PROJECT

SPIN - SPEARHEAD NETWORK FOR INNOVATIVE, CLEAN AND SAFE CEMENT AND CONCRETE TECHNOLOGIES

URL: http://www.spin.bam.de

DURATION

2009 - 2013

PROJECT TYPE

Funded by the European Commission (EC), ACP Science and Technology Programme, Project No. VH 7151

SCOPE

Globally, cement and concrete experts are at the cutting-edge to sustainable, green, healthy but nonetheless high-performance concrete. Today concrete is not yet well established in Africa, which offers the unique opportunity to build up a cement and concrete market based on the highest available state of technology. As this industry needs high level expertise, a central issue in implementation of skilled technology is cross-linking research institutions and laboratories. It should not be neglected that concrete is a product with low transport ranges. This means that an improved concrete market mainly supports the local economy without exceeding financial drains to the international market. Thus it fosters the fight against poverty, which is an urgent need in most African countries.

The project aims to cross-link experts with industry and policy making bodies, aiming to establish sustainable cement and concrete construction in Africa.

OBJECTIVES

SPIN aims at the following:

- To facilitate establishment of a collaborative institutional research network of partners in Africa, concerned with sustainable development challenges in environment, health and energy sectors influenced by cement and concrete materials and construction.
- To promote cement and concrete science and modern technology in ACP countries.
- To identify research needs and develop inter-disciplinary topics while maintaining research on practical application.
- To enhance technology transfer (EU-ACP and within Eastern, Central and Southern African countries) and promote responsible practice.
- To promote domestic innovation and technological advancement as a vehicle for sustainable development by empowering local experts.
To encourage and support collaborations among current and potential actors.

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- Eindhoven Technical University (TU/e), Netherlands
- Civil Engineering Institute of Croatia (IGH), Croatia
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OUTCOME
The SPIN project focused on developing concepts for innovative and cost-effective raw materials for sustainable cement and concrete construction. The developed concepts are related to improvements of academic and technological education and training, on national and international standardisation level as well as on the level of design and practical application. A handbook of clean and safe cement and concrete technologies was formulated over the duration of the project and is considered to be a direction for future scientific and technological innovations. This project is a stepping stone into the future where further opportunities and collaborations can exist between Africa and Europe. The prospects of this initiation can only be seen in many more years to come where innovation through available raw materials leading to sustainability is the main focus for research in Africa.

PUBLICATIONS

JOURNALS AND CONFERENCE PROCEEDINGS


