

# Implementation of Social Technologies as Strategies for Teaching Quilombola Communities

## Summary

The project "Implementation of Social Technologies as Strategies for Teaching Quilombola Communities" has been set up in the scope of the Brazilian programme of academic development Abdias Nascimento and is based in a cooperative research between Brazilian and foreigner institutions aiming the mobility of graduation and PhD students.

The project also complies with the Brazilian Agenda for Health Research Priorities, which promotes the development of studies on specific problems of some population groups that are somehow marginalized.

The main objective of the project is then to promote the internationalization of Post-Graduation Research Programmes of South, Southeast and Northeast Brazilian Universities that are focused on the implementation of specific sustainable projects aimed to the improvement of living conditions of specific of low income ethnic groups, which are nowadays marginalized, with little access to education, healthcare and employment.

In order to achieve this goal, academic exchange between the project partners will be promoted through the development of joint publications and mobility of researchers and students, the latter being preferably part of marginalized population groups.

A specific case of a low income ethnic group is that of the Quilombola and Ilhoa communities of the Island of Maré-Ba, Monte Alegre and Moreré (Island of Boipeba), in the Brazilian state of Bahia. Nowadays, such communities have no means of financial support and yet they have access to some natural resources which can be used to generate income and provide these people with a sustainable way of life.

Thus, prototypes of small plants (Figure 1) are being developed for the manufacture of sound absorbing panels (Figure 2) and handmade blinds. Such products are based on natural fibres, like oil palm and Brazilian palm fibres, which are normally discarded (burnt) by other local industries, and therefore using them also contributes to reduce pollution.

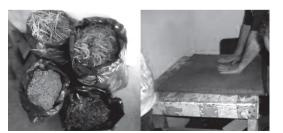


Figure 1. Fibre samples and part of a small plant for the manufacture of sound absorbing panels [1].



Figure 2. Part of the prototype of a small plant for the manufacture of sound absorbing panels and final product [2].

The research developed in CERIS is contributing to define methods of increasing not only the performance and general quality of the natural fibre sound absorbing panels, but also the plant productivity.

The project includes other tasks focused on ethnic studies and healthcare conditions, but CERIS have no participation on them.

The development of a small industry based on the use of available natural fibres complies with the aims of sustainable development and with those of the so-called social technologies. Such technologies should interact with the communities and significantly contribute to its social transformation. This is possible with technologies which can adapt to small producers and low income consumers, powering the creation of people cooperatives, and also adapt to a non-hierarchical working structure.

The research to be carried out at CERIS is part of the PhD work of the student Rubya Campos (UEM, PR, Brazil) and of the MSc theses of two students from UFBA, BA, Brazil. The studies will be focused on the improvement of the acoustic performance of the sound absorbing panels and on the development of performance prediction methods applicable to such panels. The experience acquired on the use of pine fibres in the production of absorbing mats will be used.

[1] Farias de Oliveira, E. et al. (2015): Promoting health in vulnerable communities: social technologies for poverty reduction and sustainable development, Revista Gaúcha de Enfermagem, 36, pp. 200-206.

[2] Siqueira, S. et al. (2017): Atividades extensionistas, promoção da saúde e desenvolvimento sustentável: experiência de um grupo de pesquisa em enfermagem, Esc. Anna Nery [online] 21(1), Rio de Janeiro, Brazil.

#### **Project Reference**

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## Leading Institution

UFBA – Federal University of Bahia (Brazil)

## Partners

UEM – State University of Maringá (Brazil), UNIMONTES – State University of Montes Claros (Brazil), UC – University of Cartagena (Colombia), UCM – Complutense University of Madrid (Spain), UTAD – Universidade de Trás-os-Montes e Alto Douro (Portugal), UAb – Universidade Aberta de Lisboa (Portugal)

#### **CERIS Principal Investigator**

Albano Neves e Sousa (albano.n.e.sousa@tecnico.ulisboa.pt)

**CERIS Research Team** 

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#### **Project Website**