Olla sobre la llama.
The way to safe, healthy and efficient stoves for Villa Clarín.
Promoter(s).
Universidad del Norte, Design Dept.

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Community of Villa Clarín, especially women who kindly opened the doors of their homes.
Context.
Villa Clarín, Palermo is an informal neighborhood where women usually cook and spend as much time near fireplace stoves as younger children they take care of, exposing them to these pollutants from early childhood. These vulnerable population who are constantly exposed to wood smoke have a higher risk of developing chronic obstructive pulmonary disease, and to experiment more frequent and severe symptoms of the disease.
The project.

“Olla sobre la Llama” is a project of co-creation of stoves with the community which uses resources available in their environment and seeks to inform people the risks of exposure to firewood smoke and through participatory design tools to improve the quality of life of the community by the empowerment of solutions.
The design process.
1. Situation Diagnosis
2. Conclusion Analysis.
3. Problem awareness Sessions
4. Participative alternative creation.
5. Alternatives Evaluation.
6. Prototyping
7. Validation with the community
8. Implementation
This is a neighborhood of informal nature endangered or threatened by legal uncertainty of land, with a survival economy and housing, underserved of basic infrastructure services; In the absence of state, residents have to organize themselves to improve their living conditions before being evicted or to prevent emergency situations by the characteristics and location of the land.
Activism and Civic Participation

Participative design was used since it open the possibility of developing raising awareness processes, collective learning, empowerment, among others. It was carried out in a participative way with the community, especially women heads of household in the neighborhood. People took part from diagnosis to stoves construction.
Through training workshops and co-design for empowering building techniques with clay, a new generation of "makers" is created. These "makers" have the necessary tools to perform stoves maintenance, adjustments or new developments; while transferring this knowledge to new families arriving to the neighborhood or other communities with similar situation.
This project seeks to prevent health damage by reducing the impact of the conditions of adapted firewood stoves that expose informal settlers to high levels of pollutants from its smoke. Despite that they still use firewood as fuel for cooking activities at home, in this case, small pieces of pallets that are abandoned by commercial sector companies around are been used.
In terms of consumption, “Olla sobre la llama” seeks to reduce the health impact of neighborhood families, allowing a cleaner combustion and carbon monoxide redirection. Also includes an open layout as each person can make their own stove and its adaptations. Finally collection of supplies and molds is done with the collaboration of community leaders, who open their home voluntarily, while construction of the stoves is done as a community where everyone can participate in these sessions.
The opportunity to have a closer contact with reality is given through this kind of projects, facing the daily problem of vulnerable communities in our region. Under this new methodology of work, participative approaches where community members feel connected to the design process from the beginning thought the end are been used as a tool that the students must learn to develop in their projects.
The stove design was contemplated from the beginning to be built with materials that could be found in the community’s territory. The neighborhood has a brickwork where the material to build the stoves are extracted, mainly clay. The people from the community are empowered to build their own stove and do some maintenance if necessary. This training allows people in the community to know the benefits of the material so that they can build other objects with the same technique as well as teaching among themselves.
Visualization and storytelling have been very helpful tools both for the student to organize ideas and to communicate with the community and other external stakeholders about the potential of the project to be replicated, as a process or result.
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