

Title

***On the Socio-Ethnic, Sustainable Development of the Desert Areas
of the Afro-Euro-Asian Macro-Continent, Inhabited by 45 States***

Presentation of the strategic study for the World Summit and Expo in Abu Dhabi, 13. -15. January, 2009.

Author:

p. Gianfranco Berbenni (Roma), www.ingentibus.org

gberbenni@ingentibus.org

e-fax (0039) 06 233206467

Translation in English: **Dr. Gianfranco Colognato and Prof. Karamjit Gill**



Planet Earth map elaborated by NASA (JPL). The desert yellow areas are very wide in the Afro-euro-Asian macro-continent. Its subsoil is the richest in terms of oil fields and sometimes of fossil water.

Abstract

15.000 years ago, began the formation of a very wide desert area on the Earth surface, particularly in the North, ranging from the Atlantic coast of Sahara to the Chinese Gobi desert. The city of Abu Dhabi, the host of the World Summit and Expo, lies in the middle of this geo-strategic area. It is thus also confronted with the question of a long term development of a territory rich in oil resources but of a recognized difficult human habitability. The "InGentibus Foundation" invites the World Summit to take concrete actions to give a long term positive future to the populations and cultures which inhabits this part of our Planet Earth, represented by 45 nation states and five linguistic families. Referring to the Foundation project, its section 4a is very important; it is dedicated to operational and executive projects, and proposes to stimulate the sharing of the best part of the existing social energies. We propose that one way forward is to invest in concrete applicable high technologies projects.

0. Introduction

0.1. Mission di *InGentibus Charitable Foundation e.V.*

Since 2004 our Foundation, rooted in the multicultural and multi-confessional optics, is inspired by the Franciscan values of austerity and poverty (lived by St. Francis + 1226). It aims to promote training initiatives and operative interventions in favor of the disadvantaged, marginal areas, in favor of populations and cultures forced to confront themselves with environmental and social emergencies of nature.

The World Summit, "Future Capitals", in Abu Dhabi, offers an opportunity to analyze a planetary macro-area exposed to the hardship of the desert habitat. It also offers a privileged occasion to discuss the thematic of the high socio-political impact arising from desertification, poverty, and prevention of environmental emergencies.

Option in favor of the most problematic human habitat: the social challenge of high technologies

InGentibus is more and more convinced that the control of the emergencies and the guarantee of a sustainable and socially valid development is deeply linked to the considered applications of the best high technologies offered by the modern science to the national and international Communities. Specifically, in addition to Information and Communication Technologies, we are oriented to favor research and application in the Nano sciences and Micro Nano-technology (see the European funded project *Nano-Hand*). Since they are easily transportable, their use in territories which are geographically difficult and climatically engaging could also be better manageable by individuals, communities and institutions.

The InGentibus takes a long term view of socio-economic development and is committed to engage actors, at every level, from the affected territories, cultures, ethnic groups in vital and systemic cycles. We believe that short term and segmented interventions, which are unable to share the responsibility to the development program, and work on a long-term horizon (50 and 80 years), should be considered unworkable and thus unacceptable.

To achieve the long-term goals of this development over the space of the decades, the scientific analysis and the applicable operation should accept and engage multi-faceted actors and resources during the various phases of a sustainable and effective program.

Austerity and velocity (well pondered) in the processes of application for the development

To gain the maximum benefits from financial and human resources, it requires commitment and professional responsibility on the part of all those who truly believe in working towards an authentic, global, socio-ethnic development. For this it is necessary and undelayable to ask for honesty and speedy action to all those who will be engaged in the protection of the environment and the habitat, as well as to the socially sustainable industrial development (macro and micro).

The arguments present here provide a synthetic of the new perspectives and analysis of the desert macro-area selected by us. These relate to resources and obstacles typical of the area; elements which facilitate or obstruct the specific development; and concrete proposals of planning and applicative work.

The wealth and the complexity of populations and ethnic groups involved in the selected area are shown in the next frame of 45 enlisted States inside the Afro-euro-asian macro-continent.

<p><u>Africa</u> 01. Algeria Cape Verde Central African Republic Chad 05. Djibouti Egypt Eritrea Ethiopia Libya 10. Mali Mauritania* Morocco Niger Somalia 15. Sudan Tunisia</p>	<p><u>EurAsia</u> 17. Armenia Georgia Malta* 20. Afghanistan Azerbaijan Bahrain China Cyprus* 25. India* Iran Iraq Israel Jordan 30. Kazakhstan Kuwait Kyrgyzstan</p>	<p>Lebanon* Mongolia 35. Oman Pakistan Qatar Sa'udi Arabia Syria 40. Tajikistan Turkey Turkmenistan United Arab Emirates (Abu Dhabi, 'Ajman, Al-Fujayrah, Dubai, Ra's al-Khaymah, Sharjah, Umm al-Qaywayn) Uzbekistan 45. Yemen</p>
---	--	---

Visit website www.nationsencyclopedia.com. The asterisks point the presence of geo-political problems or analytic opportunities: e.g. the Chinese and India desert areas are incomplete; the position of the Mediterranean Isles of Malta and Cyprus allow applications for a complete habitat, territorially manageable. After all, in some areas as Mauritania there are war conflicts directed to the independence of part of the territory

0.1. Thematic route

The arguments we are facing in the next pages, in a synthetic and demanding style, are concerning:

- (1) new perspectives in the analysis of the desert macro-area selected by us;
- (2) resources and obstacles typical of the area;
- (3) elements which facilitate or obstruct the specific development; and last
- (4) concrete proposals of planning and applicative work.

1. Geology, Glottology, Genetics. New perspectives for the analysis of global territory

We believe that the time has come to move beyond superficially repeating the old arguments. For this reason, we propose analytical choices, simple and application-oriented. These maintaining a sort of continuity with the elaboration of choices at the global level (e.g. *Human Global Habitat and Cultures* [in the editing phase]) not only at geopolitical level. The Abu Dhabi World Summit provides the right forum for action in an area of highest structural interest covering problems of an harmonic social future development of desert area of real difficult management.

The following three observations point to macro-area: geological, glossological and genetics.

1.1. Geology. Tectonic platforms and administration of environmental emergencies

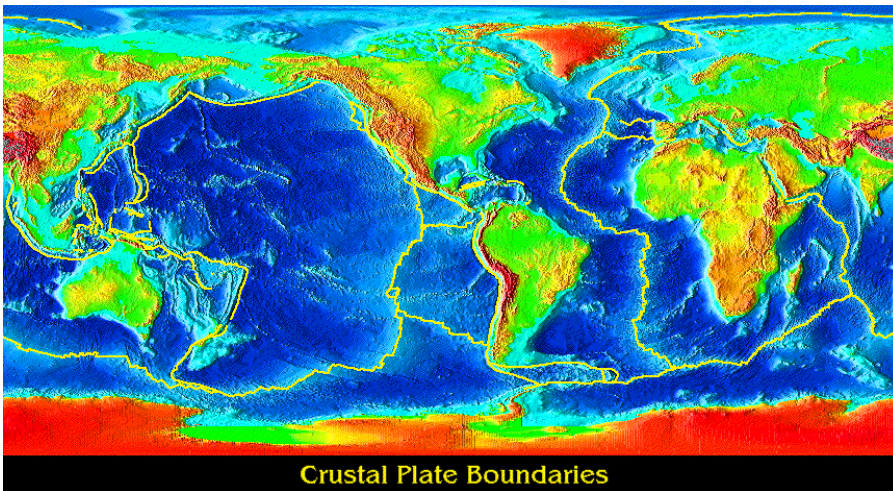
To offer a future medium and long term development to the Afro-euro-asian macrocontinent it is necessary to underline the dynamic structure of the specific, big desert areas:

- Afro-Sahara area;
- Caucasian-Arab area;
- Central Iranic-Asian area;

- Mongolian-Chinese area.

Two issues seem to be the fulcrum for a reflection at the Abu Dhabi World Summit:

- 1) What kind of development and safeguard projects would be possible in a desert habitat inhabited by Gulf Arab States, considering the presence of enormous oil fields which can provide resources for the experimentation and diffusion of long term factual solutions;
- 2) What kind of possible interventions could be activated for the wide Sahara platform, poorer in term of income, potentially rich in different resources, as well as the hydrocarbons themselves.



Tectonic platforms map with collision zones underlined. The most important movement area is just situated in the Atlantic Ocean. Some scientists foresee

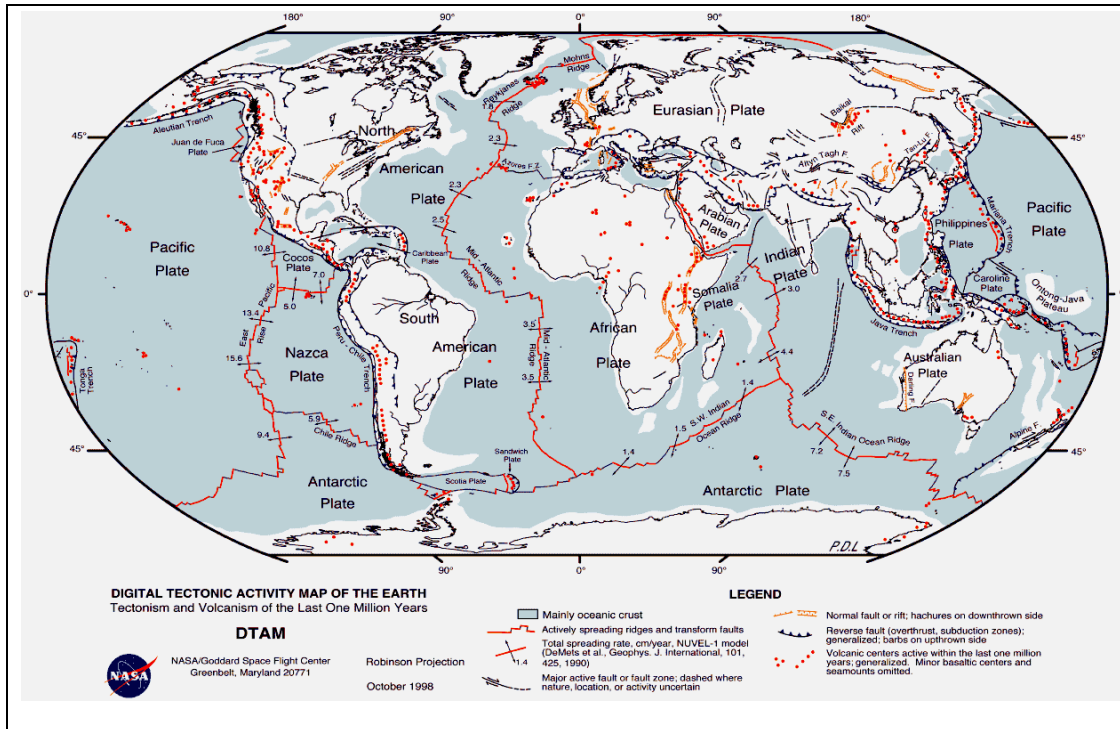
Geological Study

The most important tectonic movement area is just situated in the Atlantic Ocean. Some scientists foresee in millions of years an expansion so big that will overcome the measures of today Pacific Ocean. The African platform has seen in the last 15000 years of paleo-history the change of Sahara desert: from a green and fertile land to an area almost uninhabited, although rich in resources.

The geological study constitutes the starting and the basic nucleus to understand the inhabited territory. It not only defines the location of the energetic and mining resources of a country, but also allows a utilization evaluation in favor of the population, in respect of the local traditions and taking into account the strong impact which the technological innovation always has on human masses.

Secondly, the geological analysis allows stable consistency to the building settlements of different kind, promoting their construction or restoration, following anti-seismic rules for the specific tectonic platform. A safe residence, although light and noble as a simple two bedrooms flat, replies to one of the first primary needs of each person, familiar or parental nucleus.

At a third level, the geological analysis could obtain the most in terms of existing water resources, made by current or fossil waters as in the case of the Libian Sahara subsoil, and could act as the right frame for projects concerning plants able to convert sea water into drinking water.



Crosta terrestre, stato attuale delle placche tettoniche, sovrapposto alla situazione di un milione di anni fa. Sino al paleolitico inferiore era transitabile via terra il passaggio a nord tra macro-continente afro-euroasiatico e macro-continente americano. In tale contesto, di lunga durata, va posto il problema o emergenze dell'innalzamento di livello delle acque degli oceani.

At a fourth level, geology could be the principal science for the preservation of environmental patrimony, offering many new professions to the citizen of various Countries.

At a psychological level, the acquisition of some minimal information of geological nature could avoid a possible disaster, especially when the individual is confronted with catastrophic positions of geological environmental factor. Starting from millions of years ago, the analysis of the present and future times is necessarily more stable and acceptable, capable of provisional monitoring without underestimating the risks of sudden and unexpected emergencies, which could become sources of new professions in the national organization.



Physical map of the Planet Earth, with seas and oceans without water. Everyone may note the marine faults (or oceanic ridges), with severe volcanic activity, along which it is present the "drift" or better the approach of the continental platforms (ed. Garzanti). In the middle there is the afro-euro-asian macro-continent. The correlation between land and sea is fundamental in the future planning in favor of a sustainable habitat.

1.2. Glottologia. Linguistic families and different ways of life and production

A second structural element, capable of making a real contribution to the development of this Planet Earth macro-area, is to be found in the linguistic or glottologic factor. Without entering deeply into the matter, it is enough to focus our attention on the centrality of the ethnic-cultural vision well expressed through the linguistic forms (also through music) and the influence these have on the way of life and on the production processes of a country.

Precisely, the linguistic families present on a territory made by deserts and steppe are the following:

- Afro-Asian family with Semitic, Cushitic, Berber languages, used by 250 millions of people, occupies a large size of the Sahara area and the Arab-Syrian peninsula;
- Sahara-Nilotic family present in the Sahara desert and in the Great Lakes area (out from the area selected by us) and formed by 10 millions of people;
- Indo-European family, taken into consideration by our analysis, is composed by about 700 millions of people which speak Hindi, Bengalese, Farsi and Armenian;
- Altaic family composed, in the desert area, by 50 millions of people which speak Turkish and Mongolian.

Considering the variable factors which could certainly weigh on the applicative phase of socio-economic and socio-political interventions, the Abu Dhabi World Summit could focus the international attention on the consistent usefulness coming from the anthropological and social studies:

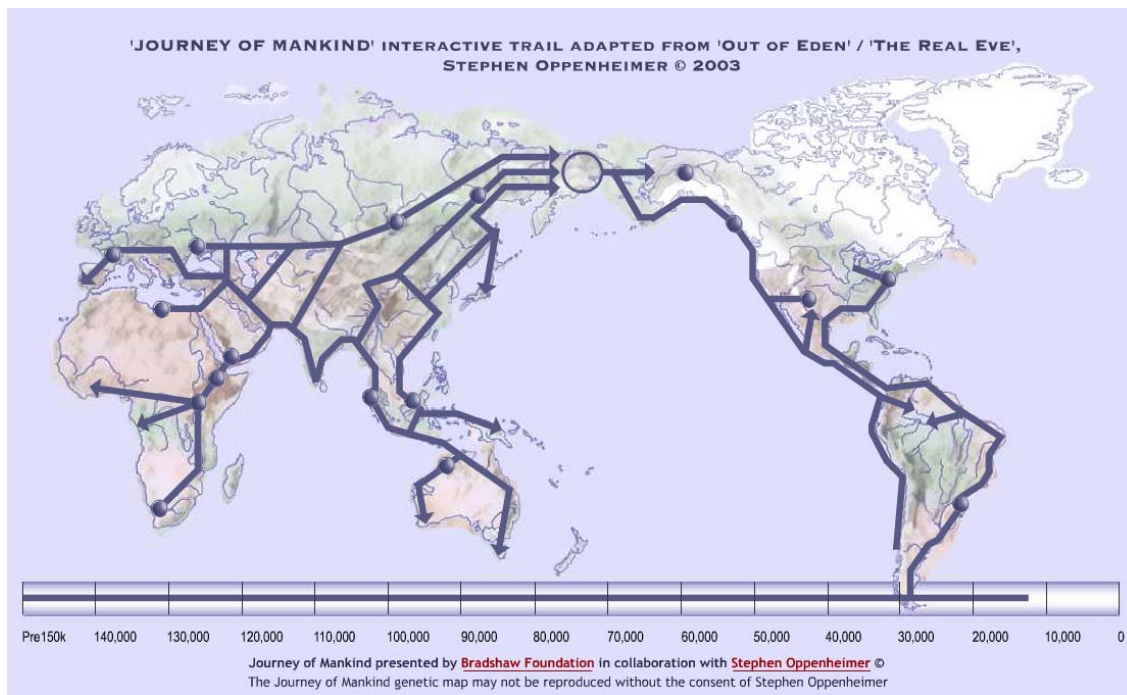
- Semitic language, main referee for populations and States present in the Arab peninsula, in the Mesopotamic hydrographic basin (area between the Euphrates and Tigris) and the Siro-Lebanese and Israelo-Palestinian coastal band;
- Berber and Turkish languages, communication elements which allow an attentive study of nomad cultures present in the steppe areas (Turkish) and desert areas (Berber);
- Farsi language (Iranian area) spoken in buffer zones between East and West with different types of nomadic and sedentary habitats.

Entering in an empathic relation with a population means to overcome many of the cultural obstacles which could seriously be detrimental for the positive results of various interventions on the territory in favor of the society. The cultural and linguistic difference constitutes at most a slowing down factor for projects oriented to the integral development of an area.

1.3. Genetics. Unity and differentiations on Planet Earth and in macro-continent

The application of genetic science to global problems could have wide socio-anthropologic consequences, as well as, the application of genetic mapping of the Earth population developed over the last two decades.

Science has confirmed with strong trustworthiness the fact that the whole humanity descends from a single stock with origins are in Central Africa, at the top of an evolution which in two recent stops - 150,000.00 and 40,000.00 years B.C. - has colonised the various continents.



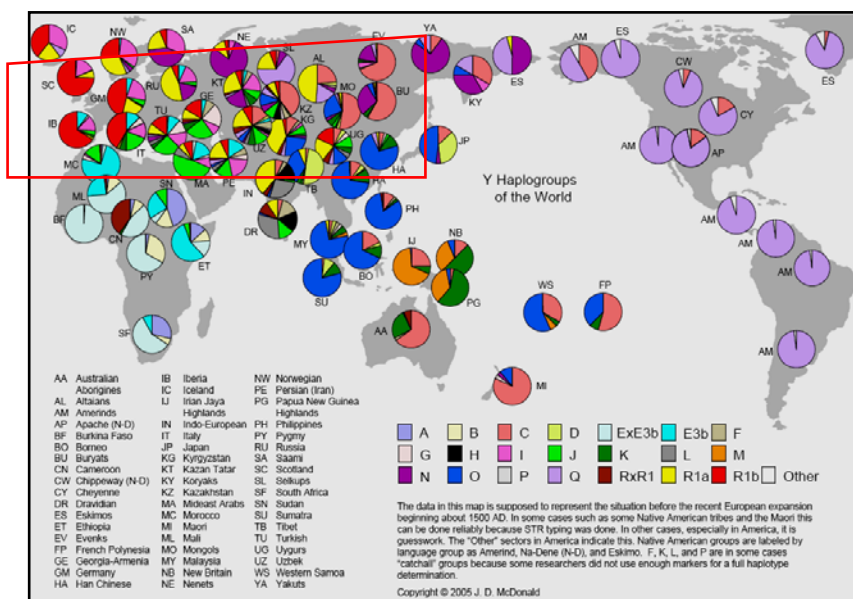
Genetic map of the **second** series of human migrations till the eve of neolithic modifications.

In a first phase the migrant routes go along the coasts of various continents.

It is to be noted in the map the width of growth of glaciers, immediately after the last, although reduced in width, glacier (Wuermian)

With a specific reference to the desert macro-area which we are examining, the emergent main focal points are:

- 1) To strengthen the perception to be part of one mankind, sharing with all ethnic groups and all civilizations one origin, overcoming extreme and conflictual ethnocentric tendencies (racism) favoring the disposability to see all the people and existing ethnic groups in a fraternal and parental relation.
- 2) Examining the dynamics of the two major steps of the itinerary made by the first human nucleus, we learn the value of the water ways (the Nile Valley) and the sea coast ways (from Horn of Africa coasts till Patagonia). In fact the water itineraries don't need much human energy and instrumental equipment.



Global mapping of the chromosome Y aplogroups genetic characters.

Our genetic origins have to be centered in the center of the African continent.

It is to be noted that some primitive characters are particularly present in the macro-area we are examining now.

The genetic map could be clearly identified as a cultural area project: the identification of the genetic characters which refer to the plural origins, the identities of the single ethnic groups, is the base for a better interpretation of the popular traditions and, starting from these, for a scientific elaboration of the anthropologies below (ethno-demo-anthropologies). These enquiries offer various beneficial effects and, among these, also to understand specific tendencies in the kind of work and social cohabitation, facilitating relation and collaboration processes.

An understanding of the anthropological resources of human communities will enable us to look into new scientific worlds as well as the intercultural psychotherapy.

2. Benefits and obstacles for human development in desert areas

The observations above help us to understand that the development of the great civilizations and the subsequent taming of the rural territory and the urbanization of privileged zones of the environment has been favored by the presence of rivers, as drinkable water or means of slime transportation useful for cultivation and harvest. We are speaking of the so called “fertile crescent” which in the Northern hemisphere of the Planet Earth goes from the lower Nile Valley to the two big rivers system of the ancient Mesopotamia, Tigris and Euphrates.

The World Summit in Abu Dhabi provides a forum to raise awareness and consciousness of the “cradle of the modern human civilization”. We should keep in our minds that the second great cultural pattern of this kind is also found in China, with very important developments, following always the customary modalities of installation (near rivers) and of itineraries made easier in trade and migrations.

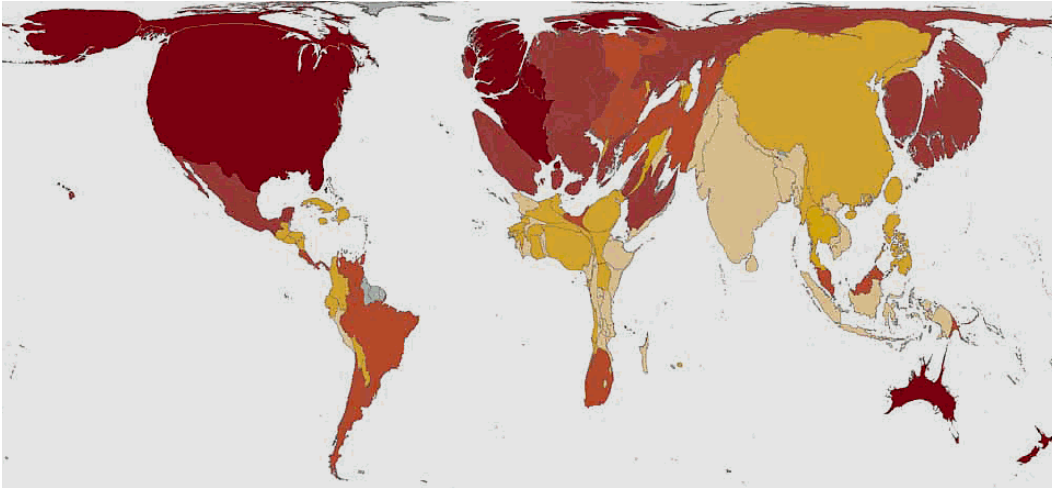
Our great cultural and “industrial” teachers come from the classic realizations visible near to the desert areas, as in the Nile Valley and in the Jordan Valley as in the Tigris and Euphrates Valley. Cohabiting with the desert is a practice that has nowadays ten thousand years of experience. It is not rare to note the admiration which experts of technology and modern engineers express in front of the grandiosity of some ancient buildings or in front of the administrative ingeniousness of the water system in the middle of the desert.

2.1. Natural resources and their limits

The main traceable resources in the Afro-euro-asian macro-continent desert zone are:

- 1) Oil fields;
- 2) Cultural experiences derived from the ancient civilizations which have inhabited this territory:

Keeping in mind the huge presence of oil fields in these areas, well organized and efficient in the “Gulf Countries”, the right attention of politicians and responsible socio-economic people of these States is directed towards future objectives in the medium and long term. In fact, if today they can dispose of huge financial resources coming from the selling of oil, it is also necessary to prepare themselves for future scenarios in which the oil wealth could be reduced by the concurrence of alternative energies.



Map representation on the basis of pro/capite income in all the States of the Planet Earth (WWF, 2008). The Northern Hemisphere is clearly favored by a development which has its roots in the Neolithic period (10.000-3.000 B.C.).

This is the first justification which should stimulate the Arab Countries to be attentive to the sustainable technological innovations and, at the same time, applicable to processes of industrialization and urbanization typical of our society. If a job of a new projection of the society is neglected, it is possible that the entire region would be confronted by a gradual decay of social and productive habitats.

The considerations and the project proposals presented here are aimed to offer an operational contribution to guarantee a solid and durable socio-economic development for the future generations of these populations.

2.2. Human resources, ethnic groups and cultures

The second sector linked to the resources, human ones, saved by people or its communities ethnically and culturally rooted in centenary or millenary history, is an aspect to which InGentibus dedicates great importance in identifying its own specific contributions.

The initial considerations presented in the previous section, centered on world language and genetic belonging, open wide horizons to the research and to the application with the aim to insert the anthropologic factor in the management of the society and of its own productive and trade processes

We postpone our indications of some concrete applicable patterns, connected with cultural world, in the fourth section.

3. Systemic Management and List of Priorities: the Quality Difficult Itineraries

If we consider that the human and natural resources, we have just spoken, are important and contemporary fragile, or better exposed at the decline in terms of applicative value, it is essential to go along the heavy research patterns of a long term Quality, supported by the capability to always intervene in a systemic way, identifying generative priorities of efficient and effective interventions.

There are two priorities, which in our minds, are important for any sort of human community rooted in a territory: water and housing. Both are more necessary if we consider human communities who inhabit an area characterized by the presence of the desert or the steppe.

3.1. Blue old, or water, in the form of drinkable water or for urban and rural use

From the Neolithic era the human communities have learned to canalize the water and to reclaim wide flat or swampy areas near big rivers. One of the possible structural interventions in areas where drinkable water is not easy to find, is to invest in the desalination technologies of salted water, building new kind of water pipelines that could reach the hinterland for almost 100 or 200 kilometers.

Nanotechnology studies now enable us to perceive the feasibility of

→ The combined preparation of geothermal and solar energies to support industrialization processes to maintain “water” factor;

→ Production of drinkable water enriched with minerals at competitive costs and simplified production of water for urban or rural use, but always used with parsimony.

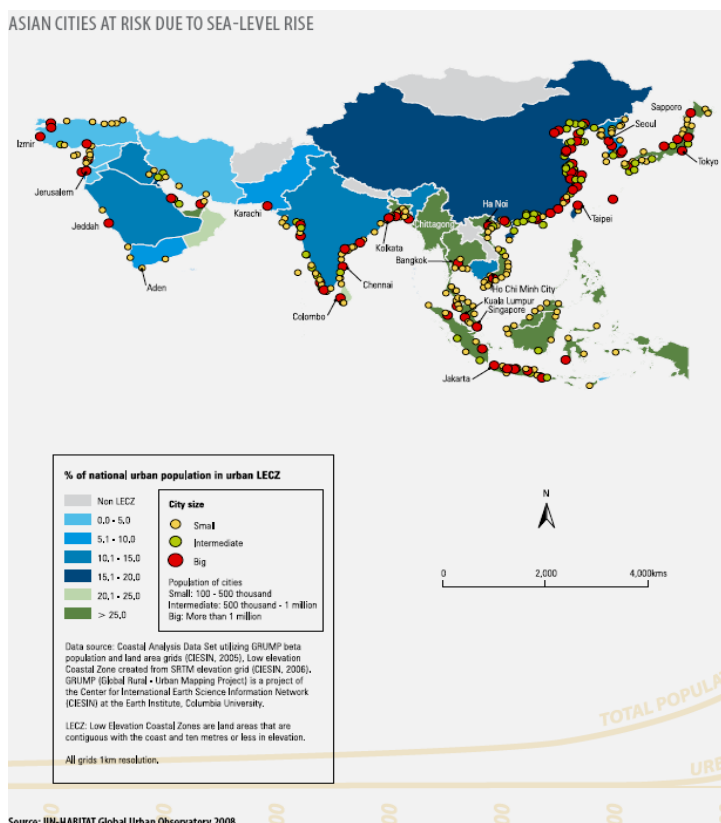
3.2. Cities and megacities: the emergency of the raising of the ocean water level

If during the evolution of the Paleolithic history we have witnessed the value of the migrations along the marine coasts, now we have to take into account also the raise of the ocean waters level, process that is going on from 12.000 years, after the most recent glacier.

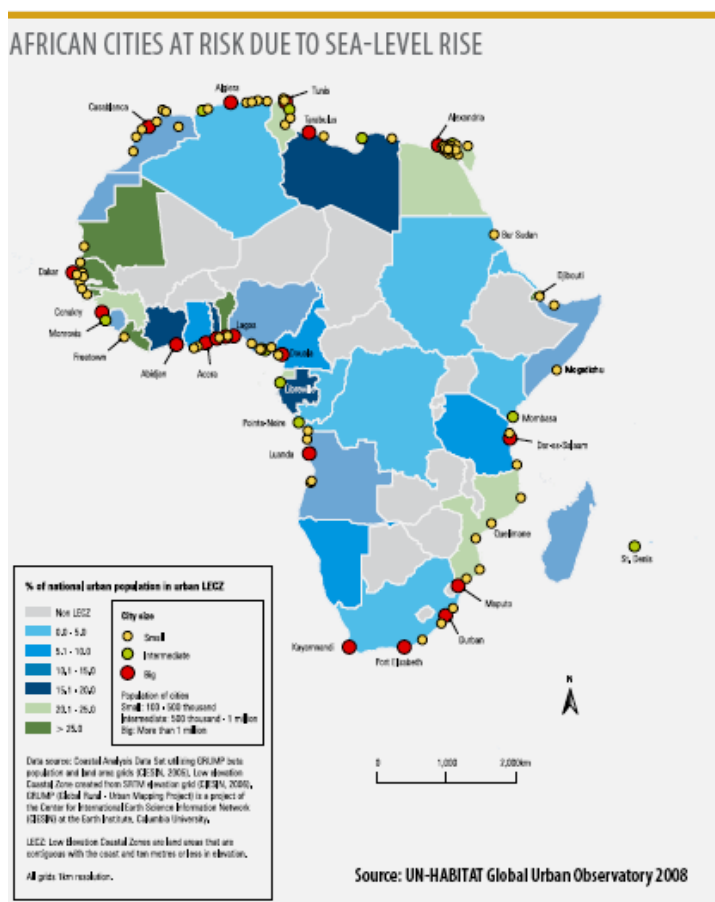
We now need to take into attentive consideration the provisions of alarm for big, medium or small cities that, in the selected area, are built near the marine coasts.

The perspectives of a total intervention are clearly linked to a new kind of colonization of the desert inland territory, near by the coast but placed at medium height on micro-hills. To proceed in this direction, it is essential to develop new systems of water and energy supply, efficient communication infrastructures (roads, railways, airports)

The two maps which we show hereinafter are really self eloquent.



Asian coastal cities with small population (yellow), medium population (green), big population (red) at risk in case of the elevation of the ocean water level. In the area of the Persian Gulf, Red Sea and Mediterranean Sea we note various emergency situations. Among those, the area of the United Arab Emirates is particularly threatened by the natural phenomenon and could be one of the places where it is possible to experiment innovative solutions, in cooperation with similar areas of Saudi Arabia and North-western India.



Afro-Sahara and Mediterranean cities with small population (yellow), medium population (green), big population (red) at risk in case of the elevation of the ocean water level. Among the areas under risk and priority of intervention are some urban installations in Libya and Egypt. Area of experiment could be the Moroccan territory.

3.3. Megacities and seismic emergencies

In the frame of projects interesting urban installations inside the desert territory and near the coast, the application of new anti-seismic technologies has a relevant place, although the volcanism isn't a big problem for these areas.

In particular it deals with the study of dissemination of light systems of seismic monitoring and to apply building technologies, which could combine the costs (accessible) with the efficiency (adequate and guaranteed).

4. Executive projects, adapted to our macro-area: invitation to share data, methods, interventions

InGentibus Foundation, keeping in mind the specific borders linked to concrete definitions of its goals and targets, proposes an operative list of rolled projects of different analysis and applications level.

Dealing with scenarios strictly depending on key sectors connected with good living of human community, the choices should firmly be oriented towards accessible solutions in terms of cost and quality of duration, offering guarantees against recurrent speculations.

The protection of the socio-economic field (governance) can be gained thanks to a wise integration among traditional patterns of social management, present in countries we are dealing with and the implementation of the best solutions to render more efficient and transparent the productive and service structures by a modern country. A redistributed wealth increases the possibility of development for all the people, including the rich people. A hoarding of wealth substantially destroys the value of the same potential resource and primes also conflicting processes in the socio-political relations.

5. Geothermic, solar and bio-masses energies

We are now in the midst of a strong and delicate engine of any activity in any human grouping, sensitive to the management of the energetic resources of the Planet Earth. Without energy there is no movement, no production, no distribution, no reinvestments.

We now underline three different systems of pure energy production:

- 1) The contribution of nanotechnologies: the scientific research in micro and nano technologies promises strong performance in the strengthening and the management of natural energetic sources;
- 2) Geothermal energy should privilege for its lowest environmental impact and for the continuity of the resource distribution at an accessible cost;
- 3) Solar energy is essential for vehicles or moving instruments. In desert countries where the radiation and the heat of the sun are really stronger, this source of energy has truly a good future;

4) Energy from bio-masses. The world population is more and more orienting itself towards installations in urban and metropolitan areas (Megacities). There are many projects and patents applied to the treatment of urban and industrial wastes (bio-masses).

All these and others energetic sources are to be integrated with the use of oil resources, selecting also for the latter a more ecologically compatible use.

Water

An important objective with priority is the treatment of the ocean and the sea waters. The modern technologies are now in a good applicative progress, particularly for the desalination of sea water and in its mineral enrichment assigning it for a double use: 1) for people (drinkable water); 2) for civil, industrial and agricultural use.

Water sustainability is also really important for the project which intends to colonize the desert belt near the sea coasts. It consists of building water pipelines which serve the territory for a range of 100/200 kilometers.

The qualitative utilization of the recent technological proposals should be coupled with multi millenary wisdom existing in ancient civilizations. It is necessary to keep in mind, for example, the high efficiency in the treatment of waters by the Nabatean civilization in Jordan (Petra) and Nazca in Southern Peru'.

There are also in progress advanced executive solutions on a large scale for the re-use of dirty, industrial and domestic waters.

Communication Infrastructures

It is evident that before we propose new human installations, it is fundamental to trace and build adequate communication ways as roads, railroads, harbors and airports. So, as the desert sector is concerned, it would also study materials able to absorb the excessive heat and the big nocturnal thermic excursion.

Micro-villages and micro-cities

The question of the merging of populations in old and new mega-cities, as apparent unbreakable line tendency (see picture at the end of this Paper) has not to forget the ancient link with the small human installations and also the rooted propensity to the nomadism.

Resources for environmental emergencies

Territories of extreme possibilities of life as the desert and the steppe we have examined, are sometimes confronted in short term by the recurrent environmental emergencies as earthquakes, fires, floods (see what recently happened in Yemen), epidemics etc..

The speed of coordinated intervention and the required deployment of men and means is a sector to be developed with extreme responsibility. The so-called Civil Protection Forces or National Guards constitute one of the main guidance axis of a country, also in its industrial effects.

Communication and training instruments

Last but not least as systemic dynamics, great importance is given by our Foundation to the investments in the field of social communication and of informatics training.

A brief illustration on four projects:

GeoTabula, or, a multi-strata (eight level of data) electronic Atlas that, starting from the ancient Tabula Peutingeriana, puts at disposal of everybody information geographically referenced of social and economic utility;

Biophonics[®], innovative musical instrument, capable to adapt itself to specific musicality of an ethnic group also reduced, or variably distributed all over the world because of forced migrations. The scientific results in medicine, advertising communication; the same art should be solid. It is important to witness the birth of many research teams on the territory of many Countries;

Human Global Habitat and Cultures[®], oriented to the realization of a training and informative minimum base intended for all the citizen of a Country or a group of Countries so they can grow with the conscience to inhabit an environmental and cultural “Inheritance” of undisputed value. The training dimension would be explained through its own instruments which will accompany the individual from kindergarten to university;

Effective Web TV, or TV micro-systems able to support a daily information service for multiple communities and ethnic groups, resident in the big metropolitan area or in two or more contiguous Nations. The best of the intellectuality and of the productive capability of a population or ethnic group have to participate to the programming. A strict control on transmissions of quality allows the national and local authorities to guard the entire population from possible danger concerning different kind of prevarications.

6. Open Conclusion

We maintain a positive attitude, towards the great territorial and cultural patrimony present in the land where people daily live and work; however much it is difficult to live as in the deserts and the steppe of the macro-continent under examination.

To invest in the actual desert and difficult areas means to face, with enough anticipation, scenarios of post-glacial epocs, which have brought more desertification. Anyway, focusing the attention on the development of adequate interventions for unforeseeable emergencies, as those brought by earthquakes, fires, flooding and epidemics, open a wide sector for wise investments of the economic resources coming from a taxation system of citizen and firms.

The organization of the Abu Dhabi World Summit in an area where nowadays the wealth seems solid, generates a wide structural problem for the vital recurrent cycles in various civilizations: how “to live better” in periods of economic “wealth”? How to maintain for the time being such a wealth, avoiding degenerative processes?

Our engagement in preparing this intervention is rewarded by the perspective that dedicating energies to study difficult or marginal scenarios is very well repaid by the satisfaction to find values and proposals which interrogate the socio-economic western pattern.

Selected Bibliography

a) Punctuated geosocial analysis

- BERBENNI Gianfranco, *Hypertechnologies and Society in the XXI century. A Franciscan Perspective*, From an article for the periodical 'DLR', Die National Koordinationsstelle bei der Deutschen Forschungsanstalt für Luft-und Raumfahrt, Projectträger des BMBF für Informationstechnik Abteilung EU-Programmbegeleitung. MD-IT, EG, Köln 90, Germany [May 1996]
- BERBENNI Gianfranco, *L'economia da strumento a idolo: una lettura francescana. Fraternità minore e povera nel contesto socio-economico odierno*, intervento all'Incontro interfrancescano GPIC (Giustizia Pace e Integrità del Creato), Assisi-Santa Maria degli Angeli, 2 giugno 2008, 12 pp. + with attached as work instruments.
- BERBENNI Gianfranco, *Il valore interculturale dell'area Ionio-Adriatica nell'ottica strategica di InGentibus Foundation E.V. Elementi introduttivi, 1st Adriatic-Ionian Intercultural Dialogue Conference*, Corfù, 27-28 giugno 2008. Vedi anche www.ingentibus.org
- BERBENNI Gianfranco, *Convivenza interculturale negli spazi urbano-metropolitani del XXI secolo. Considerazioni iniziali a partire dalla dimensione socio-religiosa*, intervento per la rivista 'Civitas' (Roma), 2008.
- BERBENNI Gianfranco, *La Sicilia nel contesto del flusso migratorio globale. Analisi-quadro per le applicazioni nel progetto 'Dedalo' finalizzato al reinserimento nel mondo lavorativo di giovani immigrati che hanno dovuto rispondere alla giustizia per azioni o situazioni incongrue*, Roma, 2008.
- BERBENNI Gianfranco, *San Pietro apostolo e il Borgo di Pratica di Mare o 'Patrica Civitas' (Campagna romana, Lazio). Il ritorno alle origini come 'rilancio nel futuro'*, per una valutazione sistemica del patrimonio storico-territoriale, Roma, 2008.

b) Sources and Data:

Reports ONU and UE (JRC).

Brookhaven National Laboratory (weekly Bulletin). [www.bnl](http://www.bnl.gov)

Los Alamos National Laboratory (Los Alamos Science, News Bulletin, daily) www.lanl.gov

Ethnologue. Languages of the World, a cura di Raymond G. GORDON Jr., con la collaborazione di Barbara F. GRIMES, Dallas (Texas), SIL International, 2005, 15a edizione, 1272 pp. con una sezione di mappe a colori (pp. 673-887). Vedi anche il sito www.sil.org.

SEMERANO Giovanni, *Le origini della cultura europea*, 2 volumi in 4 tomi, Firenze, Olschki (Archivum romanicum, 38. 43), 1984-94. Volume I/2 tomi: *Rivelazioni della linguistica storica*, vol. I, 2 tomi, Firenze 1984, LXX+956 pp. Volume II/2 tomi: *Dizionari etimologici. Basi semitiche delle lingue indoeuropee*, vol. II, 2 tomi, Firenze 1994, 720 pp. (Tomo 1: *Dizionario della lingua greca*. Tomo 2: *Dizionario della lingua latina e di voci moderne*)

c) European Commission funded Projects, finished and ongoing:

ITER - Isotopic Technologies Applied to the Analysis of Ancient Roman Mortars. This project has developed an innovative database of mortar characteristics based on the collection of all analytical data concerning isotopic technologies in complement to the traditional ones, with the aim of enabling to reproduce the mortars more accurately for more authentic preservation and restoration of ancient buildings and artefacts. It has also produced prototypes of mortars at laboratory scale, based on the knowledge and data gained in the course of the project. Website: www.iter-eu.com

Publication: **Isotope Technologies Applied to the Analysis of Ancient Roman Mortars**. Results of the CRAFT Project EVK4 CT-2001-30004, REHM-BERBENNI C., ÅBERG G., NEGUER J., KÜLLS CH., PATRIZI G., PACHA T., DRUTA A., KIENZLE P., BUGINI R., FIORE M.G. (2005)
Office for Official Publications of the European Communities, Luxemburg. 65 S. ISBN 92-894-9883-8.

GOUVERNe - *Guidelines for the Organisation, Use and Validation of information systems for Evaluating aquifer Resources and Needs* This project has developed and implemented user-based and scientifically validated Decision Support System (DSS) for the improved management of underground water resources at the catchment and sub-catchment levels. Decision support is understood as not only the acquisition, scientific validation and organisation of information, but also procedures for effective exploitation of this information by users. The DSS combines spatial representation, scenario simulation, multiple criteria evaluation and interactive user-friendly interfaces. It furnishes a validated scientific support for debate and deliberation by decision makers and stakeholders permitting intelligent compromises, identification of novel management options and, to the extent possible, cooperative conflict resolution.

Publication: **Global Change and Ecosystems, Water Cycle and Soil-related aspects, Water Technologies: Results and Opportunities**, European Commission DG Research, pp. 75 – 80, Rehm-Berbenni, C., Druta, A. (2004)

AISUWRS - Assessing and Improving Sustainability of Urban Water Resources and Systems

AISUWRS was a 3-year urban water research project partly funded by the European Community. It aimed to develop a decision support system, supported by innovative new modelling techniques, for cities that depend on underlying or nearby aquifers for their water supply. Groundwater is an important source of drinking water supply right across Europe and it provides almost a third of all water put into public supply. This project used case studies of the cities of Doncaster in England, Rastatt in Germany and Ljubljana Slovenia to develop the system with the aim of making it robust enough to be used in the many other cities in Europe and elsewhere that depend on groundwater for public and private water supply.

Publication: **Urban Water Resources Toolbox, Integrating Groundwater into Urban Water Management**, EVK1-CT-2002-00110, European Commission DG Research, pp. 251-281, 2006, IWA Publishing, London – Leif Wolf, Brian Morris, Stewart Burns et al.

NANO-HAND, Integrated Project on Micro- and Nano Systems for Automatic Handling of Nano Objects (2006).

The project started in 2006. **NanoHand** – small hand – is a European project, where leading researchers and industry collaborate to create the world's first nanorobotic production system inside of a scanning electron microscope. Nanorobotics, controlled and even automated manipulation using nanoscale tools, manipulators and soldering techniques, will allow tiny carbon nanotubes to be placed as components anywhere in a circuit to replace ordinary components or to form altogether novel devices that could not be produced using conventional methods. NanoHand is coordinated by OFFIS and involves 12 European partners consisting of 3 renowned research institutes: EMPA, the Swiss Federal Laboratories for Materials Testing and Research, MIC, the National Center for Nano- and Microtechnology at the Technical University of Denmark, EPFL, the Swiss Federal Institute of Technology; STMICROELECTRONICS, a global independent semiconductor company and 7 very innovative small and medium sized enterprises: CSEM, Swiss Center for Electronics and Microtechnology, VDI/VDE IT GmbH, Berlin, FUTUREtec GmbH, Bergisch Gladbach, Dr. Volker Klocke Nanotechnik, Aachen, Tescan, Czech Republic, Nascatec GmbH, Kassel and EurExcel, the European Association of Innovating SMEs and a forward thinking subcontractor: InGentibus Foundation e.V.

Website: www.nanohand.eu

Urbanisation and development (1800-2020).

(Fonte: Nazioni Unite, UNFPA, 2008)

In five maps it has been illustrated the impressive acceleration of the modern urbanization. The year 2007 has been the witness that half of the total population of the Planet Earth has chosen to live and work in the city. The projections for 2020 are of a consistent increase of the urbanization, with an extreme of one and half billions of people who will live in poor slums. In the socio-cultural field, the change will be more rapid and traumatic. The rural civilization pattern, 10.000 years old (Neolithic agricultural revolution), is confronting with and challenging the western pattern, industrial and urban, with a following on the global field.

