



ASF ITALIA • PIEMONTE
Architettura Senza Frontiere

Sustainable architecture and eco-friendly materials

*GOING FOR GREAT,
GENIUS, GREEN GENERATION*


march 7th 2022



Erasmus+



Going for
Great,
Genius,
Green
Generation
(5G)

A person with long brown hair, wearing a dark blue t-shirt and white gloves, is painting a blue shelf on a wall. The person is seen from behind, and their shadow is cast on the wall. The shelf is made of wood and is being painted with a brush. The wall is a light beige color.

ASF makes sustainable architecture with the aim of ensuring **human rights**: home, citizenship, health, instruction.

We gather different professionals and expertises: we believe that architecture is an **inclusive and interdisciplinary process** and employ a work-study approach.

ASF has developed **community-based and social architecture projects**, in Italy and in the world, since 2006.



* ECO-FRIENDLY MATERIALS

A material not harmful to the environment, during all its life cycle: from the resourcing to the end of use

CONSERVATION OF RESOURCES

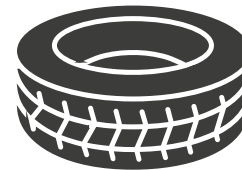
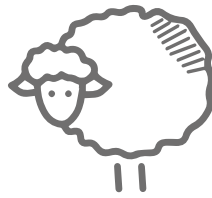


NON-POLLUTING

CO₂

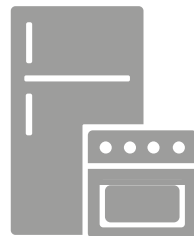
RECYCLING





Natural resources

Processed resources



OTHER MATERIALS?





* ARCHITECTURE

*the art or practice
of designing
and constructing
buildings.*



INCLUSION

COMMUNITY

CONSTRUCTION SITE SCHOOL

ENVIRONMENTAL SUSTAINABILITY

SUSTAINABLE ARCHITECTURE

SELF-CONSTRUCTION

NETWORK

ITALY

EDUCATION

HAITI

SENEGAL MALI

AWARENESS

BOLIVIA

INVOLVEMENT

ARGENTINA

SELF-SUFFICIENCY

COOPERATION

ECO-FRIENDLY MATERIALS

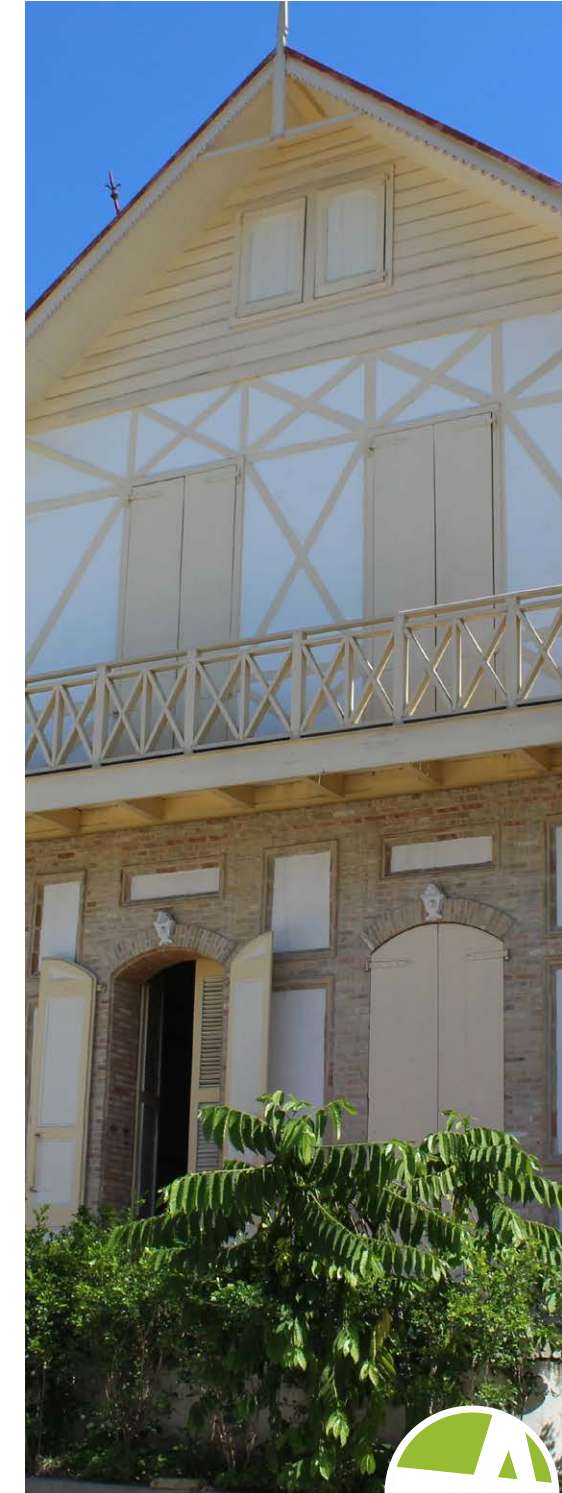
LOCAL DEVELOPEMENT





HOW DO PEOPLE BUILD IN HAITI?





Principal material
CONCRETE *



2010

Haiti, earthquake

7.3 Magnitudo

97.000 destroyed buildings

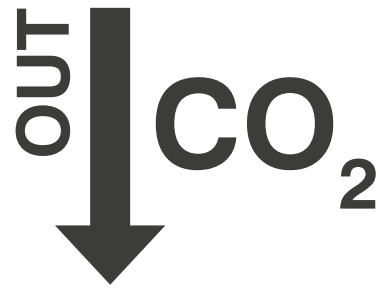
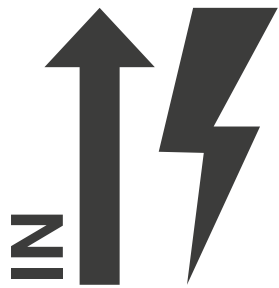
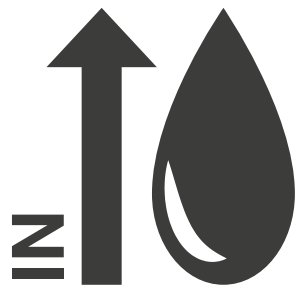
190.000 damaged buildings

*** CONCRETE**

building material made by mixing cement, sand and water



SUSTAINABLE?



Principal material
WOOD



2012

Le Foyer

Haiti, Léogâne





SUSTAINABLE?



A GLOBAL PROBLEM

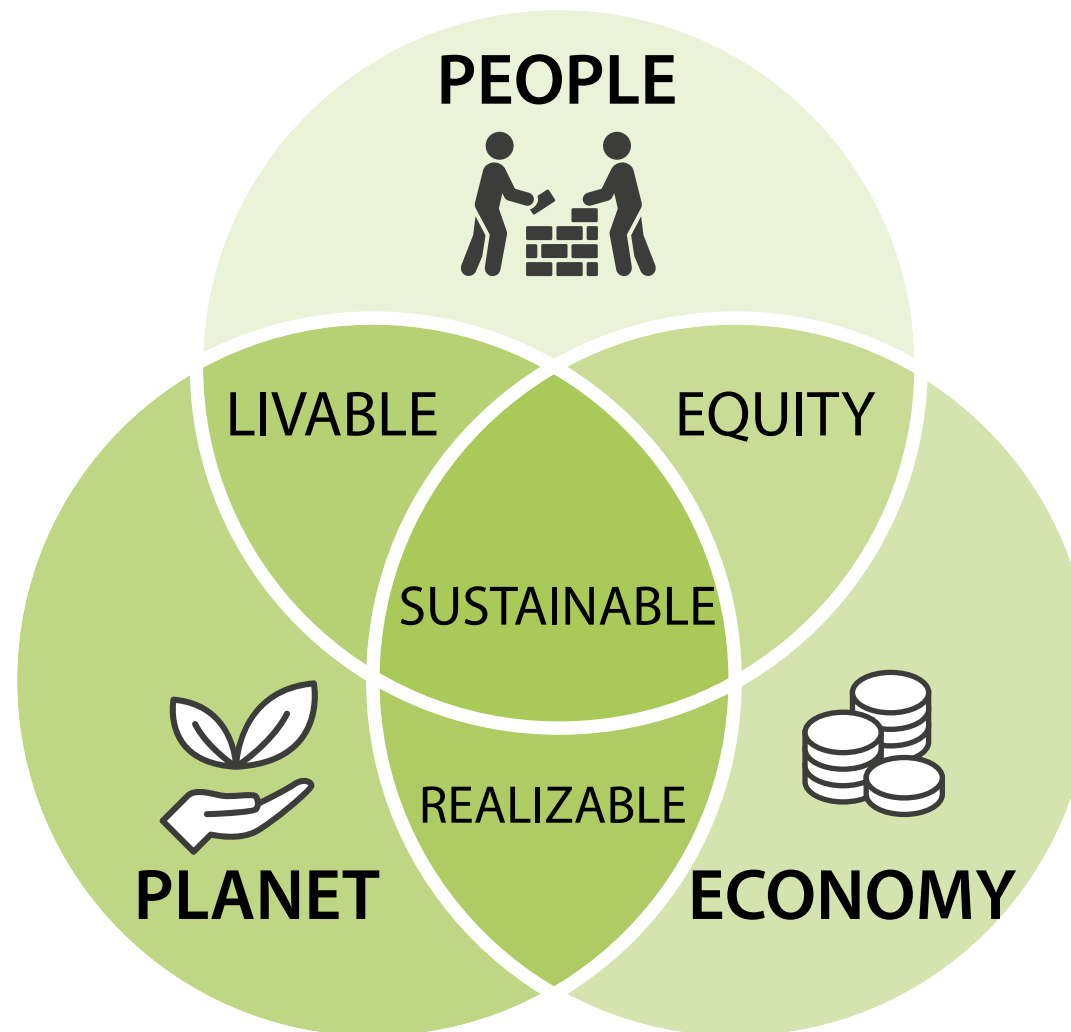
SWEDEN



© Foto di Francesco Alesi



SUSTAINABLE? A MATTER OF CHOICES



A PLACE, A TRADITION



WHAT IS MORE SUSTAINABLE IN HAITI?

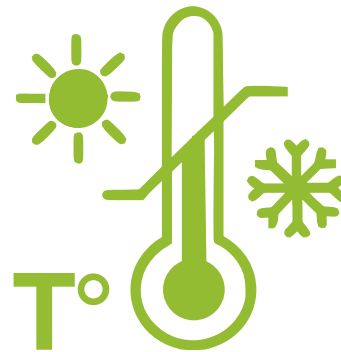




PRINCIPAL AREAS CULTIVATED WITH RICE

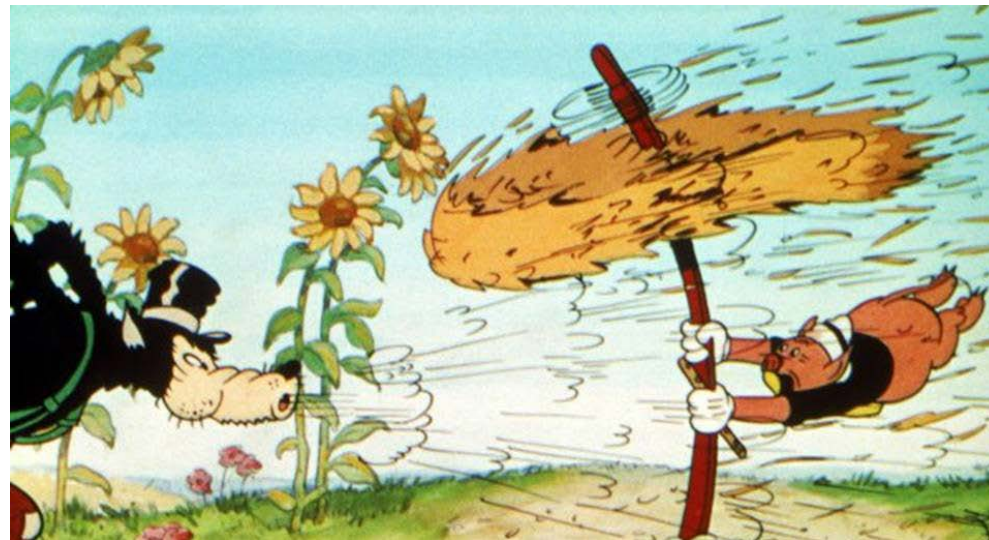


STRAW: A GREEN MATERIAL





STRAW HOUSE: SAME OLD QUESTION



STRAW BALE



INFILL WALL

LOAD-BEARING

* STRAW BALE

block made of straw: size 36x45x90 cm

INFILL WALL

The blocks are used to infill the space between the pillars

LOAD-BEARING

The straw bale wall has also a structural function



2013

Ripartire dalla paglia

Piemonte, Torino - Biella
analysis phase



Principal material
STRAW



2014

Ripartire dalla paglia

**Haiti, Bocozelle,
first building**



The manual press



2015

Anpil Pay 2.0

Piemonte, Torino,
analysis phase



The manual press



2016

Ekokay Training

Haiti, Port-au-Prince
prototype method



Principal material
STRAW



Ekokay
Costruire Coltivando

Haiti, Croix-des-Bouquets
second building

2018



EKOKAY

FROM WASTE TO RESOURCE...



EKOKAY

FROM WASTE TO RESOURCE...NOT ONLY RICE!



TIRES
For the foundation



BOTTLE CAPS
As nails



PLASTIC BOTTLES
For the roof





* FOUNDATION

the lowest load-bearing part of a building, typically below ground level.



WALLS



PLASTER



* PLASTER

mixture of sand, cement and lime with water, for spreading on walls, to form a smooth hard surface when dried, that protect the wall.



ROOF AND FALSE CEILING



* ROOF

the structure forming the upper covering of the building.

* FALSE CEILING

secondary ceiling useful to improve climatic confort inside the building.





THE STRAW BALE HOUSE



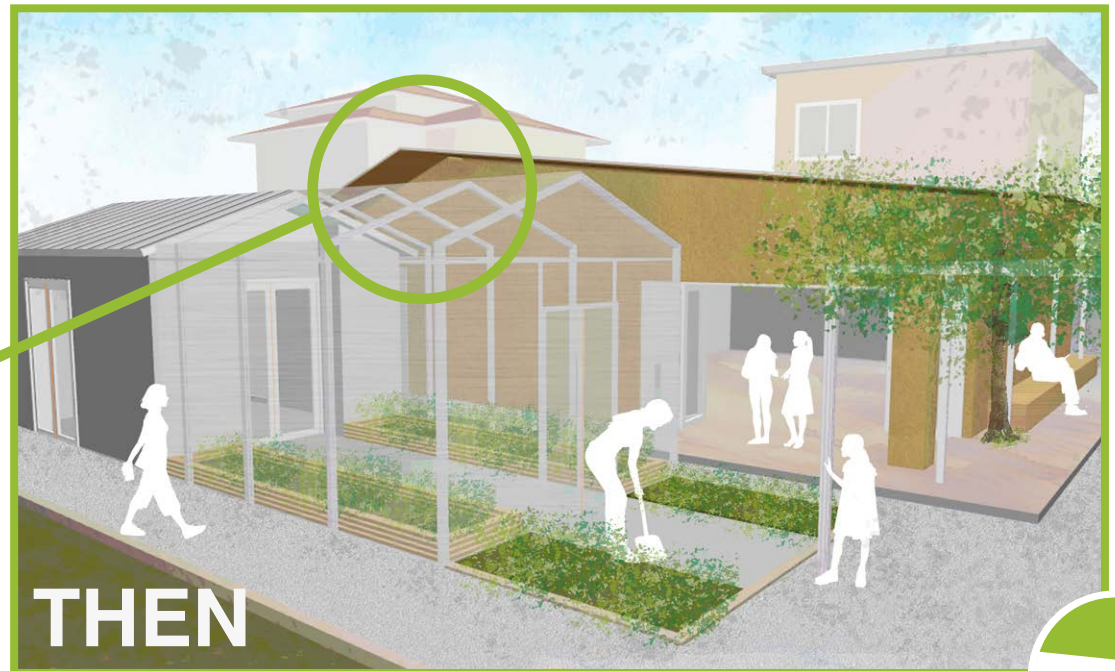
JUST IN HAITI?



Via Trivero 16

Torino,
rebuild a pavillion with straw
work in progress

Principal material
STRAW



Principal material
STRAW



Gli Orticelli di Giulia

**Adria,
a storehouse built with straw**



AND IN DAILY LIFE?



Natural materials for painting



Rivoli, Comunità Lucignolo workshop



Furniture recovery


Rivoli, Comunità Lucignolo
workshop





Architettura Senza Frontiere Piemonte ONLUS

Via Ottavio Assarotti 15, 10122, Torino (Italia)

 info@asf-piemonte.org

 www.asf-piemonte.org

 [Architettura Senza Frontiere Piemonte](#)

 [asf_piemonte](#)



ASF ITALIA · PIEMONTE
Architettura Senza Frontiere

