



# Biodiversity net gain – A call to action

Richard Luff & Gregory Crawford

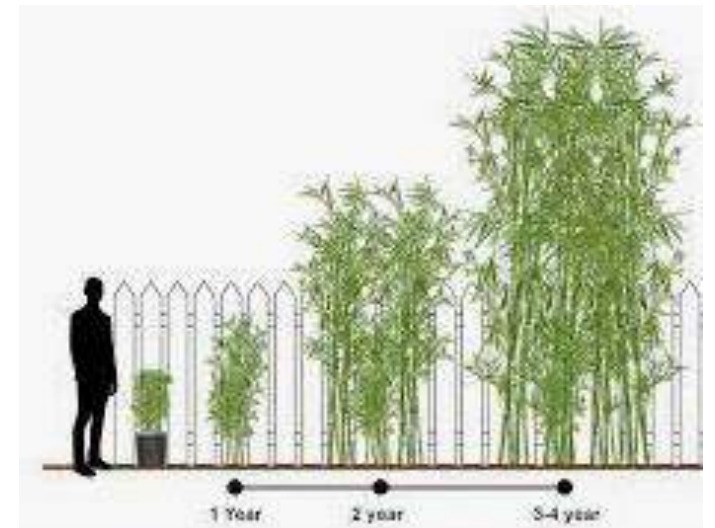
# A call to action for the shelter and settlement sector

## Biodiversity net gain\* for healthy settlements

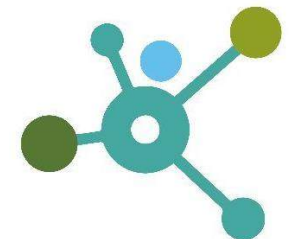
\* planting/greening of settlements



AVERAGE STAY IN A REFUGEE CAMP IS 17 YEARS, UN EXPERT SAYS CAMPS ARE "THE CITIES OF TOMORROW"



Richard Luff and Greg Crawford (members of the [Re-Alliance network](#))



# settlements

**A Requirement;  
Not a luxury.**



# Mind & Body

- “Contact with nature lowers cortisol levels, blood pressure and pulse rate, increases creativity, focus and sleep quality, while also reducing depression, anxiety, higher pain tolerance, and faster recovery from surgery.”
  - *Miyazaki, et al. 2014; Park, et al. 2010; Li, et al. 2007; Morita, et al. 2011; Han, et al. 2016; Song, et al. 2015.*



# Ecosystem services improve health

Nature's Benefits

*Food*



*Fodder*

*Medicine*



*Temperature Regulation*

*Air Filtration*



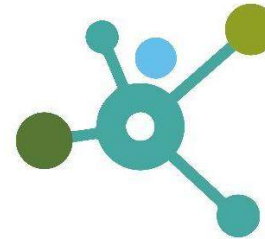
*Water Purification*

*Water Storage*

# A regenerative/community based approach



## Re-Alliance



The field of regenerative development, which draws inspiration from the self-healing and self-organising capacities of natural living systems, is increasingly seen as a source for achieving this end.



Costs \$100-600/Ha (1000 trees)

In CXB Bangladesh (0.00036% of the \$920 million 2019 JRP)

# Calling upon the CCCM/shelter clusters and agencies to accelerate existing greening efforts

- Shelter settlement agencies to commit to a net gain (over pre crisis levels) in Biodiversity; namely through planting/greening\*
- For all shelter agencies to include a modest element of funds for greening/planting at household and community level
- Primarily to improve health, along with other co-benefits
- To achieve this through an empowering and enabling approach through conditional community and household cash grants

\* **Where there are humans there will always be wastewater that can support planting to some degree and resolve wastewater contamination**

# Acknowledging and building upon the work of others

## Ongoing work

- Global Shelter cluster env WG (co-chair Charles Kelly)
- ENEP
- [The Nature-based Solutions](#) initiative

## Press and resources

- [Plant trees to benefit refugees and host communities, urges UN](#)
- [UNHCR forest management for refugees and returnees](#)

## Some examples

- [IUCN project](#) in Rohingya refugee camps Bangladesh
- [Dadab, Kenya](#)
- [Nyarugusu+, refugee camps Tanzania](#)
- [Benishangul-Gumuz Region: - Ethiopia](#)
- [Ugandan refugee camps](#)
- [Minawao Refugee Camp in Northern Cameroon](#)



[Credit: World agroforestry blog](#)