.unhcr.org/3b039e1d7.pdf](http://www.unhcr.org/3b039e1d7.pdf)

*Permaculture in Refugee situations*  
[http://postconflict.unep.ch/liberia/displacement/documents/UNHCR\\_SAFIRE\\_Permaculture\\_Refugee\\_Situations.pdf](http://postconflict.unep.ch/liberia/displacement/documents/UNHCR_SAFIRE_Permaculture_Refugee_Situations.pdf)

Permaculturists in camps in Macedonia  
<http://resilience.ngo/>

Sustainable Design Principles for Refugee Camps by de Rooij, Wascher & Paulissen <http://edepot.wur.nl/412412>

An article about an Ecovillage Design Education course by GAIA Education, addressed to immigrants and local unemployed residents:

<https://www.permaculture.co.uk/articles/future-multicultural-regenerative-solutions-sicily>



## Transitioning from camps to ecovillages

**Acknowledge the huge potential of transitioning to ecovillages (ie. autonomy and independence)**

**Start with small steps until you know you can expand more rapidly**

**Consult on all big decisions, share decision-making widely**

**Develop social capital so that financial costs can be cut and income generated**

**Encourage and facilitate refugee-led solutions on all occasions**

### **Best Practice checklist      *are you...?***

- ☐ saying yes rather than no; trusting and enabling
- ☐ empowering and mobilising, creating sense of purpose
- ☐ engaging women and children in all decisions
- ☐ encouraging a range and variety of projects
- ☐ growing learning centres
- ☐ facilitating creation of economies, livelihoods and incomes
- ☐ creating measurably greener, cleaner, healthier more productive communities
- ☐ stimulating and inspiring quality outcomes for livelihood
- ☐ playing with ideas, experimenting, visualising solutions
- ☐ involving local people

### ***are you seeing these?***

- ✓ **Improved health and wellbeing**
- ✓ **Satisfaction and direction**
- ✓ **Improved security**
- ✓ **Reduced budget costs**



## About this initiative

*PermacultureForRefugees* is a project was initiated by a working group of concerned permaculturists from Italy, France, Australia and Spain at the *European Permaculture Convergence* (EUPC) in 2016. It was based on a workshop, “Refugee Friendly Permaculture” held at the *International Permaculture Convergence* (IPC) in 2015.

With our shared set of ethics, principles and ecological design understandings and inputs from experienced practitioners in Greece and Lebanon, we have developed a concept proposal, a website and this booklet for immediate use.

## For more information

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## NOTES

**forced mass migration:**  
*refugee organisations &  
camp managers*

**restoration of degraded land:**  
*permaculture practitioners and  
educators*

**climate change action:**  
*governments on all levels*

# **refugee settlements as eco-villages**

[www.permacultureforrefugees.org](http://www.permacultureforrefugees.org)

**peace:**  
*peace-building  
organisations*

**disaster relief:**  
*organisations*

**food security:**  
*sustainable farming*

**resources management:**  
*water and energy systems*

**community development:**  
*NGOs, local government*