



www.nestown.org AMHARA MODEL TOWN



ORDA  
AMHARA DEVELOPMENT ASSOCIATION

| A | B | Z |  
Allgemeine Baugenossenschaft Zürich



Eidgenössische Technische Hochschule Zürich  
Swiss Federal Institute of Technology Zurich

**DARCH**



GREEN ETHIOPIA Gemeinnützige Stiftung  
für Umwelt und Entwicklung in Äthiopien



**Holcim foundation**  
for sustainable construction



Organization for rehabilitation and  
development in Amhara (ORDA)



**SEC** Singapore ETH Centre  
for Global Environmental Sustainability

## AMHARA MODEL TOWN

Buraneet at Lake Tana – Build it yourself

Ethiopia's present population of more than 90 million people is growing rapidly. In spite of the outstanding economic growth the poor multi-ethnic state on the Horn of Africa is reaching its limits. It is confronted with inefficient cultivation of land and harmful migration to city centres. It lacks the experience to respond to the growth of its population with a sustainable settlement development approach. In order to develop a model town, the authorities in the Amhara region are working closely since 2007 with NESTown Group, including experts from ETH Zurich. It has been officially decided to implement this urban development proposal.

The region aims to offer its mostly farming inhabitants a town and house type designed according to local conditions which they can build and manage themselves. The buildings are used to harvest rainwater and are built from local materials such as eucalyptus wood. The developed and tested construction is estimated to cost no more than the equivalent of 2000 - 3000 Swiss francs.

To realize a sustainable town, other capacities have to be developed: cooperative communal living serving both the public good and the individual households, efficient water management, a productive and ecologically diverse agriculture for food security, continuous education, including appropriate technology transfer.

By its nature, the implementation of a town is an open ended process emerging at various speeds and scales.

## Implementation Stages Prepared

(\* Amhara Government, \*\* NESTown Group and other agencies)

2013 continuing

Neighbourhood units 'Close':

A close is for 120-160 households (600-960 inhabitants) and includes irrigation systems, horticulture, grazing land, workshops for vocational trades and direct sales. Amhara Model Town is planned for 20'000 inhabitants.

Town Core\*/\*\*:

The Central Square with the Town Tree and four nuclei:

Nucleus1 Training Centre for Appropriate Technology, Agriculture and Home Economics

Nucleus2 Town Factory

Nucleus3 Market, Bus Station, Bank, Restaurant

Nucleus4 Community Centre, Day Nursery, Health Station and Community Buildings

CLOSE ONE is built by the Cooperative Community Buranest. The Training Centre, a self- sustaining boarding school for girls and boys, is started by Amhara Development Association (ADA) in collaboration with other government and non-government organisations \*/\*\*. Cooperative farming capacity is taught.

2012 second half

The Cooperative Communities Foundation (working title) is established by the initiative of Allgemeine Baugenossenschaft Zürich (ABZ) together with partners from business, government and academia. It advances new sustainable cooperative towns in developing countries, starting in Ethiopia\*/ \*\*

Its first achievement is the Cooperative Community Buranest (working title) on the base of the 2006 proclamation for the establishment of cooperative societies of the Amhara National Regional State \*. It is set up together with local households, in combination with the Farming Capacity Building Program of sustainable town agriculture, hopefully in collaboration with Syngenta Foundation for Sustainable Agriculture, Basel (request under examination)\*/\*\*  
November: 2<sup>nd</sup> NESTown Workshop II in Bahir Dar (lead by the Swiss Embassy in Ethiopia, Addis Ababa) \*

July – Building the water deviation channel around the Buranest town centre \*

## Implementation Stages Achieved

2012 first half

June Construction of model houses and workshop in nucleus 2, Town Factory Buranest \*\*

May Access road to Buranest town centre \*

April Successful test of Prototype II Construction \*\*

March Bridge Building on Shene River to accessing Buranest towncentre\*

March ABZ Letter of Intent, signed by H.E. Ato Ahmed Abteu, Vice President of Amhara Region; Ato Aderaw, Head, Cooperative Promotion Agency (CPA) and Peter Schmid (ABZ President)

March NESTA\_ Syngenta Foundation for Sustainable Agriculture, formation of Supervisory Group and Task Force, Bahir Dar

2011

November Prototype I Construction and Construction Cost Monitoring \*\*

Oktober 11 Kebele Vote on Buranest Master Plan and Action Plan

May/August SEUL Singapore ETHiopia Urban Laboratory at SEC / FCL

February 1st NESTown Workshop I in Bahir Dar: Shaping Urban Ethiopia the Case of Lake Tana Region, lead HCU/ Prof. Dr. D. Laepple

April Woreda Libokemkem Implementation Committee, in action  
 March Cost Sharing Agreement between Amhara Government and NESTown Group  
 January New Buranest Steering Committee, Chairman H.E. Ato Ahmed, Head BIUD, Vice President of Amhara

#### 2010

October Green Ethiopia Foundation, Winterthur, Kurt Pfister, President, funds the Buranest tree nursery  
 September Benjamin Stähli, New Town Coordinator, starts working locally under contract by ETHZ, Prof. Dr. Marc Angelil  
 June 27 Buranest Town Inauguration Ceremony under the lead of RUPI, General Director Wro Genet Gebre Eyesus  
 March HOLCIM Forum 2010 Mexico City, public presentation by Franz Oswald and Peter Schenker:  
 NESTOWN\_PLAY WITH COMPLEXITY IN ETHIOPIA - The Making of the Amhara Model Town at Lake Tana

#### 2009

Design submission of Amhara Model Town to Ato Helawi Yoseph by NESTown Group  
 Exhibition of Amhara Model Town Design in ETHiopia Urban Laboratory Pavilion at EIABC / AAU  
 Inauguration of Ethiopian Institute of Architecture, Building Construction and City Development (EiABC / AAU), Addis Ababa, Exhibition sponsored by ETHZ, Prof. Dr. Marc Angelil  
 Start-up Initiatives, Wettingen, implementation of start-up campaign for maintenance workshops and mechanic handicraft  
 HOLCIM Foundation for Sustainable Construction, Zurich, research fund  
 Town Site Planning in Bura at Lake Tana in close collaboration with Bureau of Works and Urban Development (BWUD), Head Ato Ayalew, and Regional Planning Institute (RUPI), Wro Genet Gebre Eyesus, General Director, Bahir Dar and Libokemkem Woreda Administration, Addis Zemen.

### Initial Steps

#### 2008

Accord between Ato Helawi Yoseph, Founding President of Amhara Development Association (ADA), and NESTown Group, Fasil Giorghis and Franz Oswald, to develop the design for Amhara Model Town at Lake Tana within one year  
 HOLCIM Foundation for Sustainable Construction, Zurich, application for research fund

#### 2007

NETS FOR URBAN CAPACITY BUILDING, lecture by Franz Oswald at ecbp-Lecture Series Engineering towards Development and Change at Addis Ababa University

### Partners NESTown Group

Ethiopia: Fasil Giorghis, Zegeye Cherenet, Dejene Liramo  
 Europe: Marc Angelil, Philippe Block, Dieter Läßle, Franz Oswald, Monika Oswald, Peter Schenker, Benjamin Stähli, Roland Walthert

## Governmental and Non- Governmental Agencies

ADA	Amhara Development Association
ARARI	Amhara Regional Agricultural Research Institute
BARD	Bureau of Agriculture and Rural Development
BDU	Bahir Dar University, Department of Agriculture
BIUD/RUPI	Bureau of Industry and Urban Development / Regional Urban Planning Institute
BoEPLAU	Bureau of Environment Protection, Land Administration and Use
BoWRD	Bureau of Water Resource Development
CPA	Cooperative Promotion Agency
ORDA	Organisation for the Rehabilitation and Development of Amhara

## Support

ABZ	Allgemeine Baugenossenschaft Zurich / CH
ARGE N2	AUS Franz Oswald & sssvt_architects, Bern / CH
CRAterre	ENSAG, National Superior Architecture School, Grenoble / F
TESFA	Ilg Foundation, Zurich / CH: Dawit Tesfaye
ETHZ	- President, Professor Dr. Ralph Eichler - Professor Dr. Marc Angelil - Professor Dr. Philippe Block - World Food System Center, Executive Director, Dr. Michelle Grant
Fasil Giorghis	Lecturer EiABC / AAU, Architect, Addis Ababa
GreenEthiopia	Winterthur / CH, Kurt Pfister - President
HCU	Hamburg, Professor Dr. Dieter Laepple
HOLCIM	Foundation for Sustainable Construction, Zurich / CH
AAU	Messelle Haile, Dr., Professor, / Addis Ababa
Oswald	Monika & Franz, Bern / CH
SEC/ FCL	Professor Dr. Gerhard Schmitt; Professor Dr. Marc Angelil; Prof. em. Franz Oswald
Start-Up	Initiative, Wettingen / CH
Swiss Embassy in Addis Ababa, Ethiopia,	Dominik Langenbacher, Ambassador
UNIBE	University of Bern / CH, Prof. Dr. Hans Humi

## Publications

- 2012
- Ethiopian Model - Build it yourself in: The Presidential Newsletter no 11 ETHZ, March
  - NEST - NEW EMERGING SUSTAINABLE TOWNS, Franz Oswald, in: BUILDING ETHIOPIA, Sustainability in Architecture and Design, ed. Zegeye Cherenet & Helawi Sewenet, eiabc
  - THE BURA NESTOWN: interview with Fasil Giorghis, in: BUILDING ETHIOPIA Sustainability in Architecture & Design, ed Zegeye Cherenet & Helawi Sewenet eiabc 2011
  - Singapore ETHiopia Urban Laboratory (SEUL) Review III + IV - FCL / Module VI, SEC N.E.S.T. The Participatory City, in: POST- OIL CITY, The History of the CITY'S FUTURE, ifa/ ARCH+
  - The MAKING OF URBAN ETHIOPIA, Franz Oswald, in: Construction Ahead 2010
  - NESTown: New Ethiopian Sustainable Town - A Real Life Experiment, Franz Oswald & Peter Schenker, - ATDF JOURNAL Volume 7 / Issue 2009
  - Challenges of New Towns in Ethiopia, A personal impression, Fasil Giorghis in: Construction Ahead
  - The IDEA of a TOWN, Franz Oswald, in: Construction Ahead 2008 / 2007
  - Engineering towards Development and Change, Lecture Series, Academic Year Addis Ababa University, Ethiopia, ed. Samuel Coetzee & Bernd Multhaup, ecbp,