

University Capacity Building Program (UCBP)

Capacity Development for
Ethiopia's Construction Sector



What is the University Ca

The University Capacity Building Program (UCBP) is a large-scale capacity development and construction program initiated and funded by the Ethiopian Ministry of Education (MoE) and Ministry of Capacity Building (MoCB).

The Government of Ethiopia has declared capacity development one of its main objectives. It formalized this commitment in 2001, when the MoCB was established. Their efforts are particularly demonstrated in large projects such as the UCBP, which uses experiences from the German construction sector as benchmarks.

As the project management and implementation agent, GTZ International Services' foremost task is to develop the capacity of the Ethiopian construction sector. GTZ IS supervises the construction of 13 universities at 15 different sites throughout Ethiopia, mostly in rural locations. A phased approach to building has allowed students to already begin classes at UCBP campuses in early 2007.



Capacity Building Program?

The UCBP constructs:

- 13 universities in
- 15 locations throughout Ethiopia on
- 1.500.000 square meters for
- 121.000 students.

The program aims to:

- 1) Modernize Ethiopia's construction sector, leading to increased international competitiveness; and
- 2) Design and construct public universities in 15 locations throughout Ethiopia, at a competitive cost and in a short time span.

The capacities of Ethiopian companies are developed throughout the entire program duration, specifically tailored to four groups within the construction sector:

- Construction Management Consultants,
- Architects and Engineering Firms,
- Construction Companies,
- Local Enterprises in UCBP regions.



How is capacity development

The capacity development at all levels of intervention supports companies to reach international standards in quality, safety, efficiency and modern technologies. Knowledge is transferred through management trainings and workshops such as change management, financial management, equipment management, and marketing.

UCBP supports involved companies in implementing the quality management system ISO 9001:2000. This powerful tool helps companies to change their day-to-day business procedures, structures and processes. Companies are enabled to work more efficiently, thus maximizing their financial and human resources and improving the quality at the same time. This will not only strengthen the business of the ISO certified companies but also Ethiopia's economy. With guidance from UCBP, the first companies in the Ethiopian construction sector received an ISO certificate in February 2008.



ent integrated in UCBP ?

Onsite, UCBP conducts practical on-the-job trainings. German and national master craftsmen upgrade the skills of construction site workers in major trades, such as masonry, carpentry, metal- and woodwork, plumbing and electricity. Theoretical sessions, such as mathematics, physics and engineering, reinforce these hands-on trainings.

UCBP identifies new methods and adapts technologies to the Ethiopian context for improved quality and higher efficiency. Knowledge and experiences are documented as good practices in the Ethiopian construction sector*. One good practice example can be found in the masonry trade. The improved workflow in building

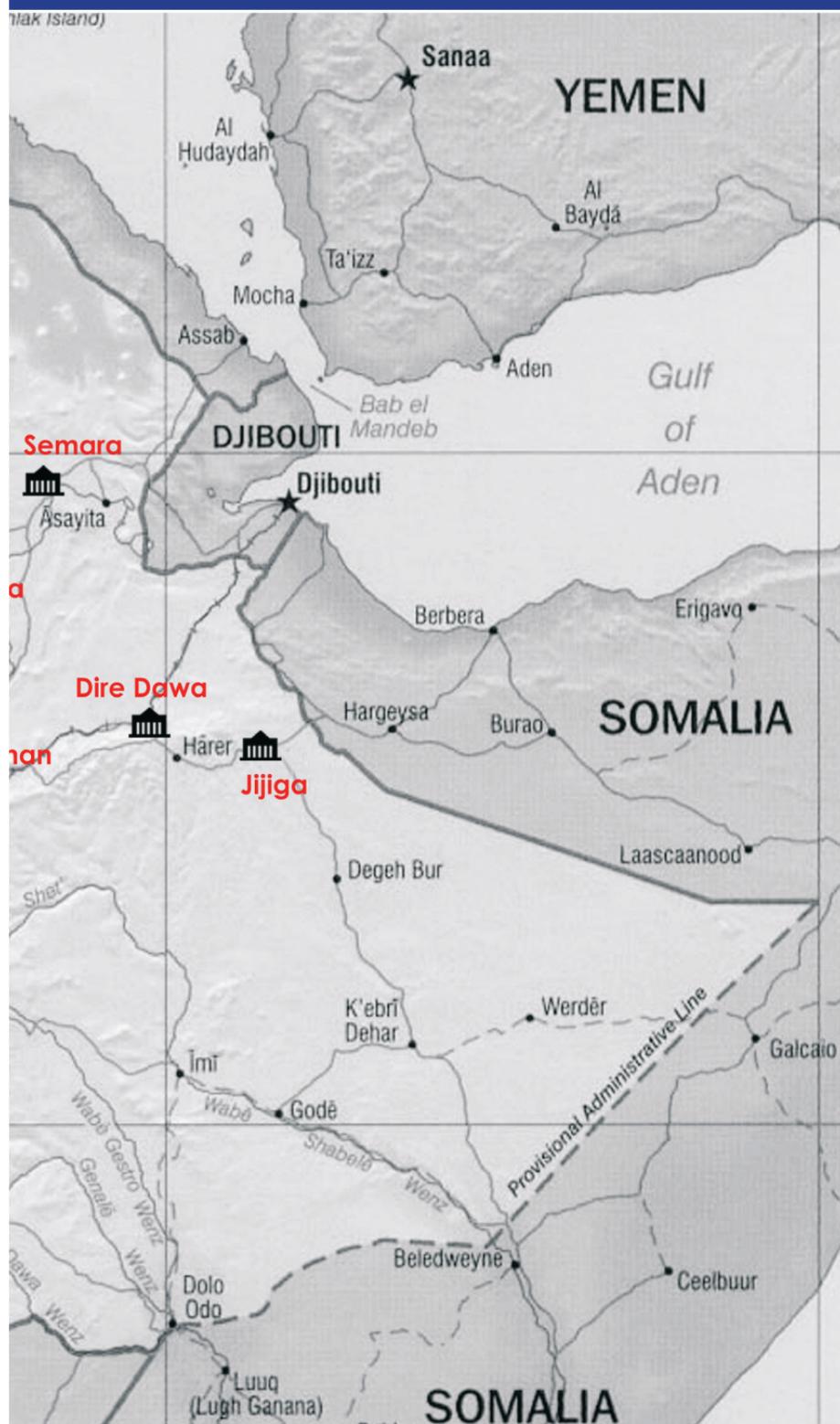
- saves up to 35% of the costs,
- improves the quality on many levels, and
- reduces construction time.

*For more information on good practices, please see separate booklet with GTZ IS



Photo by Michael Tsegaye

Universities located?



How are UCBP Universities

In UCBP, MH Engineering is responsible for the master plan, building and infrastructure network design of the university campus. GTZ IS coordinates every step of this process- from the definition of room programs with regard to client demands to the final design for all trades.

Throughout the entire program duration, 46 Ethiopian Architects and Engineering companies (A&E) benefit from UCBP experts' capacity development. Guided by GTZ IS, the A&Es elaborate planning details and good practices for the university designs and buildings such as lecture halls, libraries, dormitories, and laboratories.

One fundamental element of the planning processes in UCBP is to apply and improve the Cost Efficient Design (CED)* methodology which allows the implementation of pre-fabricated and standardized elements. This:

- saves money by reducing both construction time and material wastage,
- allows a rapid construction without compromising quality, and
- streamlines established principles in construction efficiency.

*For more information on CED, please see separate booklet with GTZ IS.



designed and constructed?

UCBP is building 13 universities throughout Ethiopia. The phased approach of construction allows students to live and study in UCBP facilities, while construction is ongoing on other parts of the campus. Every program phase involves additional contractors. Therefore, the majority of Ethiopia's contractors is involved in UCBP. The contractors, as well as their subcontractors benefit directly from the program's capacity development endeavours on management and technical level.

UCBP recognizes that a university campus is much more than just superstructures. One of the components in the infrastructure field is the cobblestone project: within only two years, the project has created 30.000 jobs for unskilled and semi-skilled workers as well as beautified many roads, walkways and places. Other infrastructural solutions allow a sustainable integration of:

- Sewage water systems,
- Water supply systems,
- Electrical power supply, and
- Sewage water treatment plants that will be beneficial for the entire country.*

*The entire country will benefit from the application of these innovative and adapted infrastructure methods.



Which methods are used to promote

No other program in Ethiopia involves as many local enterprises and cooperatives as the UCBP!

The construction sector is an effective engine for regional economic development. Especially local enterprises and cooperatives play an important role in generating employment and sustaining local economic development, thus reducing poverty. This being the overall goal, UCBP involves around 400 enterprises and cooperatives from the regions in 2008.

Additionally, the UCBP universities will accommodate more than 120.000 students plus administrative staff and teachers. They will contribute to strengthening the economies in the regions significantly. UCBP supports stakeholders such as Municipalities, Chambers and Sectorial Associations to turn the universities into incubators of local and regional economic development.



ote local economic development?

One of UCBP's objectives is to develop the economies in the regions by involving local construction related enterprises*.

UCBP encourages the formation of local enterprises and strengthens already existing ones through:

- enabling the contractors to subcontract up to 40% of construction works to local enterprises,
- providing entrepreneurial and managerial trainings for business sustainability,
- conducting practical trainings on-the-job to upgrade the skills of workers in trades such as masonry, metal works, carpentry, electricity and plumbing,
- cooperating with local "Technical and Vocational Education and Training-TVET" colleges, offering internship to their students and "Start-up business" workshops to graduates who are interested in creating their own construction related enterprise.

*For detailed information on local economic development, please see separate brochure with GTZ IS.



Photo by Michael Tsegaye



UNIVERSITY CAPACITY BUILDING PROGRAM

የትምህርት ሚኒስቴር እና የአትም ግንባታ ሚኒስቴር
MINISTRY OF EDUCATION & MINISTRY OF CAPACITY BUILDING

Together, the Ministry of Education (MoE) and the Ministry of Capacity Building (MoCB) are guiding and funding the University Capacity Building Program (UCBP). More than 400 companies from the Ethiopian construction sector participate in the program. Firms include Construction Companies, Architecture and Engineering Firms, Construction Management Consulting Companies and Local Enterprises throughout Ethiopia.

GTZ International Services is commissioned by the Ethiopian Government as project management and implementation agent. GTZ IS provides capacity development for the Ethiopian construction sector while ensuring the timely construction of 13 universities at a competitive cost.

As an international cooperation enterprise for sustainable development with worldwide operations, the Deutsche Gesellschaft fuer Technische Zusammenarbeit (GTZ) GmbH is owned by the German Government and works on a public-benefit basis.

gtz

IS

International Services

TK International Building, Bole Road
Bole Kifle Ketema, Kebele 03/05, House No. 162
P.O. BOX 28127, Code 1000, Addis Ababa, Ethiopia
Tel: +251 116 622260
Fax: +251 116 624114
E-mail: ucbp@ucbp-ethiopia.com
Web: www.ucbp-ethiopia.com, www.gtz.de