UNCCD

UNESCO

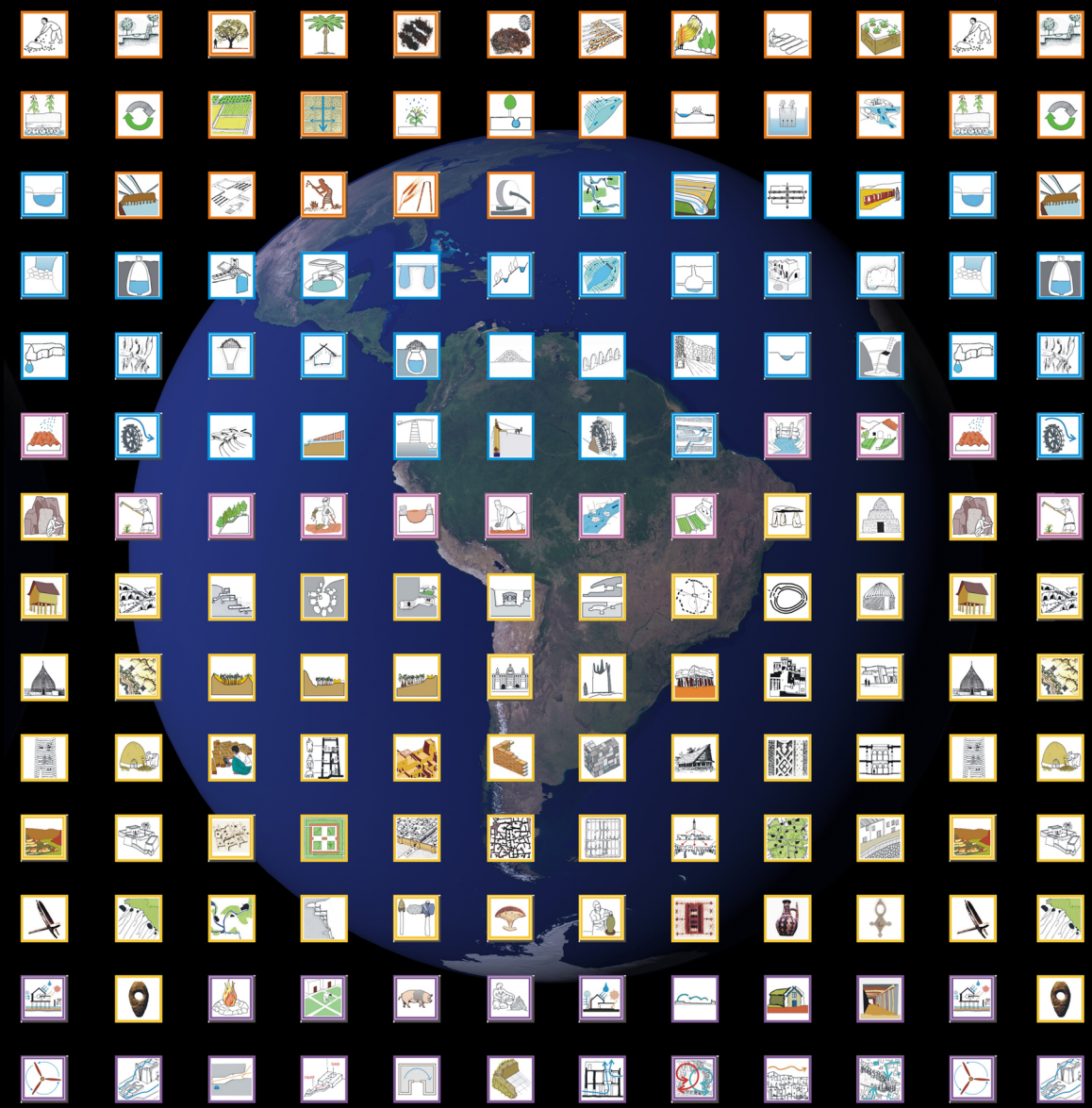
INTERNATIONAL TRADITIONAL KNOWLEDGE INSTITUTE

REGIONE TOSCANA

IPOGEA

INTERNATIONAL TRADITIONAL KNOWLEDGE INSTITUTE

WHAT IS



TKWB?

www.tkwb.org

Heritage and Knowledge
to cope with global crises

To solve the global crisis, which is not only financial but also climatic, environmental and of all ecosystems, it is necessary to elaborate a new model.

Scholars, research centres and international organizations put forward various strategies: sustainable development; the green economy; a third industrial revolution based on alternative energy sources; zero emissions; Zero Km; the slow- economy; the de-growth theory; creative industry; design for poverty; ecosystems harmonic management theories.

These are all points of interest today, what is true however is that the effort for change must involve, first of all, the Knowledge, and the answers must be fitting with specific sites and draw from the material and immaterial heritage deriving from cultural diversity and from local knowledge.

In fact, we cannot resolve the global crisis by applying the methods that caused it: technocracy, waste of resources, undifferentiated approach for all countries, top-down approach,

A new paradigm is required based on cultural heritage and traditional knowledge.

Traditional knowledge is the ancient heritage of humankind and concerns techniques, practices, spiritual notions, which passed on from generation to generation, enabling man to adapt to periodical changes and thus insuring an appropriate management of the ecosystems.

They are historical knowledge of humanity that allowed building architectures and landscapes with a universal value protected by the UNESCO in the category of cultural landscape and immaterial heritage. An appropriate use of natural resources such as water, soil and energy is made possible by using traditional knowledge that establishes the harmony of architecture with the environment, the symbioses of the techniques of organization of space with the tradition, the social habits, the spiritual values and the fusion between practical aspects and beauty.

Traditional Knowledge and Living Heritage are in danger and their disappearance would not only cause the loss of peoples' capabilities to keep and pass on the artistic and natural heritage, but also of an extraordinary sources of knowledge and cultural diversity from which appropriate innovative solutions can be derived today and in the future.

Traditional knowledge, its innovative use and Living Heritage represent the base for a sustainable technology, indispensable for elaborating a new model for the human progress.

The Regional Government of Tuscany, UNCCD and the Italian Ministry of the Environment have decided to set up in Florence an International Centre on Traditional Knowledge with the aim of listing, preserving and disseminating such knowledge and their innovative use. The objective of the international meeting is to create a forum for a discussion between experts, international organizations, foundations and enterprises for the constitution of a Centre on Traditional Knowledge and Living Heritage, as a common platform for the promotion and realization of projects, ideas and visions for a sustainable future.

Experts will have an opportunity to air their views and put forward proposals and pilot projects; Foundations will present their operative programmes; international organizations will put forward their strategies; enterprises their innovative solutions. The common platform will be made available at an international scale through a World Knowledge Data Bank: TKWB.

Declaration of Intent

Following the *"International Conference on Traditional Knowledge and Living Heritage"* held in Florence from the 10th to the 12th of July 2009, coordinated by The Maria Nobrega Foundation and in association with IPOGEA, with the financing of the Ministry of the Environment and Territory(prot. N DDS/2007/130707 del 12/12/07), of the Region of Tuscany and of the Municipality of Florence,

The Parties

Aware of the fact that the safeguard and promotion of traditional knowledge is an important strategic objective for the public and private institutions

Granted that

1. Traditional Knowledge constitutes the ancient knowledge of all mankind. It represents the foundation upon which our science and culture are based, and which has enabled mankind to identify local solutions for the construction and management of cultural ecosystems and landscapes. These have formed in situations of scarcity and lack of means and in pre industrial societies characterized by a strong social cohesion and environmental integration. For this reason they provide low energy solutions and minimal depletion of resources, they are capable of adapting to environmental variability and to answer with flexibility and multi-functionality to emergencies and catastrophes.

They can provide important contributions to the mitigation of the effects of climate change.

2. The Region of Tuscany following numerous initiatives carried out with the Ministry of Environment, UNESCO and UNCC D (*United Nations Convention for Combating Desertification*) including, in particular:

• Organization in Florence, together with UNESCO and the UNCCD, of Major Conference *"Climate Change, Desertification, Environmental conflicts and migration-An International Network of Experts on Traditional Knowledge for a common strategy"*, held on 28 and June 29, 2007 ;

• The Convention between the Region of Tuscany and the UNCCD, signed on 28 June 2007 in the framework of the 2007 Conference above;

• The Convention between the Region of Tuscany and Ipogea, signed on December 22, 2006, which identified Ipogea as the body who will implement the Centre; has decided to promote this initiative and to set up in Florence the International Headquarters of the Institute of Traditional Knowledge.

The necessary actions are undertaken along with IPOGEA Centre for Studies on Traditional Knowledge, which is the body that put initiated this programme.

They deicide

3. To establish a non-governmental, not-for-profit Associazione with legal status in Italy, to be designated: *"International Traditional Knowledge Institute"*, with an intent to encourage the exchange of knowledge and good practices in the field of culture and

traditional techniques and as an instrument for organizing studies, events, meetings, publications, databank and participation to international events in order to promote Florence as the scientific and organizing centre of such activity.

4. To undertake that the Associazione *"International Traditional Knowledge Institute"* established in Florence- a city already inserted, for its Historical Centre, in the UNESCO World Heritage sites list- as a UNESCO Category 2 Institute of Traditional Knowledge.

5. To establish as the permanent premises for such Institute, **Le Gualchiere di Remole**, a monumental building owned by the Municipality of Bagno a Ripoli (Province of Florence) and to make, beginning from this day, every possible effort for the functional restoration of this invaluable monument, one of the few examples of unaltered late medieval industrial buildings still extant in Italy.

Florence, July 2009

__for the Region of Tuscany

Councillor Quercioli for the Province of Florence

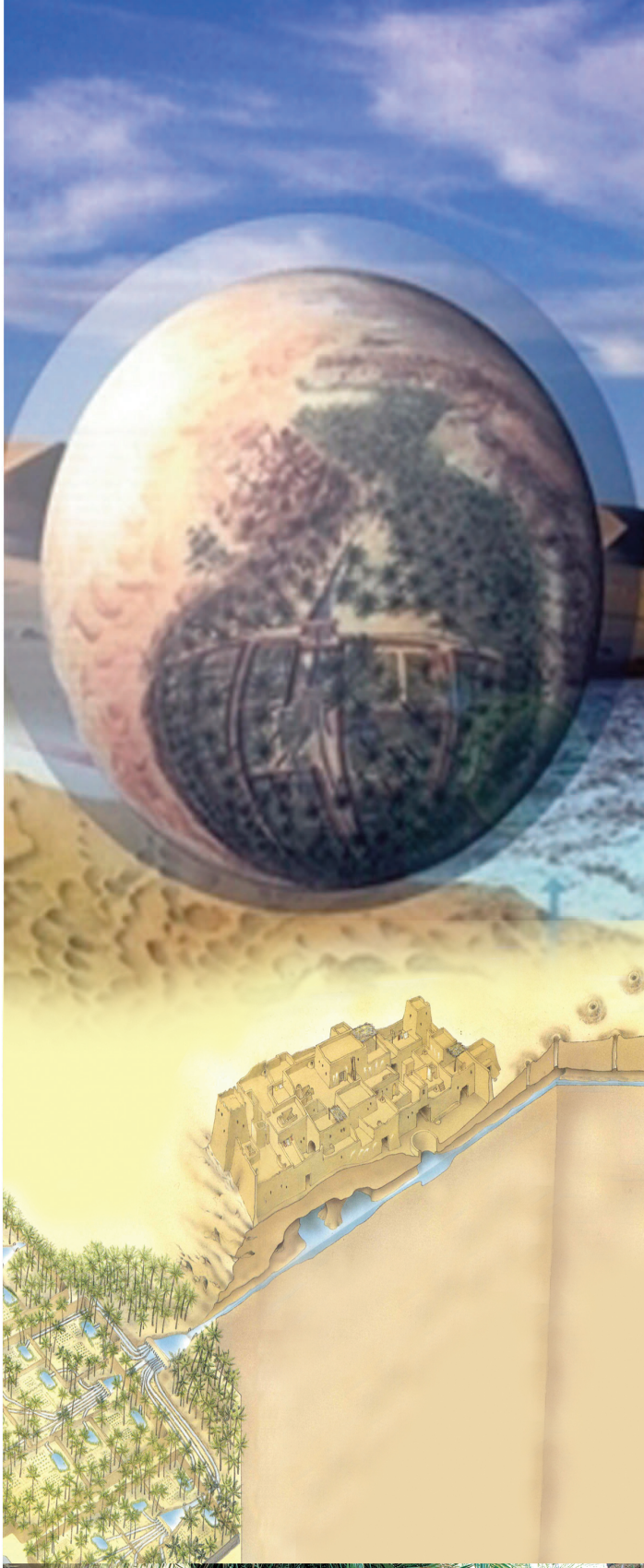
Dario Nardella for the Municipality of Florence

Luciano Bartolini for the Municipality of Bagno a Ripoli

Michael Carrington for The Maria Nobrega Foundation

Pietro Laureano for IPOGEA

Paolo del Bianco for Fondazione Romualdo Del Bianco



AIMS OF THE CENTRE

I Recognize, study and make an inventory of Traditonal Knowledge;

II Insure the protection of Traditional Knowledge and cultural heritage as living heritage;

III Share and promote the diffusion of Traditional Knowledge locally and internationally;

IV Promote the integration between Traditional Knowledge and scientific system and encourage innovative applications;

V protect the rights of local communities and indigenous peoples holders of Traditional Knowledge systems and indigenous science;

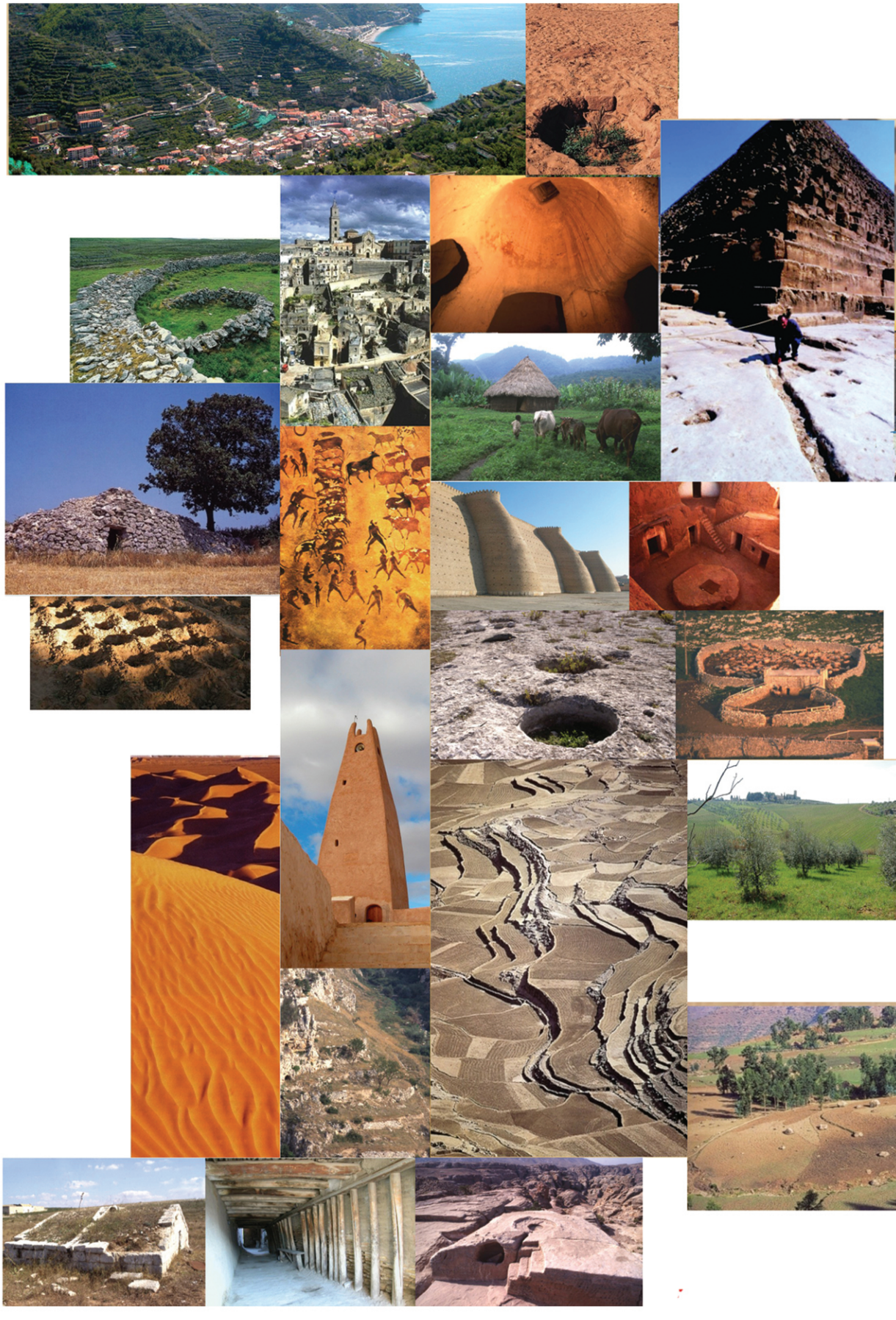
VI Promote the diffusion and the innovative use of Traditional Knowledge for the management of world cultural heritage, and for the protection of ecosystems;

VII Promote the application of Traditional Knowledge for the restoration and sustainable rehabilitiation of Cultural Heritage as living heritage through the implementations of pilot projects;

VIII Introduce the use of traditional practices for the realization of rehabilitation works, stimulating participative approach in the choice of technological infrastructures;

IX Promote protocols which adopt Traditional Knowledge in the management of parks, protected areas and UNESCO sites

X Contribute to the protection of local traditions and cultural diversity



THE TKWB, AN INVENTORY FOR THE PROTECTION AND DISSEMINATION OF TRADITIONAL KNOWLEDGE

UNESCO launched a global programme for an inventory of Traditional Knowledge assigning it to IPOGEA, Research Centre on Traditional and Local Knowledge. The project collects and records historical knowledge, promoting and certifying innovative practices based on such knowledge.

The main beneficiaries of such innovative techniques based on tradition are local companies, cooperatives, administrations of historcal towns and ecological areas who will empoly such techniques thus becoming entitled to compete for international acknowledgements of excellence for their good use of such practices and innovative solutions. Each innovative technology, proposition or experience applied will generate a spin off on an international scale, thus bringing benefits to whole regions of the planet.

The Traditional Knowledge World Bank safeguards the rights of such local population as are the traditional custodians of any particular technology or technique, by recognizing to them the intellectualproperty rights under the international copyright law.

The TKWB is a platform for sharing such knowledge by dissemination, granting full acknowledgement of the original custodians. This is conceived as a global network with a series of hubs in all relevant areas.

Using traditional Knowledge does not mean to reapply directly obsolete techniques from the past, but to understand of this type of knowledge. Traditional Knowledge enabled societies of the past to manage ecosystems in a sustainable way, and to create outstanding technological, architectural and artistic works which are universally admired. Traditional Knowledge has always been able to renew ad adapt itself, being a dynamic system, drawing from exparience since it is subjected to the test of long term experience. Traditional Knowledge goes hand in hand with environmental sustainability.

THE TKWB PROMOTES INNOVATION: TODAY'S APPROPRIATE INNOVATIONS ARE DESTINED TO BETOMORROW'S TRADITIONAL KNOWLEDGE

The TKWB promotes Traditional Knowledge as advanced innovative knowledge, as a system capable of generating new technological paradigms based on the evolutionary nature of tradition. Traditional Knowledge is endowed with the versatility and the interpretation of technological, ethical and aesthetic values. It is part of an economy where production is not based on growth but on long-term sustainability. Production and reproduction are based on a no waste principle, and energy use is based on cycles of constant renewal. The aim of societies based on Traditional Knowledge is to preserve and protect the ecosystem and the sources of energy as well as the diversity and complexity of the living world.

The project envisages a new model of development based on historical memory.

The TKWB connects the demands for appropriate techniques from sites of exceptional value, urban ecosystems and protected areas with the offers of companies operating in this sector. Sites of exceptional value become acknowledged on an international scale by adopting the protocols of usage of the appropriate techniques. Companies certified by the TKWB provide the necessary technologies.

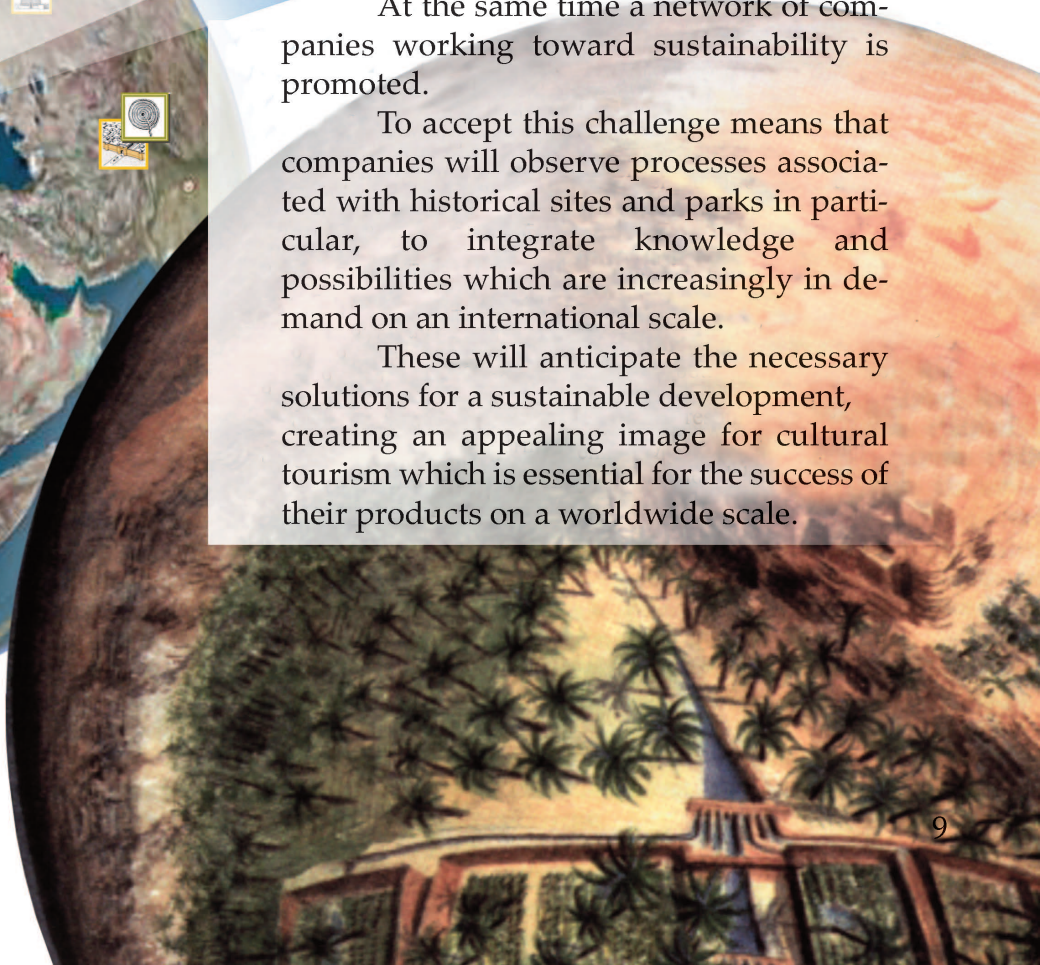
As a result, the long-term conservation of valuable sites, which will not be allowed to adopt processes, techniques, materials and unsuitable transformations, is insured.

THE TKWB OPERATES TO PROMOTE CREATIVECULTURAL INDUSTRIES AND TO PROTECT MAN-MADE ECOSYSTEMS

At the same time a network of companies working toward sustainability is promoted.

To accept this challenge means that companies will observe processes associated with historical sites and parks in particular, to integrate knowledge and possibilities which are increasingly in demand on an international scale.

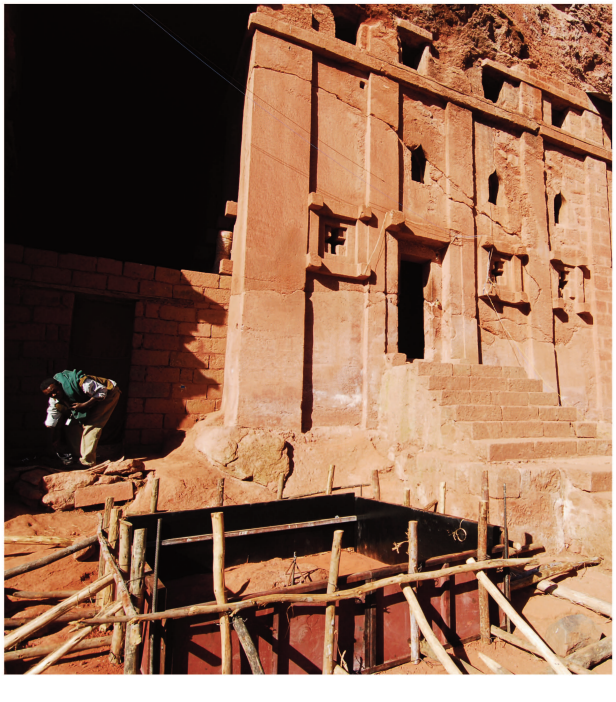
These will anticipate the necessary solutions for a sustainable development, creating an appealing image for cultural tourism which is essential for the success of their products on a worldwide scale.



SITTI

The iconographic system has been created in order to simplify the identification of techniques and their use. A classification based on single techniques is insufficient since it will not grasp the full meaning and significance of Traditional Knowledge.

Conservation works at Lalibela



TK is part of a complex system and cannot be reduced to a mere list of technical sulutions.

A classification based on icons has only the practical aim of facilitating recognition and appraisal of the techniques.

Icons have been grouped into 7 thematic categories. These have been further subdivided into *ICONS OF REFERENCE* and *SPECIFIC ICONS*. Reference icons group together more specific techniques, according to a wider functional and typological principle.

CATEGORIES

A **SILVICULTURE ANIMAL BREEDING HUNTING, HARVESTING**

B **AGRICULTURE**

C **WATER MANAGEMENT**

D **SOIL AND ENVIRONMENTAL CONSERVATION**

E **SETTLEMENT, ARCHITECTURE AND MOVABLE ARTEFACTS**

F **ENERGY AND RESOURCES MANAGEMENT**

G **SOCIAL ORGANIZATION, ART AND SPIRITUALITY**

SITTI OPERATIVE TOOLS

ICONOGRAPHIC ARCHIVES OF TRADITIONAL TECHNIQUES

-GENERAL LIST OF ICONS
-GENERAL DESCRIPTION PG EVERY SINGLE TECHNIQUE
-MAIN LOCAL MANIFESTATION OF EVERY SINGLE TECHNIQUE

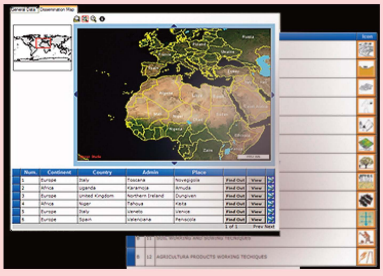
SIMBOLOGY USED FOR ASSESSING THE CURRENT STATE

GUIDELINES FOR THE STUDY OF LOCAL CONTEXTS

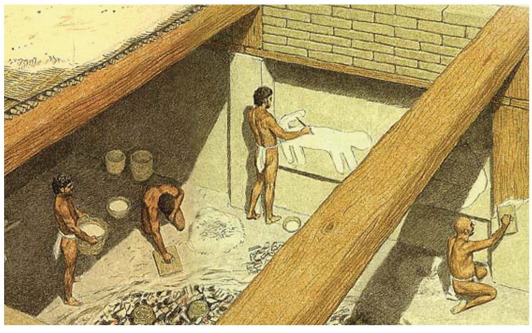
-GUIDELINES FOR AN ANALYTICAL COLLECTION OF DATA ON THE TYPOLOGY AND CONSISTENCY OF TRADITIONAL TECHNIQUES IN A GEOGRAPHICAL CONTEXT

-CONCISE CLASSIFICATION FORMS OF THE STUDY

GENERAL ARCHIVES



STUDY MANUAL OF THE LOCAL CONTEXT

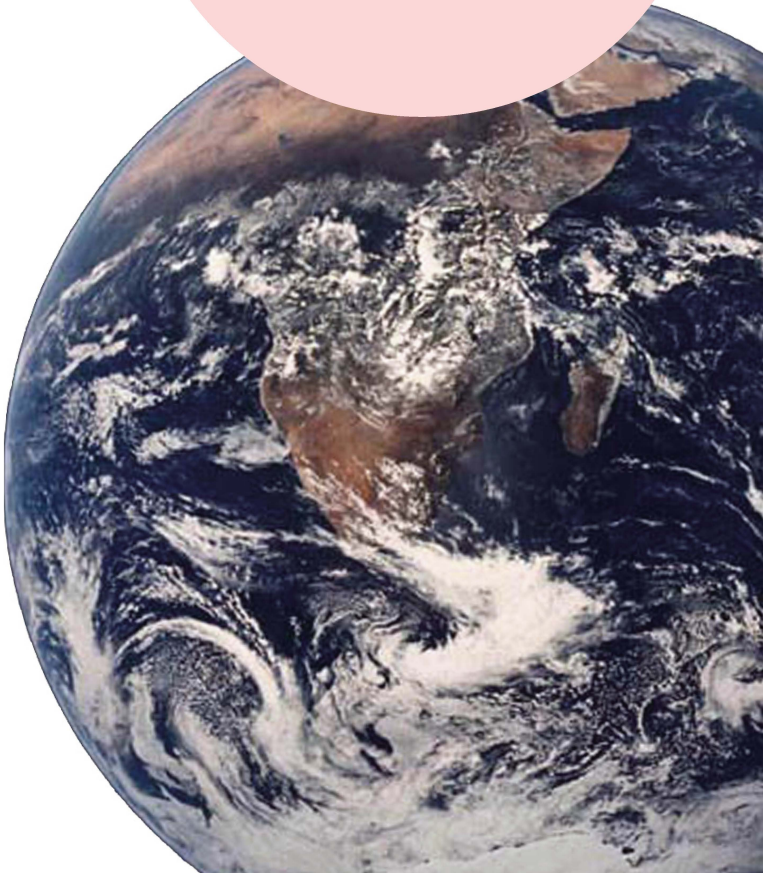


ARCHIVES OF THE INNOVATIVE TECHNIQUES

-GENERAL LIST OF SUCCESSFULLY APPLIED TECHNIQUES
(making direct reference to the icons for traditional techniques)

-DESCRIPTION OF LOCALLY APPLIED TECHNIQUES

SYMBOLOGY FOR ASSESSING OUTPUTS



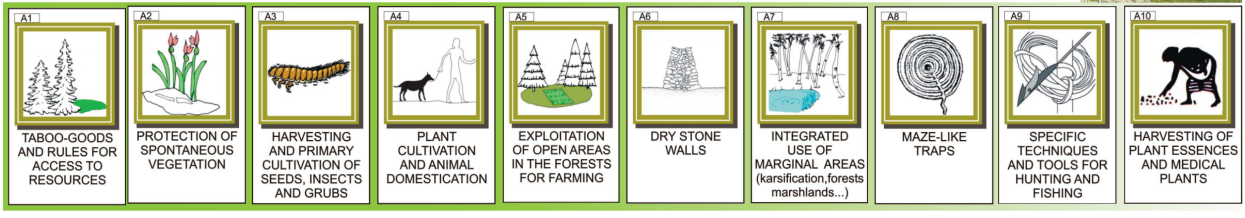
GENERAL LIST OF ICONS

CATEGORY

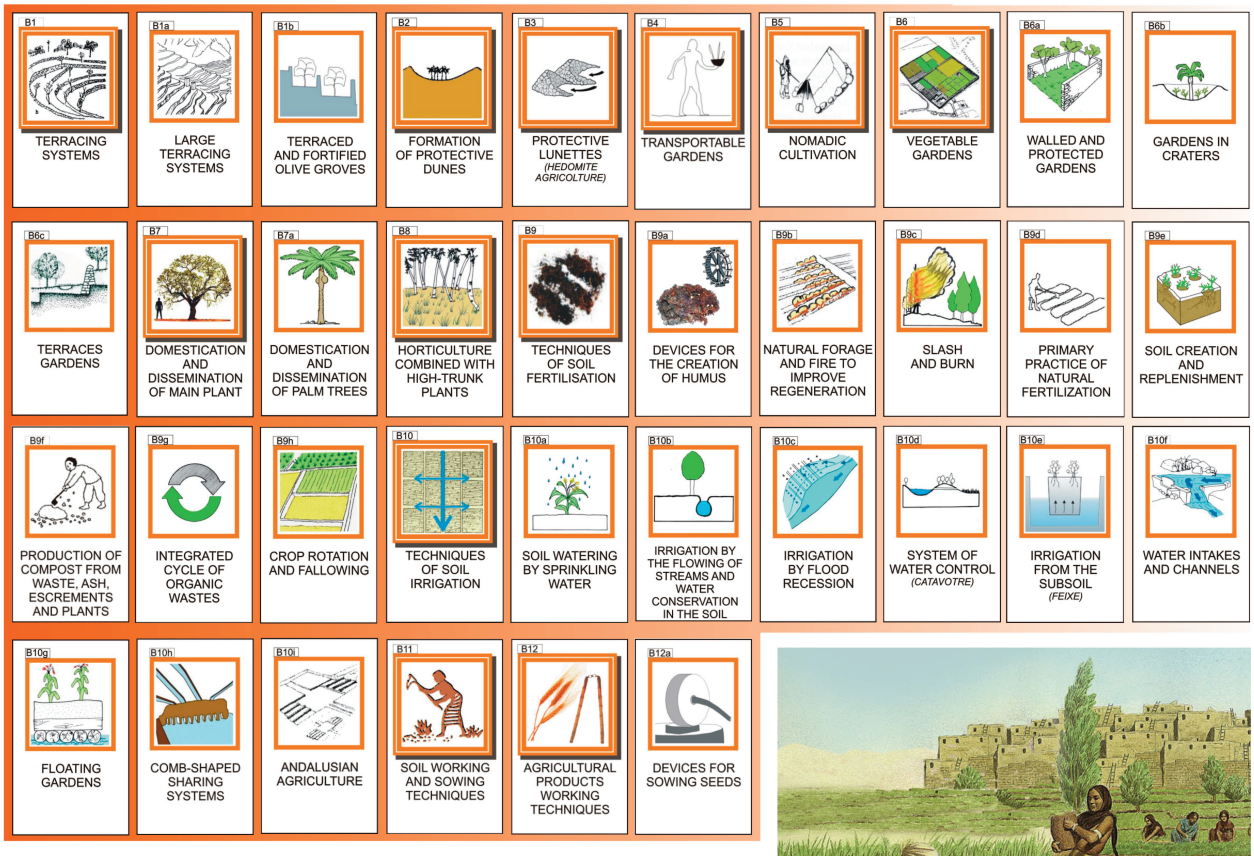
ICONS OF REFERENCE

SPECIFIC ICONS

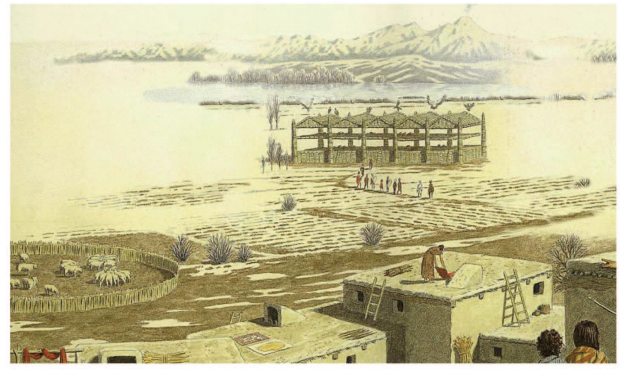
A SILVICULTURE, BREEDING, HUNTING AND HARVESTING



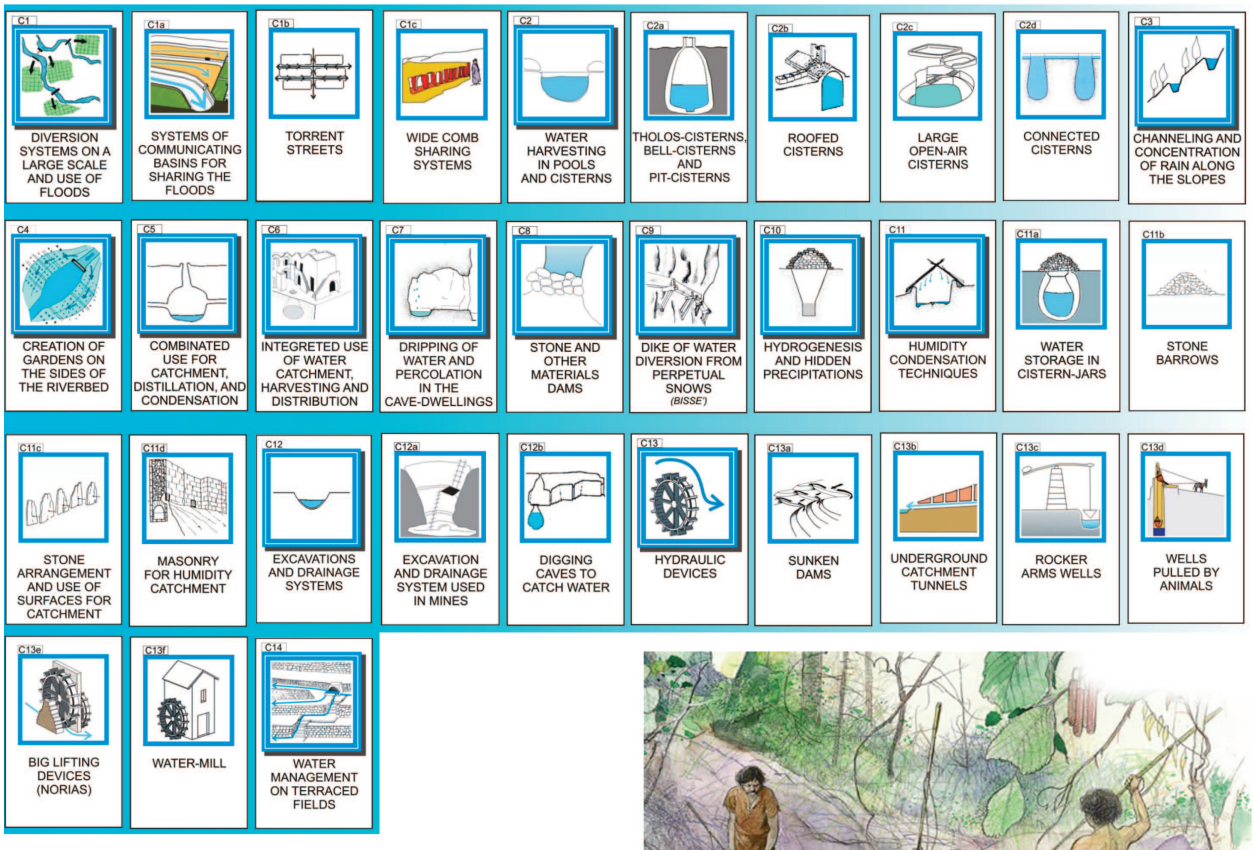
B AGRICULTURE

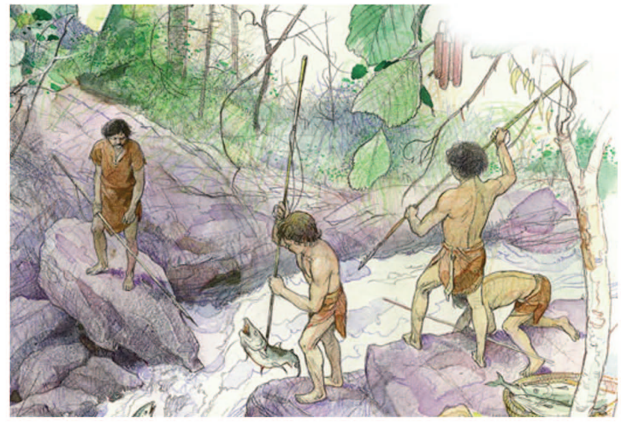


GENERAL LIST OF ICONS 1

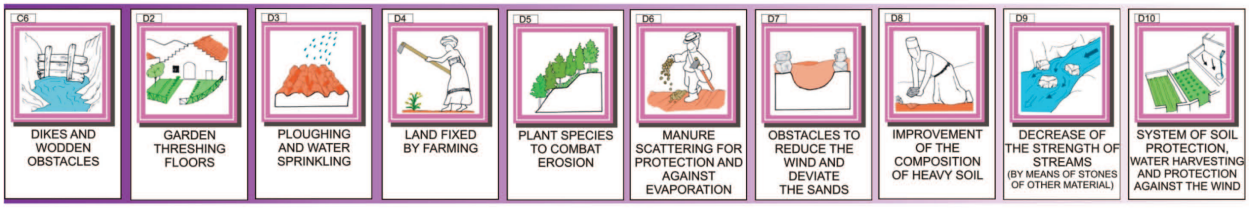


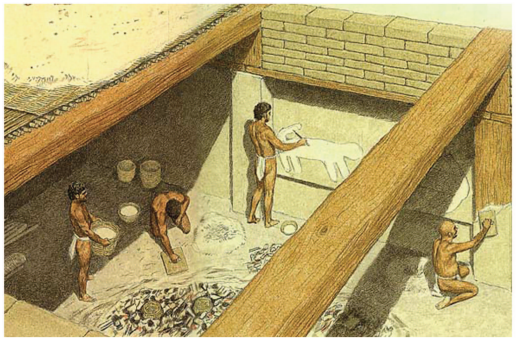
C WATER MANAGEMENT

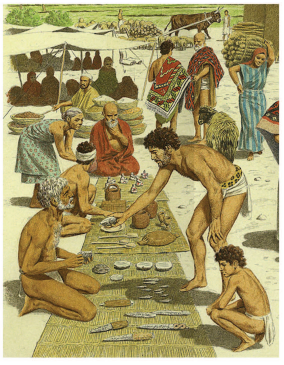




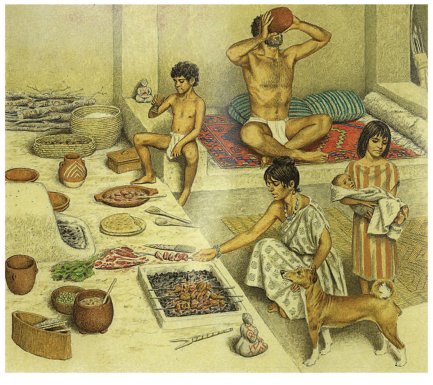
D SOIL AND ENVIRONMENTAL PROTECTION





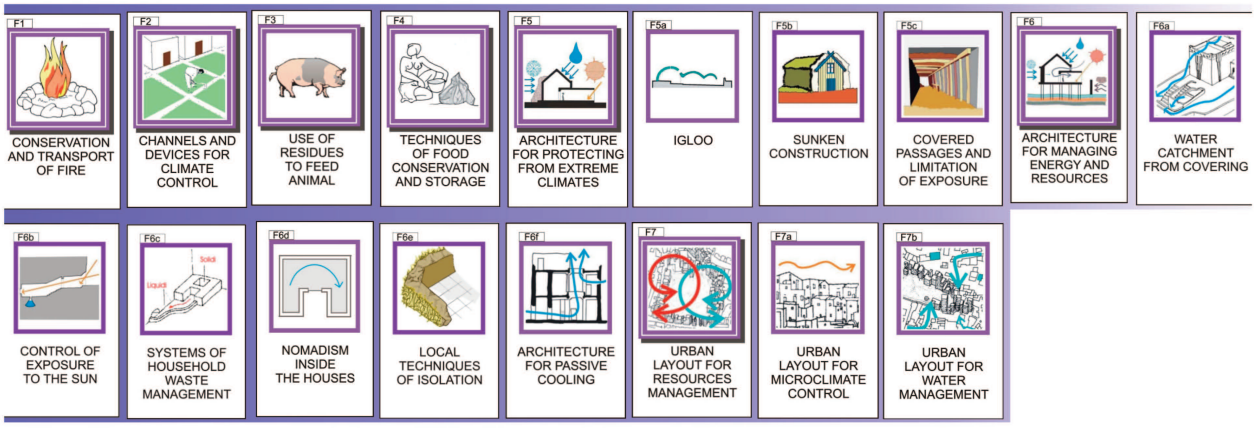


E SETTLEMENT, ARCHITECTURE AND MOVABLE ARTEFACTS



GENERAL LIST OF ICONS 2

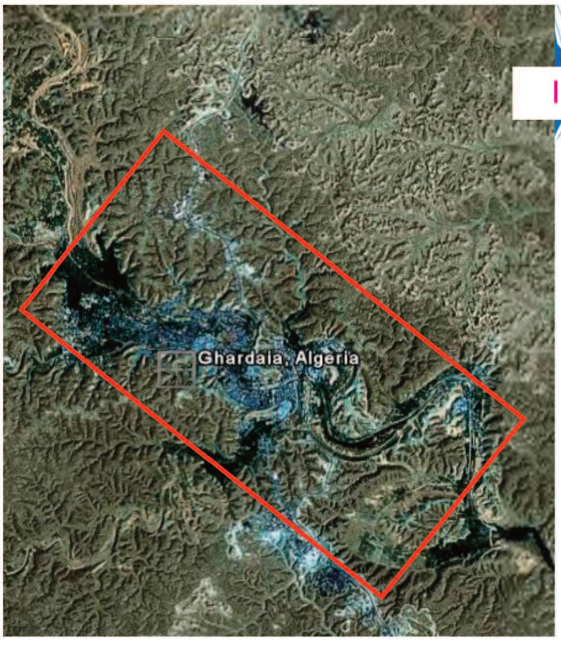
F ENERGY AND RESOURCES MANAGEMENT

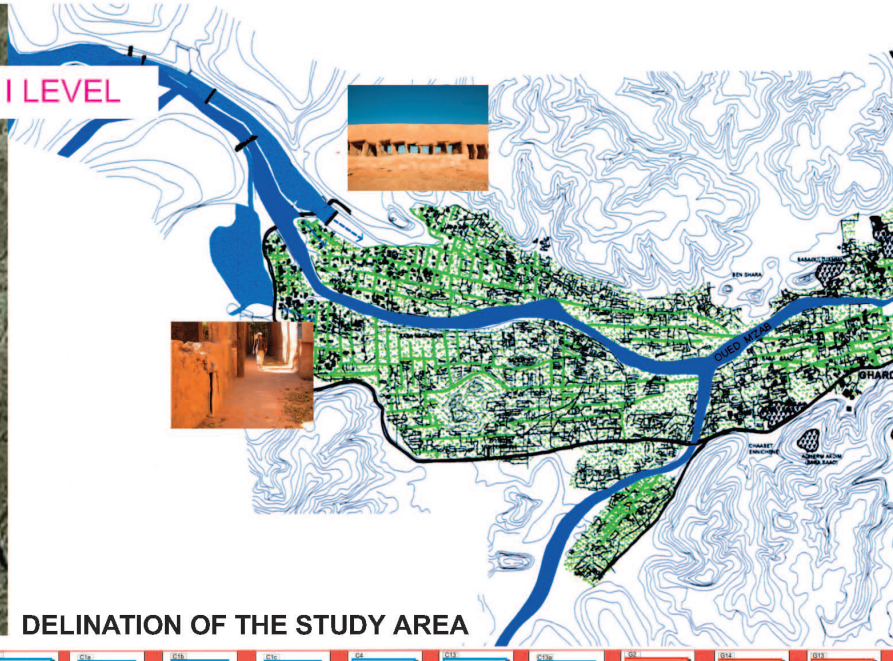


G SOCIAL ORGANIZATION, ART AND SPIRITUALITY

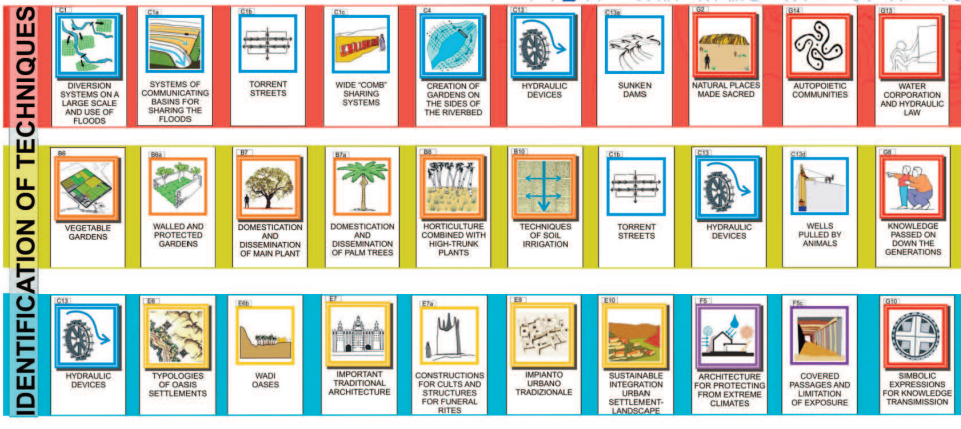
STUDY OF SPECIFIC AREAS USING THE ICONOGRAPHIC SYSTEM

EXAMPLES OF CASE-STUDIES CARRIED OUT: WADI MIZAB (ALGERIA)





DELINATION OF THE STUDY AREA



SYMBOLOGY USED FOR ASSESSING THE CURRENT STATE


UNALTERED EFFICIENT


PROTECTED WORKING


PROTECTED AND MODIFIED


ALTERED

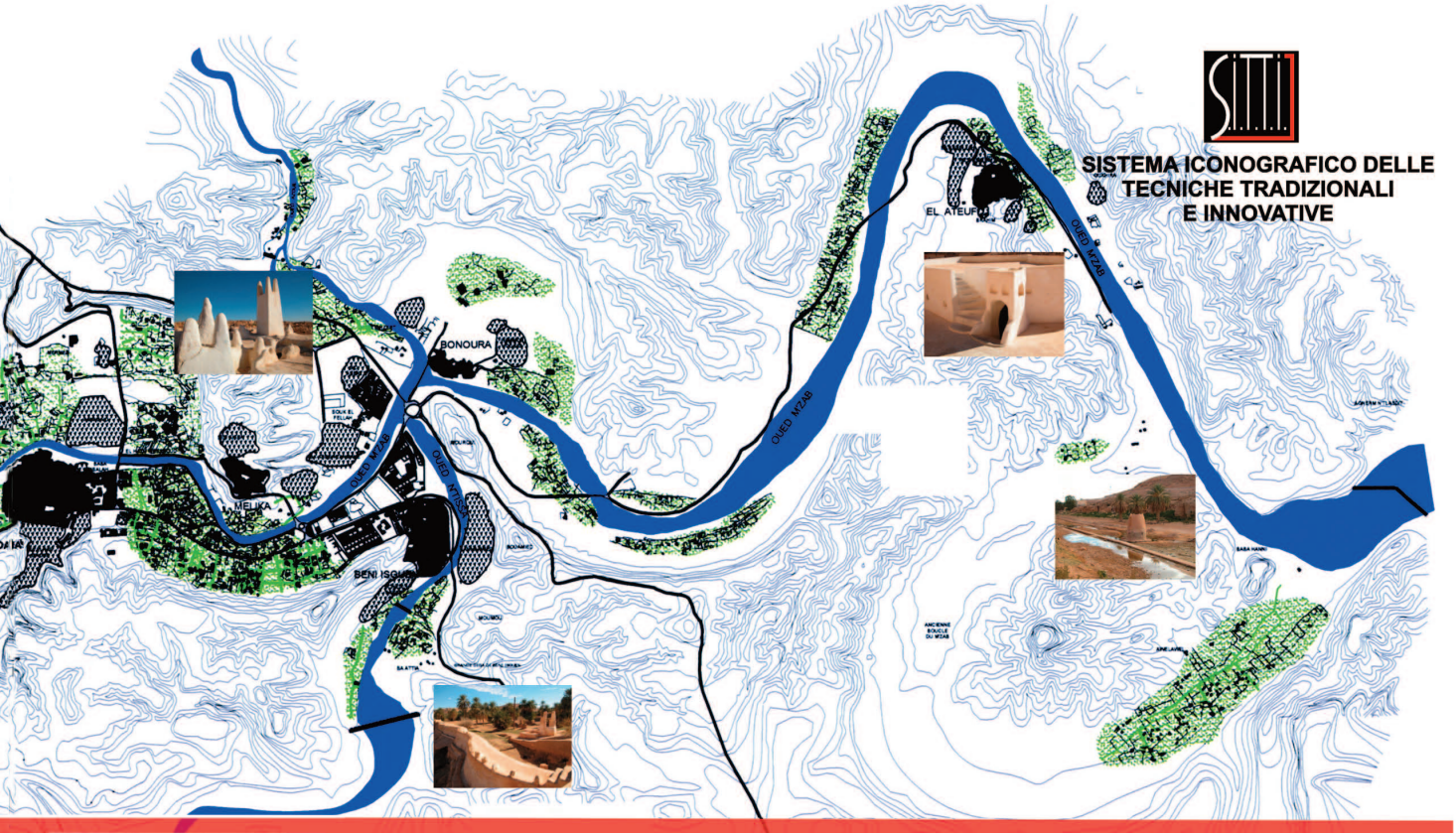

AT HIGH RISK OF ABANDON-MENT OR DISEPPEARANCE


ABANDONED OR REPLACED

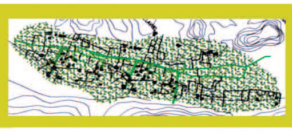

DEAD

NOTIFICATION OF EXISTING TECHNIQUES

SISTEMA ICONOGRAFICO DELLE TECNICHE TRADIZIONALI E INNOVATIVE

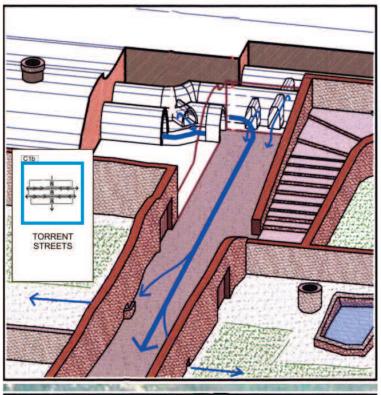


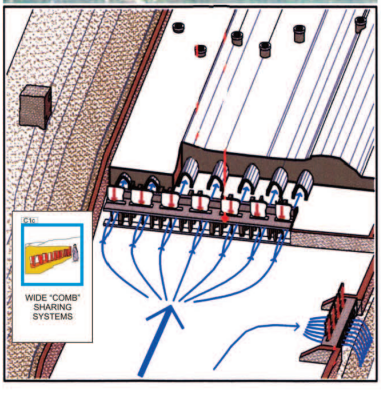
NATURAL CONTEXT — **WADI**

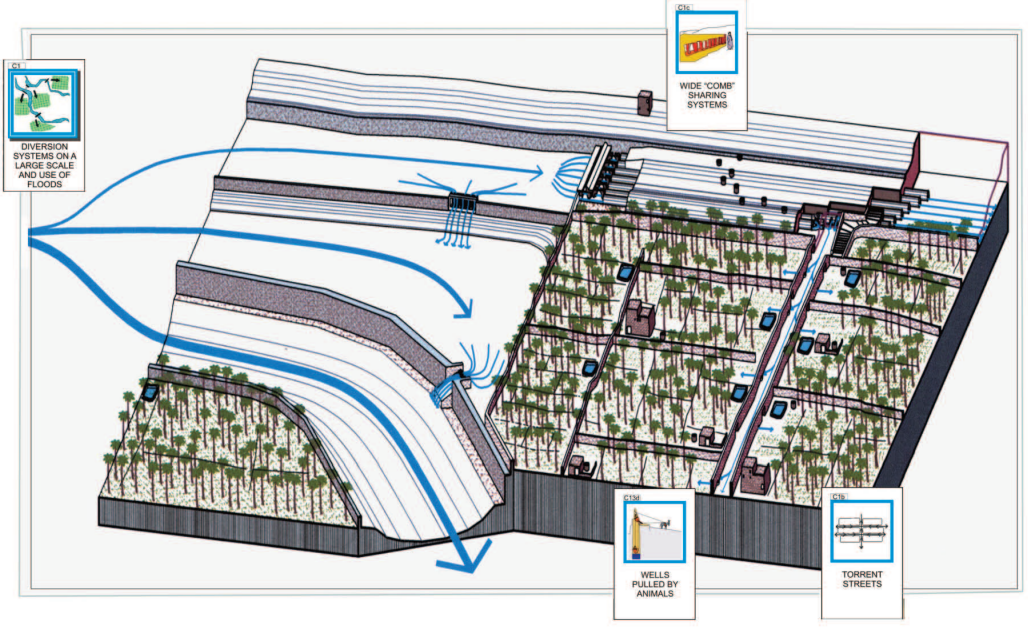


RURAL SETTLEMENT — **PALM-GROVES**

URBAN SETTLEMENT — ***PENTAPOLIS***





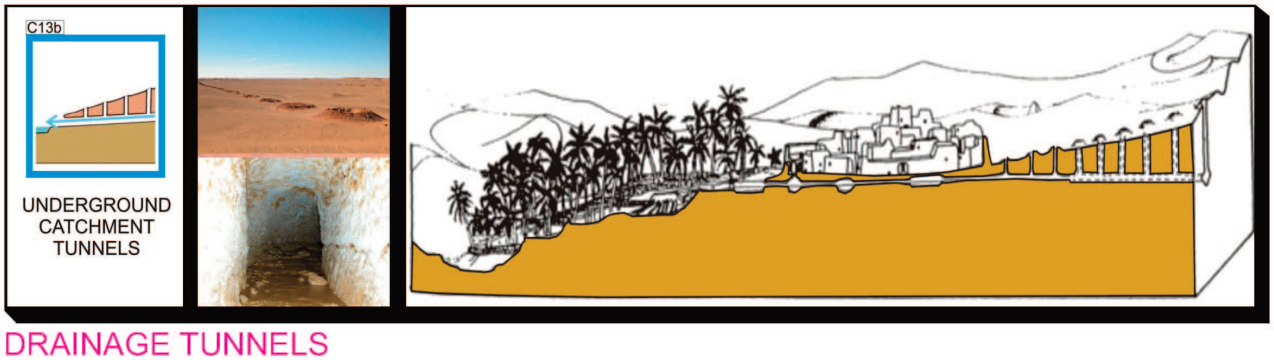


INNOVATIVE USE OF TK AND APPROPRIATE NEW SOLUTIONS

Companies proposing the innovative use of traditional techniques, or creating new solutions fitting the logic of traditional techniques, are selected. ENEA, National Research Council (CNR) in Pisa and in Florence, the universities and the research centres organized in a world network, have joined in this project. The Municipality and the Provincial administration of Florence and of the Region of Tuscany are candidates for housing a centre of excellence which will be the point of reference for the 800 UNESCO sites existing all over the world. *FederParchi* and *LegAmbiente* have launched an initiative involving a network of 751 protected areas spread over 3 million hectares of territory. This initiative will culminate with an exhibition of Traditional Techniques and their Innovative use.

During the first phase, the application of SITTI and the experts system enabled to notify each single technique and to examine specific local and integrated ecosystems of technical knowledge.

After having assessed the current state and the possible priorities of conservation and recovery, the proper innovative techniques for each single case-study are selected and certified, while destructive and inappropriate techniques are removed.



DRAINAGE TUNNELS

In the case of drainage tunnels, research carried out within the framework of the Foggara European Project, demonstrated that the use of local materials and the retention of the aesthetical and monumental qualities of traditional tunnels, help to safeguard rational water harvesting functions.

The project proved that:

The rehabilitation of foggaras by using concrete and heavy technology is inappropriate and highly inefficient.

Innovative traditional techniques, created on purpose in order to enable maintenance with light tools available locally, safeguard both aesthetic and functional qualities.

In SITTI, to the archives of Traditional Techniques, correspond archives of Innovative Techniques. The latter are exactly registered in correspondence with the icons of the Traditional Techniques, i.e. the functional or typological principles which are at the roots of such practices.

The functional features, the main technical-economic details and the applications already carried out in the territory and their results are registered in the forms concerning Innovative Techniques. A scientific committee will undertake the assessment of such technologies which possess the necessary requirements for being inserted in the database. This will insure a safe and constantly updated support for future work for the companies involved.