TOMB HOUSES
A REMEDIAL APPROACH TO SAVE ANFGOU

DIAGNOSIS

BASIC INFRASTRUCTURES ARE ABSENT SO FAR IN THIS OUT-OF-THE-WAY REGION OF MOROCCO. ANFGOU WAS SINKING INTO OBVIOUSNESS UNTIL ONE DAY IN FEBRUARY 2007 WHEN THE GOVERNMENT OF THE REGION RECEIVED AN URGENT MESSAGE: "DON'T FORGET THE DEATH OF 25 CHILDREN DUE TO A SEVERE COLD SNOW". THE ECONOMIST GSM-PUBLISHED A PHOTO PRESS-REPORT ON THE "FORGOTTEN WORLD OF ANFGOU", EXCLUSIVE AND THIS SHAKE UP THE REGION AS A VILLAGE OUTCAST IN THE FRINGE OF MOROCCO. THE INHABITANTS OF THE VILLAGE ARE FROM A REGION CALLED THE "GREATS" OF MOROCCO. ANFGOU IS DERIVED FROM THE MOST BASIC NEEDS. WINTER IN THIS AREA IS GETTING HARDER AND HARDER. SNOW IMPOSES THE VILLAGE AND BLOCKS ALL THE HOUSES FROM BOTTOM TO ROOF, MAKING IT IMPOSSIBLE FOR THE INHABITANTS TO GO OUT. THIS YEAR, ANFGOU IS IN THE BAD NEWS. HELP FROM THE DRY SOUTH AND THEY HAVE BROUGHT WITH THEM THEIR BUILDING MANNERS WHICH ARE UNUSABLE TO THE NEW REGION. WHAT MAKES MATTERS WORSE IS THAT HOUSES DON'T DISPLAY ANY THERMAL INSULATION AND CONTAIN MANY INTEGRATIONS. SO HOW TO SOLVE SUCH PROBLEMS AND SAVE LIVES?

1. AIR SOLAR PANELS

THE SOLAR PANELS WILL BE SETTLED IN THE COLIN BEHIND THE VILLAGE, TO EXPLOIT ITS SOUTH ORIENTATION. THE AIR INSIDE PANELS TUBES WILL BE HEATED WITH SOLAR ENERGY, STORED, THEN INJECTED INSIDE THE VILLAGE HOUSES THROUGH SPECIAL CANALIZATION. AIR SOLAR PANELS WILL GIVE US A GAIN OF HEAT OF 9°C.

2. COVERED NARROW PATHS

COVERING THE NARROW PATHS WILL ENABLE THE INHABITANTS OF THE VILLAGE TO HAVE A COMMUNAL LIFETIME DURING WINTER. IN FACT, DURING WINTER, DUE TO HIGH SNOW FALLS AND STRONG WIND THE INHABITANTS ARE UNABLE TO GET OUT, AND MEET EACH OTHER. THE WALLS ARE DIRECTLY EXPOSED TO SNOW. THEY CAN ALSO PROTECT THEM FROM SUMMER SUNSHINE. INSOLATION OVER THE NARROW PATHS THEY WILL EARN ABOUT 2°C.

3. IMPROVED ROOFING SYSTEM

WITH REDUCED COSTS THE IMPROVED ROOFING SYSTEM OFFERS TO ADD TWO LAYERS TO THE ROOF: A FIRST LAYER MADE OF STRAW, AND THE SECOND ONE CONSISTING OF A PLASTIC FILM. THE MAIN OBJECTIVE IS TO REINFORCE THE INSULATION OF THE ROOFING SYSTEM. TO AVOID COLD AIR INFILTRATION TO THE HOUSE THROUGH THE JUNCTION BETWEEN WOOD, LOGS AND COB WALL, THEY SHOULD USE THE LOCAL STONES. SUCH IMPROVEMENTS WILL GIVE US A GAIN OF 5°C.

4. CLOSED HEART CHIMNEY

CLOSED HEART CHIMNEYS ARE EASIER TO CONTROL, IN TERMS OF THEIR ENERGETIC PERFORMANCE. THANKS TO THEIR STONE WALLS THE HEAT IS CAPTURED INSIDE, AND CAN BE DISTRIBUTED TO THE ROOMS THROUGH CANALS. THIS SYSTEM PROVIDES MORE SECURITY AND A BETTER CONTROL OF NOXIOUS SMOKE, IT WILL ALSO SUPPLY AN ECONOMY UP TO 40% OF WOOD CONSUMPTION. THIS WILL PROVIDE A GAIN OF 7°C.

ECOLE SUPÉRIEUR D'ARCHITECTURE DE CASABLANCA (EAC)

DEROUCH SAAD
SMAIL TAZ
ELMOUJSSI ISSAM
DUZZINE FADEL
IBNODDINE MED