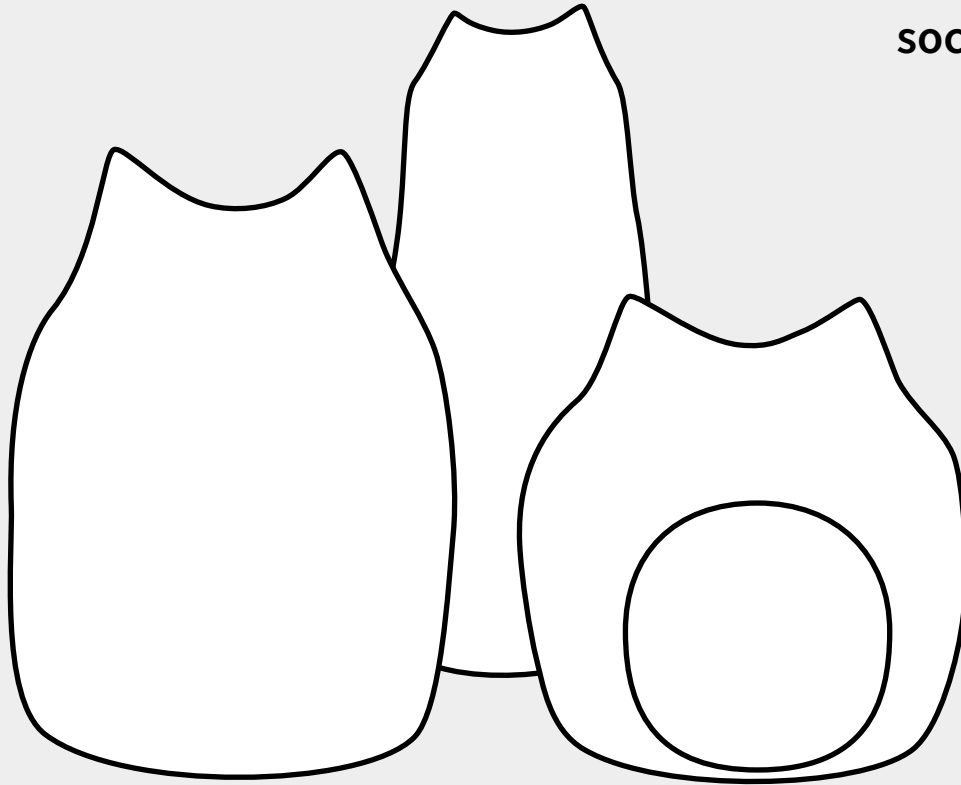


01. WHECAT

Potential of materials to help solve
social & environment problems



Watch the Video

<http://bit.ly/wheatcat>

WHECAT is a set of
modular cat supplies
made from wheat straw
that used to be burned



SUSTAINABILITY SOCIAL PROBLEM

*“ Whecat bring us a smart way
to increase income and deal
with wheat straw ” --- a villager*

To help

Improve air quality

Villager increase income

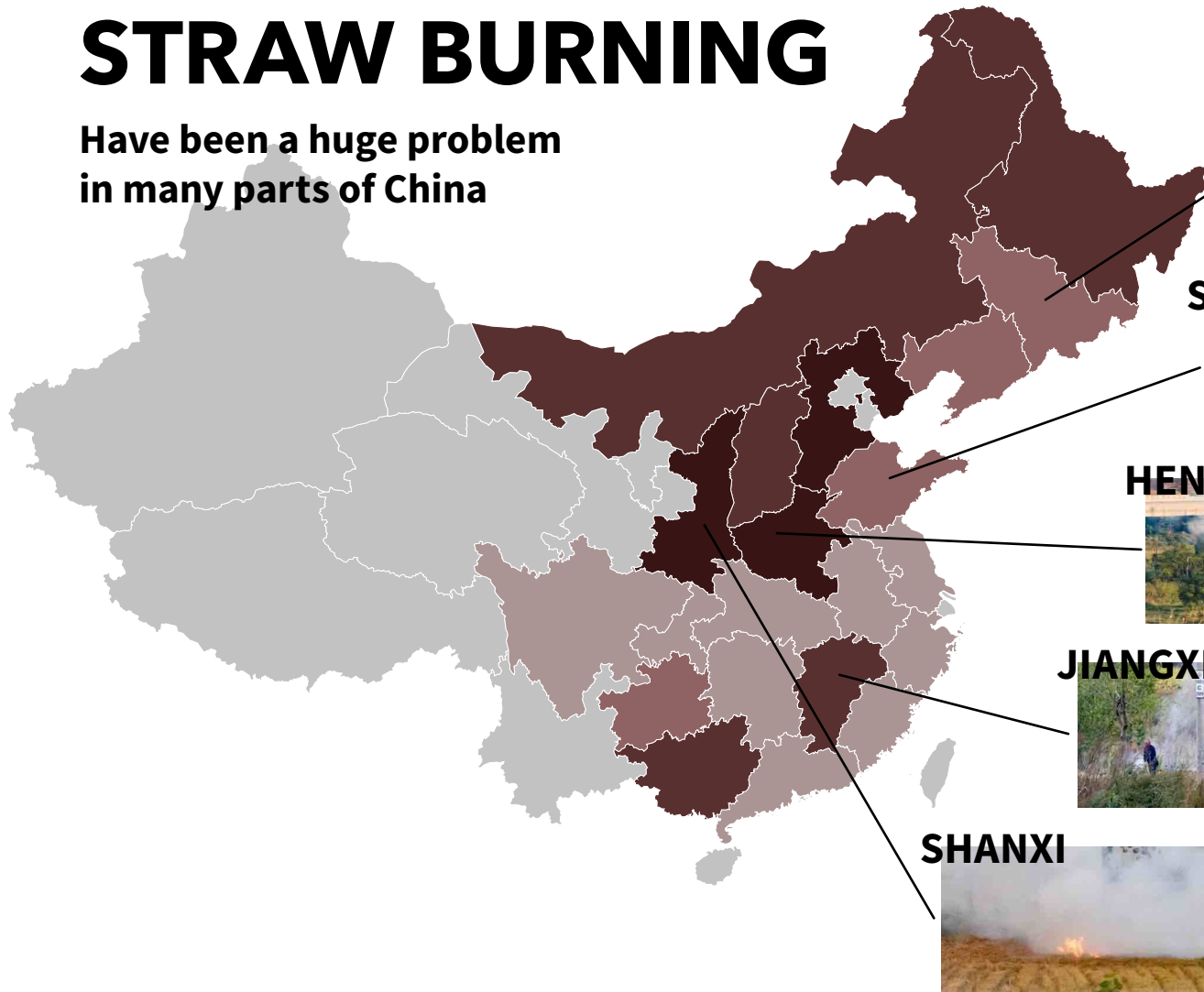
Stray cats against winter

Reduce plastic consumption



STRAW BURNING

Have been a huge problem
in many parts of China



JILIN



SHANDONG



HENAN



JIANGXI

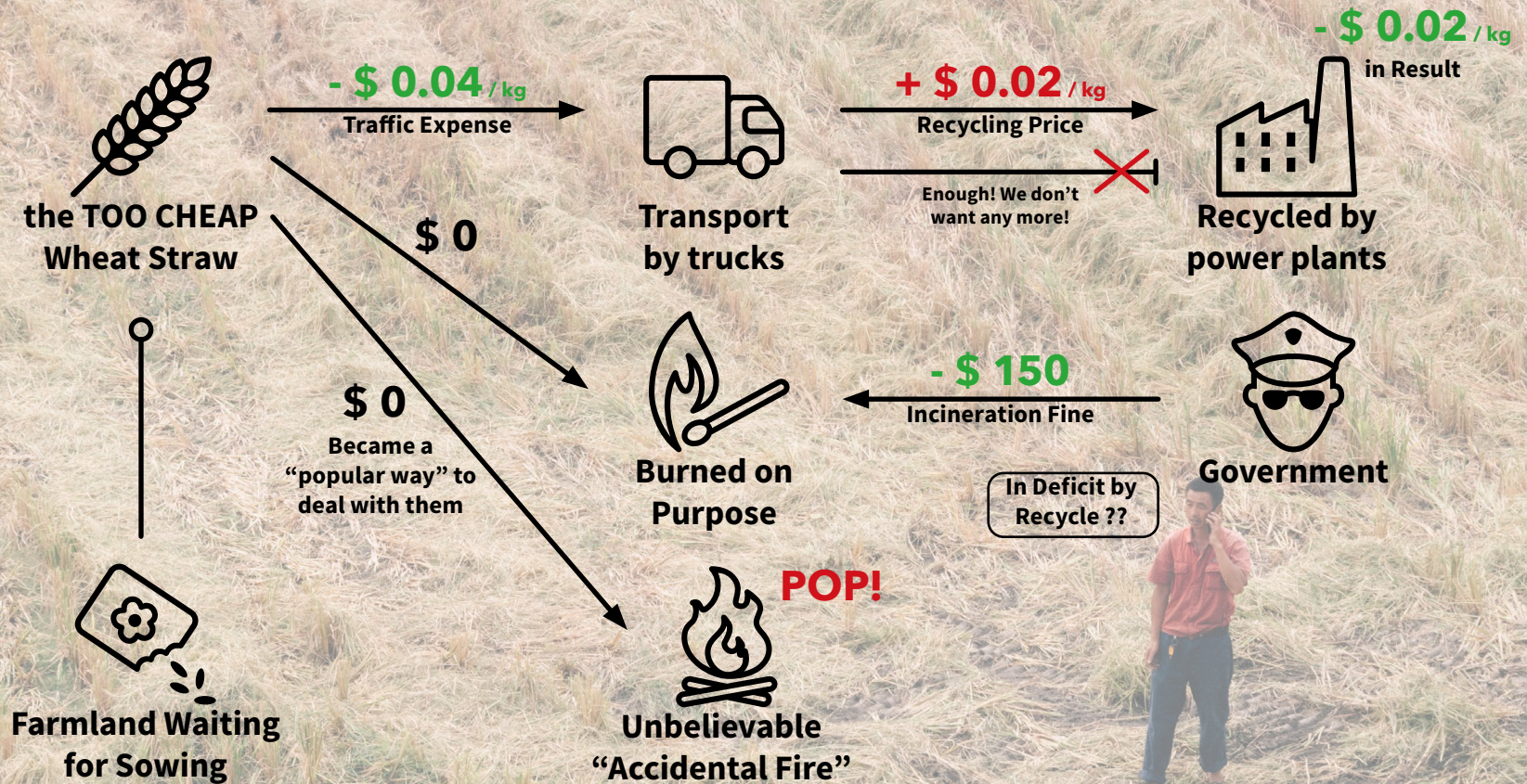


SHANXI



Parts I visited
for research
and bring back
straw examples

Why they have to burn straw ?





TOO CHEAP TO COLLECT

Large quantities of straw were burned after the harvest season in China

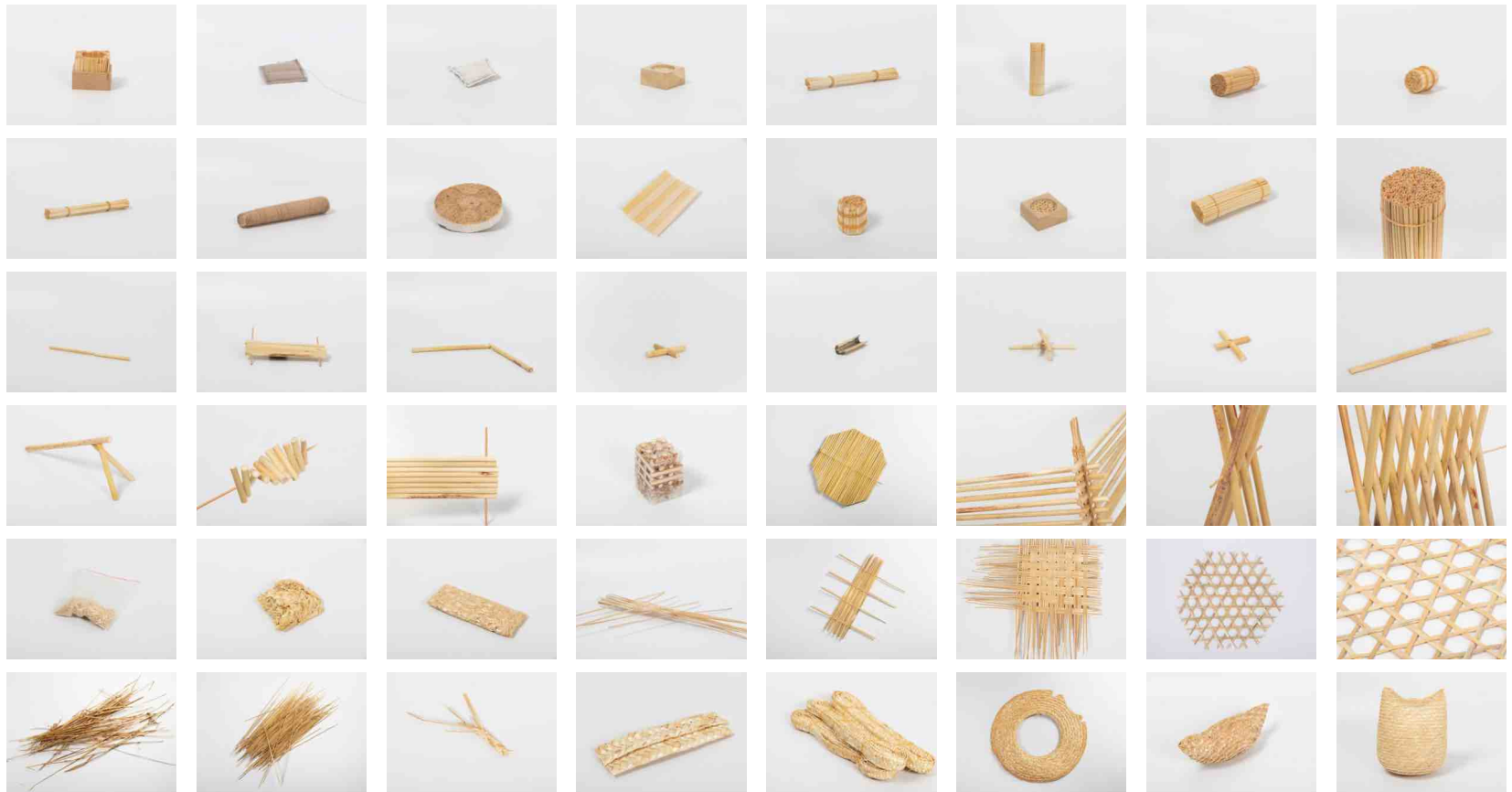
Farmers have to quietly burn straw that occupies a large amount of arable land causing serious deterioration in ambient **AQI** (Air Quality Index)



What if we can increase the value of straw by using design method and simple processing ?

\$ 0.02 / kg → **\$ 4.50 / kg**





MATERIAL & STRUCTURE TESTS

Wheat \ Sorghum \ Fibre \ Skewer

Jun 2019 - Jan 2020



Stray cats usually use wheat straw as shelters against cold in winter

Traditional shelters contain plastic, cloth, metal and glue and are difficult to have garbage classification.



Potential of Wheat Straw As Cat Supplies



Plastic



Wheat

Cat Popularity



Costumer Price



Biodegradability



Chemical Glue



Waste Sorting



Working Life



1 year

YANGGUO TOWN in SHAANXI



Villagers use straw to make straw braids in their free time



Villagers sell straw braids to the factory as \$ 0.5/m

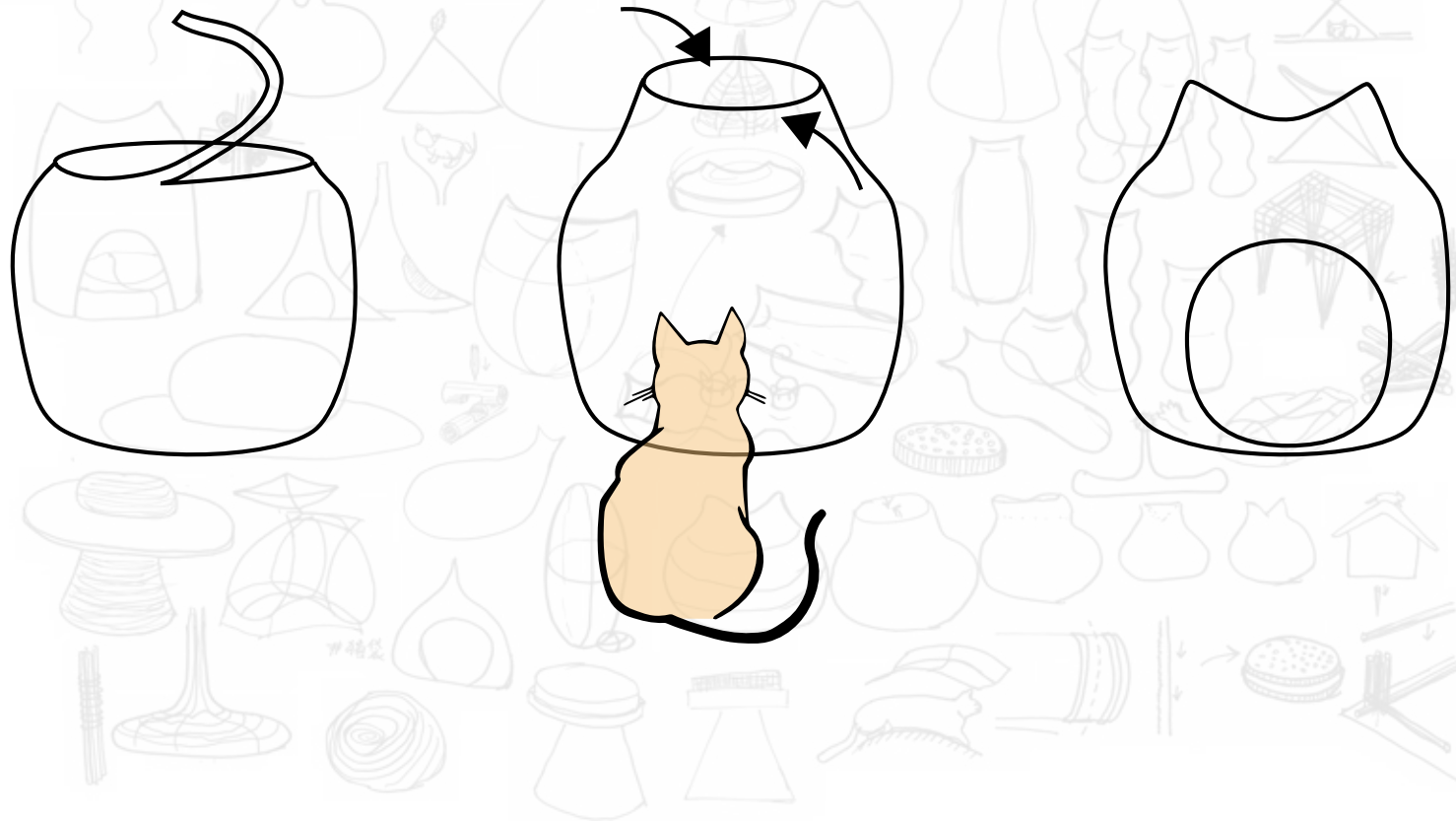


They coiled stitched straw braids to make straw hats



“Our village is famous for straw hat making, most families even earn more through wheat by-product than selling wheat itself.”

Inspiration & Forming Solution

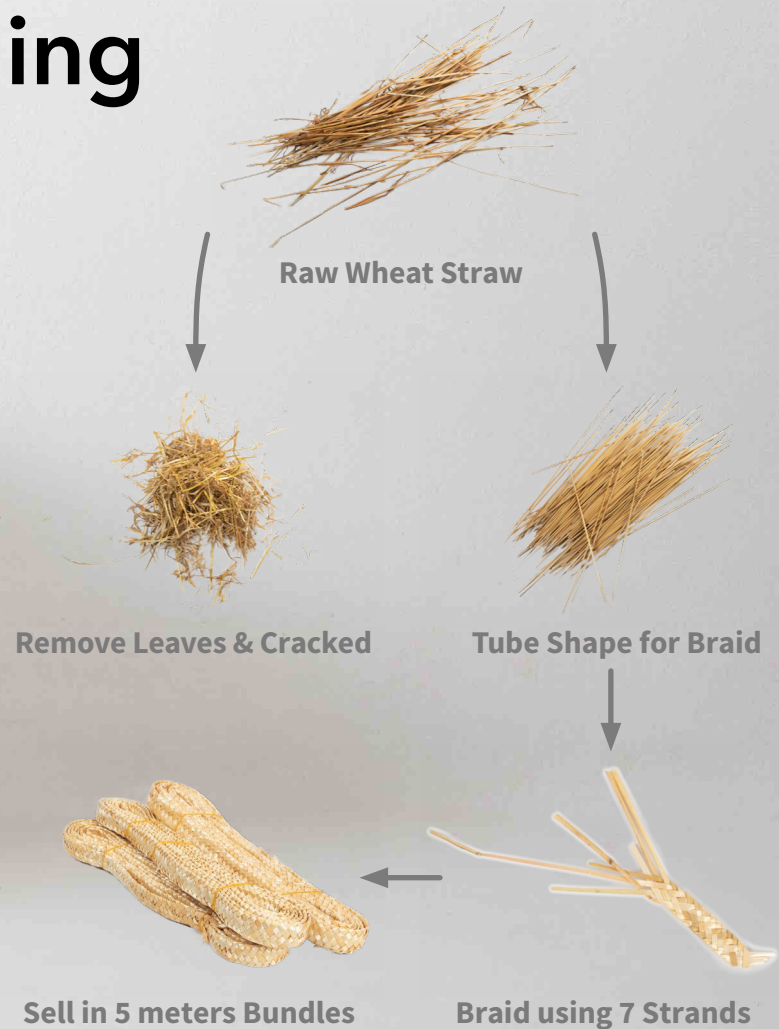


Standardized Braiding in villages



← Filling Material

← Forming Material



Making Process of WHECAT



Making Straw Braids using raw material wheat straw



Villagers sell braids to the factory as \$ 0.5/m



Sorting through its width and make the braids wet



Coiled stitched straw braids



Sewing the sealing



Form Assessment

