

Das "Geowissenschaftliche Museum" und die Entwicklung in der Dritten Welt

"Geoscience Museums" and the Third World Development

Музей наук о земле и его развитие в третьем мире

Von

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Schlüsselworte

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Abstract

Education and culture are not consumable articles. They teach one how to transform things to be consumable. Museums are shrines of education, culture and heritage. They also enthrone visual education. They document, expose, instruct and diffuse knowledge. The depth of such knowledge is unlimited.

Natural History or Geoscience Museums are no exception. They present the nature's beauties and riches which help the survival of the modern industrial world, and expose the coveted vanity items like gems, gold etc. These museums have always attracted people and the curious. They have inculcated in youth the desire for further search and discovery. Abstaining from the museums is resulting in limited culture, limited knowledge of our planet, and loss of curiosity to achieve something more than what is known and to know the unknowns.

Museums in developing countries are essential for cultural and educational growth. Modern strategies involving the government to donate the land, the tourist-artesian- consumable industrial sectors donating building and maintenance, and the

educational institutes collaborating with organization and diffusion, museums will develop, flourish and foster citizenship. Thus Man's creativity can transform museums as welcome attractions of tourism, education, past-time, and discovery, fostering sustained development.

Museums: What they are?

Education and culture are not consumable articles. They teach us how to make articles consumable.

Museums archive each and everything in this world. They document, expose, instruct and diffuse knowledge. The depth of such a knowledge cannot be estimated, and depends exclusively on the competence of the recipient.

Museums are repositories of art, culture and nature's beauties. They are also the educational centres from where we beget our heritage and culture; conceive our resources and riches; define our potentialities and perspectives. Further they are centres of attraction for visitors, tourists and the curious. They are the homes of rarities, uncommon and common things; they are the laboratories for research and discovery; and they aim to occupy always a universe unlimited, though conscious of its impracticability.

Museums have overlived men, societies and occasionally civilisations. Thus, today in all countries money is invested in conserving and amplifying existing museums, and/or creating new museums to stimulate an organised educational system, to promote cultural consciousness and to strengthen the citizenship. They are indispensable instruments in social and economic developments.

Geoscience and Natural History Museums are no exception. They are visited regularly by all those interested in nature's beauties, not only to see and enjoy, but also use them as references of our natural earth's potential and riches. They are spots of beauty and glamour, because they show the nature in its exuberance, ecstasy and luxury.

Museum and Cultural Heritage

Culture is not cultivated in a day or two. It is the consequence of living, observation, toil and tradition. It is the art of understanding and tolerating. It is the depiction of facts, not crude and nude, but with garments that could fascinate the common to highly sophisticated intellectual.

Museums are just the same. They shelter simple to complex things, ideas, facts, samples, art, science and technology. They could narrate the evolution of a nation, civilization, man and his environment. They could signal the next stages of world's history, and give the backbone framework for the present day human survival.

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All this depends on man and his capacities to observe, interpret, utilize and invent new arts from the old, or new things from nothing. If this "elo" is not well conserved there will certainly be a "hiato" and this interests no one, excepting the explorers.

New generations do not seem to have patience to think of the importance of this heritage. Heritage is age old, and as time goes by, it will be indispensable and important to architect and build the future. Experience and age are not commodities that could be obtained even at the price of a fortune. They should be obtained in due course of time, and only then they complement knowledge. Surprisingly museum culture brings this heritage in good packages for us to understand, amalgamate and identify our desired part.

Geosciences in The Third World / State of Art

Geosciences truly are developing in the Third World only in this Century. Eventhough in few countries Geological Surveys have even celebrated a century of existence, yet the greater number still do not have well established Geological Surveys to map the country. Some of them have and maintain a museum, which is truly a Geo-Sciences Museum, displaying old and new collections, though often the former are well organized.

The University Geology Departments are much younger even in those countries where the Surveys have a centennial tradition. The change of patterns of geological education, with the quick growth of post-graduate courses, leaving the undergraduate geology as an orphan mostly in affiliated colleges, is reflecting in the quality of the Masters and Doctors in these countries. Field work, geological mapping and exploration geology are scarce due to the ill prepared youth. Some such University Departments that cater only to the post-graduate degrees and research, and the Institutes of Technology with Geo-science Departments have conserved or established some departmental museums. They attend mainly to the requisites of teaching and less to the visitors cum curious. Often the problem is traditional and well known, viz. lack of funds, resulting in a general disinterest of the staff.

The lack of funds is classical in many activities and in all countries. The complaint of the administrators over the governments is also well known. This is rampant in developing world. It is practically like people depending on everything on God. It should be emphasized that the governments in the developing countries have to consider food, water, housing, health and sanitation as absolute priorities.

Most of these countries are undergoing an industrial revolution. They are changing their policy structure to market economy by opening avenues for foreign capital and increased technology based industries. This needs raw material. Thus mineral resources are having an increased internal demand, though the world metal/mineral trade is not encouraging exports. Luckily, this calls for a general consciousness as regards the importance of the earth sciences in the industrial development and of the society.

There cannot be a better diffusion than through visual education in a Geoscience Museum.

Museum Types

Museums could be amalgamated from the three principal conceptual types, with the following characteristics, to attend to the necessity of modern societies.

CONCEPTUAL TYPES

Type 1: Modern

- a) Communicative versus Conservative
- b) Dynamic versus Static
- c) Renovative versus Routine
- d) Realistic versus Imaginative
- e) Eloquent versus Visible
- f) Concrete versus Conceptual
- g) Pleasing versus Congested

Type 2: Thematic

- a) Compare to Contrast
- b) Dynamise to Attract
- c) Expose to Exploit
- d) Cultivate and not Curb
- e) Offer for Demand
- f) Variety with Variability

Type 3: Technical

- a) Stimulate Enthusiasm
- b) Motivate Creativity
- c) Enthuse Passion for Collections
- d) Foment Repeated Visits
- e) Educate without Tiring
- f) Invoke Consciousness
- g) Reveal and Magnify Nature's Beauty

Creating a Modern Museum

In our world to create anything needs talent, and museums are no exception. The creation of a Geoscience Museum perhaps is the most competitive. This is due to the earth's riches like diamonds, gems, precious metals, energy resources, metallic minerals, industrial minerals,

construction material and fossils to expose, besides the enchanting phenomena inside the earth's womb, etc.

It is often said that proposals are easily made without analysing their feasibility. It has been so perhaps in old days, but with the communication networks extended all over the world, and the technological revolution we are facing, museum establishment is not only conceivable but also feasible.

It is important to establish some fundamental notions of the importance of a museum to enhance.

MUSEUMS ENHANCE

- 1) Culture
- 2) Heritage
- 3) Resources and riches
- 4) Education
- 5) Creativity
- 6) Discovery
- 7) Past-time
- 8) Tourism

Also it is important to define those benefited by the museum, directly or indirectly.

MUSEUMS BENEFIT

- 1) Youth
- 2) Aged
- 3) Families with children
- 4) Scientist/innovator/investigator
- 5) Educational centres
- 6) Tourism
- 7) Industry
- 8) Government

A Conceptual Model

The following model is practicable in any country, more so in the developing countries. It is made up of three principal items:

PRINCIPAL NEEDS FOR MUSEUM DEVELOPMENT

- 1) Land for the location of the Museum.
- 2) Museum Building. and Display Material.
- 3) Curator and Development.

Land for Museum

The first item on the agenda on museum building is a piece of land, if this is not to be sheltered by any other organisation or department or survey.

In view of the importance - benefits of a museum, a well argued project with an elaboration of its importance to the general public, presented to either State or Federal Government, could get a piece of land for its installation.

Museum Building and Display Material

Certainly these are other primary items, and they are extremely interwoven in our Conceptual Model. The private enterprise is fully involved in the construction of the building and furnishing it. But this will have an immediate return to it, since the model involves exposition of their own product, merchandise, equipment, services, etc. which are normally propagated through media.

In addition, these are the main sources of the display material. In Geosciences, minerals, ores, fossils, rocks etc. have to be furnished by the mining companies and metallurgy's. The fact that most of the products generated through the geological work are availed by industry, should be viewed with optimism and such enterprises should be sought for support to build a museum and maintain it.

CONCEPTUAL MODEL OF MUSEUM ESTABLISHMENT AND MAINTENANCE

- **A) DONORS**
WITH ANNUAL LEASE OF
BOXES or SHOW-CASES or AVENUES
Single donation, or on an annual lease system
 - 1) DISPLAY OF MINING COMPANIES
 - 2) DISPLAY OF MINERAL INDUSTRIES
 - 3) DISPLAY OF METALLURGY'S
 - 4) DISPLAY OF GEOSCIENCE INSTRUMENT MANUFACTURERS
 - 5) DISPLAY OF JEWELLERY INDUSTRIES.

6) DISPLAY OF ENERGY RESOURCE COMPANIES.

B) SUPPORTING MEMBERSHIP OF SOCIETIES, GROUPS, ORGANIZATIONS PRIVATE OR PUBLIC.

Annual contribution to the Museum, its operation and betterment.

C) FOREIGN MEMBERSHIP OF MUSEUMS OR MUSEUM SOCIETIES.

Annual contribution to the Museum, with an exchange of personel, training and organisation of symposia etc.

D) INDIVIDUAL MEMBERSHIP OPEN TO ALL

Annual membership open to those interested in furtherance of the activities of Museum

Gems, ore pieces, noble metal samples can only be obtained through the donation of the mines, jewellery and industry. As they are expected to be Donors, and thus they have a showcase or a box or an avenue, they are responsible to build it up, display and renew, such that their identify is kept, differentiated and maintained from time to time.

The society on the other hand need to participate in this activity. Thus the supporting foreign and individual memberships are to be stimulated. They are the backbones for the dynamic structure of the museum, they are the observers, admirers, critics, and supporters of each and everything the society plans and wishes to operate.

This model involving both collective and individual members is to see that the museum works as a foundation, with a board of trustees to direct its work.

It is evident that to arrange donors, supporting members and others, there should be a gifted curator, responsible for these activities.

Curator: The Indispensable

Initially the concept of curator which is not in vogue in developing countries, need to be established and defined as the indispensable administrator of the museum with the following profile.

The curator must be a scientist- creator- renovator (ANONYMUS, 1994). Modern museums need certainly men with these three talents, much more than a politician or a simple administrator. Without the visualization of the needs and the scope of museum, no administrator can ever maintain, develop, and enlarge any museum as a centre of excellence in science or art or culture and research.

Geoscience museums need a truly experienced scientist and a thinker with a broad outlook. He should have re-

spectability in the field, besides name, with concepts of modernization, visualization and dynamism.

The following strategies can be adopted for the success of a curator:

1. Invite a well known scientist - creator- renovator in geological sciences to be curator of the museum. Give him (her) just the minimum requirements to start and prove his (her) mettle.
2. Allow liberty for the curator to think and act in preparing the projects and seeking funds from funding agencies, private enterprises and mining and other industries to obtain resources for the creative ideas.
3. Organize the construction of the museum within the conceptual model, with the support of private sector.
4. Create small infra-structure, and a small laboratory for identifications, cataloguing and displaying.
5. Obtain donations of samples from the mining companies and private donators and diffuse the mining companies activities through their own brochures.
6. Promote strategies for renovation in sectors exposed to beget more public interest, enthuse visitors, induct aptitude for earth sciences in the youth. Make the museum a place of regular visits, with renovations.
7. Interact with other museums and curators, both national and foreign, to promote regular courses in museology / gemmology / mineral identification / economic minerals / uses of minerals / fossils and their stories etc.
8. Promote and participate in symposia on museum development and conservation.
9. Produce popular atlas on minerals, fossils, gems etc. to stimulate interest in earth sciences.
10. Promote and diffuse among the school children regular induction of geosciences through the state and local governments (Project GEODIFFUSION, RAO et al., 1986; DISCOVER THE EARTH., RAO et al., 1992). Distribute mineral and fossil samples to enthuse the youth.
11. Organize simple collections of earth materials, minerals, rocks, ores, fossils etc. in boxes and promote their distribution through the support of State Banks or other entities.
12. Organize periodical "Professional Development Seminars and Courses" aiming at museum art and technology.
13. Prepare fliers and small earth science kits for tourists, and offer support for tourism in return of the support of the Tourist Bureau.

Museums and Tourism

The tourist industry is now possibly the most profitable of all times. This is due to the increase in population, access to comfortable travel, more circulating money, growing curiosity, and excess of national and international events. The packages for tourists usually need to have some attractions. A Geoscience Museum certainly is one, provided it is well established and maintained. When the Government Tourist Bureau or a Development Bank takes part in the museum organization or so, then it becomes an easy matter.

Geoscience Museums with a section of gems, jewellery and decoration pieces made out of stone could always attract visitors. Gold Nugget Museum in Carlton City, Nevada, and the Mineland Museum in Osarizawa, northeast of Akita are great tourist attractions, besides the Natural History Museums known in famous cities.

This should be the inspiration for the developing countries, and only thus Geosciences will be well propagated and tourism will increase.

Conclusions

Developing countries should attend to their primary necessities such as food, fresh water, housing, health and education.

Of them education is both a short term and long term investment. It is not only in the schools and colleges, but also in the way of living and learning. Museums offer visual education without teaching or in regular classes and as past time.

Without machines of iron and steel Man is forlorn; without gold and gems he has no illusions; without coal

and petroleum he has no energy for the industry; without industry he has no hope; and without hope he has no reason to live.

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