

**Conference on Planning Sustainable Urban Growth and Sustainable Architecture
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Planning Sustainable Urban Growth and Sustainable Architecture in southern Africa

Sustainability is not a concept that everybody understands in the third world environment of Africa. For the great majority of our citizens it simply means the possibility of remaining alive through the difficulties of the everyday struggle for food and shelter and the chance of escaping war or sickness. The dramatic mathematics of demography and urbanization increase the pressure over the arable land and accumulate unproductive human beings in the impossible human conglomerations that we call cities.

Sustaining human life under those circumstances is so difficult that distant concepts like the preservation of forests and wild life, maintenance of the water quality, conserving energy, caring about air pollution or managing solid waste sound like adding insult to lack of respect. When three quarters to four fifths of the urban population live under inhuman conditions in most countries in our region, we must ask ourselves what kind of sustainability are they concerned about?

Traditional African society lived in balance with the environment.

Life was physically hard, but every person's task was clearly related to the rhythms of nature and to the rules of a perfectly integrated hierarchy of authority that could tune the needs of the group to the potential and the limits of the environment. Historical reasons, political change and social upheaval have altered this unsustainable situation of "wise sustainability", forever.

Present living conditions in Africa are well known and I spare you the litany of our problems and difficulties, but those conditions are the sole basis over which we can, and must, construct a strategy and a program for the sustainability of our people, of our natural resources and of our cities and buildings, to be accepted by the people and implemented by the people. The reality is that we live in a situation where it is now almost materially impossible to survive in cities without some form of aggression to the environment.

Against this dramatic background another danger looms permanently over our environment and jeopardizes the chances of creating a sustainable situation: the greed and the manipulations of powerful forces, often disguised as multi or bi lateral development initiatives and covered by international finance mechanisms that impose on our weak and corruptible administrations, immensely dangerous projects in the form of dams, polluting industries,

inadequate and obsolete technologies and agricultural and trade policies, against which we are left without alternatives.

With the very low technical and scientific preparation of most of our decision makers, and the lack of any capacity to discriminate between valid options, it is impossible to resist the temptation of a major and highly visible project where there are so often irresistible pay backs. That is why it is so easy to push environmentally negative investments under the guise of a contribution to the “development effort”. Along the way, there are fat profits, for the politically protected corporations of the donor countries, to be collected

To concentrate on the problems of sustainable urban growth and architecture we must also elaborate on other simple but indispensable considerations.

In face of the conditions of demand for their services the role of the planner, the architect and the consulting engineer is very limited in terms of what he can do to propose, from an ethical position, for the creation of sustainable cities and architecture.

The state must, naturally assume the role of establishing the planning policies and of making sure that the planning exercises and the building activity do not contribute negatively to the environment.

But if this can be the case for the building and construction activity in the industrialized countries, in our part of the world, the great majority of the building stock is self built and, as such, does not follow the same rules or can be controlled by the same mechanisms. In our situation it is very difficult, if not materially impossible, to secure, and maintain, any degree of control over the sustainability parameters of the construction sector. Those self built constructions are eminently sustainable as they are not built by specialized capacities but use materials and processes known to everyone in the social group as abilities that come with the “mother’s milk” and with the clan’s kit of survival knowledge. Not just the technology but the construction processes used are sustainable, in the sense that they assure the feasibility, the ease of maintenance and the renewal of the habitable structures needed.

The problem is that those constructions, so adequate for the ways of living of the traditional African society, are no longer adequate to the new quality of life that the new African society demands now.

They are not, any more, adequate even to the peasant refusing to accept discriminatory conditions of life that relegate him to unacceptably low levels of services, infrastructure and quality of life.

The discussion brings us, now, to a point where, on one hand we have an outlived, but perfectly sustainable way of building, and, on the other, we must answer to values and demands that can only be satisfied by imported materials, technologies, skills and processes, making them, if hardly sustainable, more appropriate to a new society who wants them, and is willing to pay for them.

The critique of the relevancy of the vernacular sustainable construction must be carried much further. The quantitative and the qualitative relationship of the people to the land, the impact of new political and economic trends on the social organization and, particularly, the accelerated population growth, create an impossible pressure on natural resources which, compounded with the attraction of the urban centers, determine new relationships and new problems relating to the rights of use of the land and its resources.

In countries like Mozambique the demographic pressure on land can be better expressed by the decrease of some 30% of arable surface per capita in the last 20 years and the projection of a further loss of some 30 to 50% in the next 25 years!!!

This is more serious still when associated with the current trend of land grabbing by the powerful, which, if not controlled, will eventually affect, dramatically, the living conditions of the peasant families and, in fact, their survival.

In the light of the problems that our society faces everyday, the issue of sustainable construction seems to be an arcane preoccupation.

We are building a very small fraction of the structures that we need and our construction industry is so small that it has no expression as an environmentally dangerous activity. The same, however, can not be said about the construction industries of our developed partners which demand, and contribute heavily, to the extermination of our forests and the degradation of our environment by the installation of highly polluting industries rejected, now, in their own countries, and producing, almost exclusively, for their own needs. This creates a situation where it is in fact the non-sustainability of the developed countries construction industry that brings to us some of the environmental problems that we face.

When we refer to the construction sustainability issue as arcane, in our present situation, there is no intention of dismissing it as irrelevant. It simply means that it is not an issue that worries most of our people, as it does not appear as an objective and pressing problem affecting directly their daily life as, for instance, is the problem of energy for domestic use which is, year after year, a greater drama to the majority of the population in our region.

The question is: what does this sustainability mean for us?

Working daily in urban development and planning and in the design and construction of buildings, we are aware of the importance of the sustainability issues. We have been fighting for a more responsible attitude from the state to private organizations and to the public in general.

But the reality is that we are loosing the battle.

The gains achieved at the research and technological levels are contradicted by the negative influence on our students, and on the public in general, by the propaganda of the "hero architect," the corrupting images and the formal expression of the latest fashionable follies that make no sense as environmentally sustainable or, simply, as rational structures.

It is true that the literature and the media also bring to us excellent examples of projects, where the sustainable qualities of some constructions is clearly a success. Unfortunately those are less known and, in many cases, they are better known for reasons other than the ones that we are considering here.

Are we willing to take the risk of being called naïve and - taking advantage of the credibility of this Conference - propose some clear and simple “rules of the game” in this struggle for a sustainable urban and architectural environment?

This risk is justifiable. The lack of simple and understandable guidelines for the average non-professional decision maker is leading to a generalized level of confusion and arbitrary choices, with no reference to any relevant parameters and standards.

If we *are* willing to take this risk, our proposal must also show that the concept of sustainability is based on aspects other than just the ecological, the environmental and the technical ones.

It should consider cultural continuity, or the creation of it, the need for identity in the urban context, and the development of a sense of citizenship with the creation of a sense of place.

Those subjective, but strong forces, are necessary to create a new or a renewed respect and love for one’s place of living, suffering, and dying, and essential for the creation of a sustainable human environment.

Sustainable construction, in ours, or in any other region, is only one of many dimensions of the larger problem that we face: the sustainability of a universal civilization by civic education, building a society conscious of its legitimate goals and dreams but also conscious of its limits.

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