

Global Education Research Awareness Motivation for Empowering Rural Architecture (GERAMfERA)

(Prof. Dr.) Nizamuddin Ahmed*

"The happiest of people don't necessarily have the best of everything; they just make the most of everything that comes along their way." ~ Karen S. Magee

INTRODUCTION

Throughout its history architecture, both as practice and education, has largely been concerned with the built environment linked particularly to urban areas,¹ and practised essentially for the benefit of the well-to-do class of the society. The vast rural population have been digressively ignored and 'effaced'².

In real terms, architecture and architects are guilty of discounting the majority and simultaneously serving a very small section of humanity. In Bangladesh 71% of the plus-15 million population live in the villages³. In order to democratise architecture it is necessary for architects and allied professionals to get involved with the forgotten mainstream, so as to provide them with improved lifestyle, better houses, uplifted schools, safer working conditions and hygienic environment.⁴

INDIGENOUS DWELLINGS

Indigenous dwellings in rural Bangladesh (Figure 1) too are the human responses to localised environment with available and affordable materials, and native and intuitive technology, so strong that a variation in house form is generated even across this small country. (Figure 2) Construction are by local craftspeople with unskilled homeowners and neighbours often lending a hand.



Figure 1 One type of many indigenous houses in Bangladesh: wood frame, mud floor, wall of wood strips, and CI sheet roof at Sutiakati, Swarupkati,

THE ISSUE

In Bangladesh today, due primarily to the enticement of urban living, the educated urban youths have generally turned away from their villages, and to some extent country,⁵ the ancestral roots of many, depriving themselves of the rich rural culture, and the rural people of their knowledge.

¹ Tschumi, Bernard., (Introductory comments), *Event-Cities*, The MIT Press, Cambridge, Mass., 1996

² Halfacree, Keith., "Rural Space: Constructing a Three-fold Architecture", *The Handbook of Rural Studies*, Paul Cloke, Terry Marsden & Patrick Mooney (Eds.), SAGE, 2006

³ tradingeconomics.com/bangladesh

⁴ Dean, Andrea Oppenheimer (author), Hursley, Tomothy (photographer), *Rural Studio: Samuel Mockbee and an Architecture of Decency*, Princeton Architectural Press, 2002

⁵ Iredale, Robyn., Guo, Fei., Rozario, Santi., (Eds), *Return Migration in the Asia Pacific*, Elsevier, Edward Elgar Publishing, 2003, p79

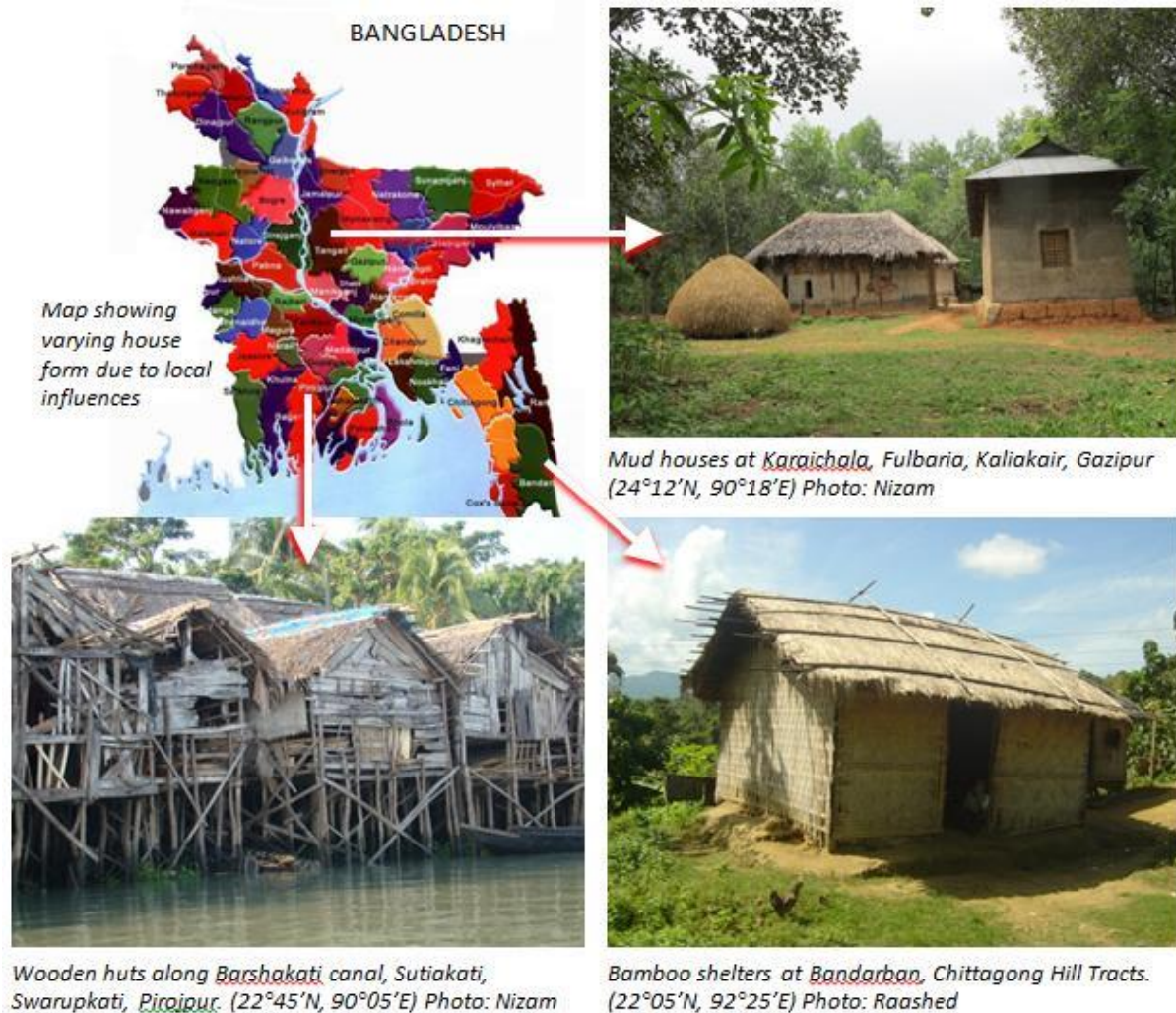


Figure 2 Variation in house forms due to local materials and technology within Bangladesh, some examples

Adding to the rural woe is the concurrent phenomenon of people, who can afford a permanent building in the idyllic village, including those who have migrated (even if temporarily so) to the city, imitating erroneously the urban form,⁶ importing inferior building elements, utilising high-energy and expensive materials (steel, concrete, ceramic tiles), and destroying the longstanding fabric of the countryside. (Figure 3).⁷

Due to many factors, a growing number of rural houses today bear little relevance to people, context, economy, society, and culture, all of which are essential to convey the meaning of architecture. Indigenous houses are an endangered species, and they need to be understood, preserved, and proliferated.⁸

Also, a vast majority of the population are being deprived of modern building knowledge and the services of the architect. Since the advent of formal architectural education, the focus of

⁶ John, J.P., Sridharan, N., *Shelter for the Rural Poor*, Ashish Publishing House, New Delhi, 1992, p114

⁷ Ahmed, Nizamuddin., Khan, Nayma., *Evolution of House Form in Dhaka City*, *Global Built Environment Review*, UK, Volume 3, Issue 3, 2004

⁸ Costa, Kelly Ann., "The Tyroleans of Austria", *Endangered People of Europe*, John S. Forward (Ed.), *The Greenwood Press*, Westport, CT, 2001

the schools has been the built urban environment, generally apathetic to society, culture and environment.⁹ The Architect emerged basically as the detached urban form maker.¹⁰



Figure 3 The 'rich' man's 'poor' house in rural Bangladesh. Photo: Nizam (R)

GERAMfERA

In Bangla language GERAMfERA means 'returning to the village' [*geram*=village, *fera*=return]. GERAMfERA (Global Education Research Awareness Motivation for Empowering Rural Architecture) is an endeavour to encourage and engage youths of both urban and rural areas to interact and participate hands-on in rural architectural activities. The organisation is non-political, not-for-profit, and non-government, and is based on the principles of human welfare. The interest area of GERAMfERA is very large and significant: buildings, community space, economy, technology, and population. Any degree of improvement in any of the areas would benefit a large bulk of the Bangladesh population. The adopted measures, design decisions, participatory models, and the rural-urban technology transfer may also be a guideline for such deprived populations elsewhere. Replicating the model in the other parts of the world may see a positive change in the global attitude for destroying the countryside in the name of modernisation and development.¹¹

An urban youth, by learning about rural life and working alongside rural people with indigenous materials and technology in a rustic environment, will develop patriotism, regard for his people, and an yearning to do something positive for the people whom he has touched and vice versa. Consequently, he may opt to serve in his motherland instead of migrating to an alien country.¹²

⁹ Rabbat, Nasser., "The boundaries of Architectural education today", *Architectural Education Today: Cross-cultural perspectives*, Salama, Ashraf. M.A., O' Reilly, William., Noschis, Kaj., (Eds.), Aga Khan Trust for Culture, 2002

¹⁰ Kusno, Abidin., *The Appearance of Memory, Mnemonic Practices of Architecture and Urban Form in Indonesia*, Duke University Press, 2010, p126

¹¹ Zeidler, Eberhard., *Buildings Cities Life: An Autobiography in Architecture*, Vol. 1, Dundurn Group, Toronto, 2013, p513

¹² *The International Bank for Reconstruction and Development, World Development Record 2007: Development and the Next Generation*, The World Bank, Washington, 2006, p197

Rural youths too shall benefit from such exchanges, as they will find out more about globalisation,¹³ universal thinking, information technology, about making more durable traditional materials by newer techniques and processes.¹⁴

The greatest beneficiary shall be the country, as there will be a possibility of reduced human capital flight to developed countries,¹⁵ and a countryside whose architecture will be protected by a people working together.



Over decades our villages have been at the receiving end of all that is negative, as a result of which quality of life has suffered.¹⁶ In a bid to attain better living, livelihood, and social security many rural people give in to the 'push' aspects and move from the villages to the city, while simultaneously being allured by the city's 'pull' influences.¹⁷

Factors that 'pull' people to the city for a higher quality of life include (*not exhaustive*) expectation of more opportunities and better paid jobs (factory workers often earn three times more than farm workers), freedom to buy food instead of growing own crops, access to more comfortable housing with better facilities (electricity, water and gas), better access to services for schooling, medical treatment and entertainment, congenial and safer situation to carry out religious, political and cultural activities.¹⁸

The situation in the villages is quite the opposite, creating 'push' issues that compel people to leave the rural areas or to keep city people away. Such factors include overpopulation, lack of employment, limited food production, investment-less farming, landlessness, pressure on the land, natural disasters (floods, cyclone, erosion, etc.), dearth of healthcare, education, services, and socio-political insecurity.¹⁹

GERAMfERA: MISSION, MOTTO, AIMS, OBJECTIVES

MISSION: The Mission Statement of GERAMfERA is "to enhance the quality of life of people living in rural areas by engaging their livelihood, society, and culture interactively with the naturalness of their environment and their vernacular habitation, founded on high moral values, best religious practices, Bangalee patriotism, state-of-the art knowledge, and community safety, welfare, and progress".

MOTTO: Assuming that a lot has been lost by the rural areas, GERAMfERA embraces the motto in Bangla "†kl †_†K iia"; the English of which is 'beginning from the end', as we believe there is hope in every new beginning.

AIMS: It is expected that the work of GERAMfERA shall bring about some changes, and as such its Aims are:

¹³ Maira, Sunaina., "Imperial Feelings", *Globalization: Culture and Education in the New Millennium*, Marcelo M. Suarez-Orozco, Desiree Qin-Hilliard, (Eds.), University of California Press, 2004, p211

¹⁴ Pratt, P.L., "The durability of Building Materials" (Keynote Address), *Durability of Building Materials and Components: Proceedings of the 5th International Conference*, J.M. Baker, H. Davies, A.J. Majumdar, P. J. Nixon, (Eds.), Span Press, 2006

¹⁵ Grubel, Herbert G., Scott, Anthony., *The Brain Drain: Determinants, Measurement and Welfare Effects*, Wilfrid Laurier University Press, Ontario, 1977

¹⁶ Hartmann, Betsy., Boyce, James K., *A Quiet Violence: View from a Bangladeshi Village*, Zed Books, London, 1983, p91

¹⁷ Datta, Amal., *Human Migration: A social phenomenon*, Mittal Publication, New Delhi, 2003, p25

¹⁸ Snedden, Robert., *The Growth of Cities*, Franklin Watts, London, 2003, p18

¹⁹ Snedden, Robert., *Ibid*

- acknowledge relationship between history, culture, architecture and human comportment realize needs of the needy to improve conditions of the most impoverished inhabitants of rural areas, and meet needs of the community within its context, not from outside it²⁰
- derive optimum benefit from nature and employ its resources judiciously, minimally and appropriately to maintain and nourish the much 'threatened' natural world²¹
- reverse the incursion of negative urban attributes into the rural built environment
- encourage researchers, youth, and people to learn from nature²²
- create proactive citizens of a community and cultivate the spirit of patriotism such that traditional values and architecture can be conserved



Figure 4 Abundance of logs from Sundarbans (L) and wooden houses in Sutiakati, Swarupkati, Pirojpur district
Photo: Nizam

OBJECTIVES: Towards accomplishing the Mission and fulfilling the Aims, education, research, awareness and motivation should be employed as tools, and the most appropriate global knowledge applied. Hence, the GERAMfERA Objectives are

- associate development with history, local politics, migration, technology, and socio-cultural interactions²³
- document relevant buildings and human space
- formulate suitable curriculum for education about architecture, people and society to attain an understanding of the harsh realities of life
- implement projects by volunteering researchers and students to put theory into practice
- ensure minimum footprint, make the most efficient use of space, and optimal passive maintenance
- design, construct and maintain the built environment by optimization of local materials and technology to cause architecture based upon derivations of vernacular imagery ([Figure 4](#))

²⁰ Homan, Mark S., *Promoting Community Change: Making it happen in the real world.*, Brooks/Cole, Belmont, 2011, p46

²¹ Tabor, Gary M., "Foreword", *Connectivity Conservation Management: A Global Guide*, Worboys, Graeme., Francis, Wendy L., Lockwood, Michael., (Eds.), Earthscan, London, 2010

²² Chiras, Daniel, D., *Lessons from Nature: Learning to Live Sustainably on the Earth*, Island Press, Washington DC, 1992

²³ Hays, Samuel P., *A History of Environmental Politics Since 1945*, University of Pittsburgh Press, 2000

- utilise knowledge for the betterment of society and gain from hands-on algorithmic experience of ‘human contact-comprehension-learn-design-build’ experience²⁴
- adhere to building, safety and health regulations and propose amendments to meet the aspiration of the economically disadvantaged people
- understand the role of the economically disadvantaged in nation-building
- improve the lives and lot of the most impoverished citizens of a society
- work together as a team to appreciate the fruits of united effort
- gain hands-on experience through a system of give-and-take learning through a humanitarian involvement
- connect with the people and profit from the contentment of ‘sharing the sweat’ with the community
- influence positively the lives of the community, families, researchers and students it touches

SCOPE OF WORKS

Education:

- rediscover the potentiality of nature and human capabilities to reciprocally sustain human habitat and the natural environment
- attain relevant knowledge and provide formal and informal education by using, among others, information exchange between rural dwellers and relevant professionals through courses, seminars, workshops and community programmes for proactive interaction and dissemination of information by ensuring participation of stakeholders²⁵
- provide supervision/support to architecture and engineering research students
- documentation in the form of literature, drawings and photographs

Research:

- undertake research to make rural building materials and technology (Figure 5) more durable, abundant, and affordable²⁶, and shelters more comfortable
- investigate the influence and transfer of environment, religion, cultural variances and tradition on shelter and space design, as well as adjoining areas, including beyond political boundaries
- explore means to preserve rural characteristics while enhancing living conditions²⁷



Figure 5 Home-grown technology is the mainstay of rural architecture

²⁴ Ahmed, Nizamuddin., “Architectural Research for the Economically Disadvantaged” (Keynote), Seminar: Architecture for the Economically Disadvantaged, Bangladesh University of Engineering & Technology, Dhaka, December 2006

²⁵ Swiderska, Krystyna., “Stakeholder Participation in Policy on Access to Genetic Resources, Traditional Knowledge and Benefit-sharing”, *Participatory Approaches to Research and Development in International Institute of Environment and Development (IIED)*, Earthprint, 2001, p6

²⁶ Hodgson, Robert L.P., Seraj, Salek M., Choudhury, Jamilur R., Editors, *Implementing Hazard-Resistant Housing*, BUET and University of Exeter, 1999

Awareness:

- disseminate all available information about building, digging, environmental protection, health, and globalisation by means of posters, leaflets, news bulletins, workshops, and lectures, etc.
- seek solutions to the needs of the community through real human contact, personal realization, and a gained appreciation for the culture.²⁸
- utilise radio, television and mobile telephone services, and operate radio and television centres

Motivation:

- stimulate both urban and rural people nationally and globally on the need to develop rural areas from within, but with the globally available technology for local application²⁹ (Figure 6)
- coordinate private and institutional involvement of architecture, planning, and relevant engineering students to move to the rural areas for a period of time to participate in understand-design-build-handover community projects as a charitable undertaking
- Involve the community through welfare activities³⁰



Figure 6 This landscape reserves the right to be protected

GERAMfERA's programme is based on three modules:

- Module 1: Urban-Rural Architectural Linkage (URAL) held in a city. The Pilot Module 1 Seminar at Dhaka city on 27-28 April 2012 was participated by 32 city youths from architecture, law, medicine, and general background. The programme was sponsored by Sinamm Engineering Ltd. (Figure 7a)
- Module 2: Rural Enquiry into Architecture & Living (REAL) held in a village. The Pilot Module 2 Seminar at Village Sutiakati, District Pirojpur on 16 February 2013 was participated by 59 rural youths, mostly with graduate level education. The programme was sponsored by GERAMfERA Ltd. (Figure 7b)
- Module 3: Rural-Urban Technology Transfer by Sharing (RUTTS) to be held in the REAL village. Under Pilot Module 3, the participants of Modules 1 & 2 shall participate in the design and construction of a community building, erected with indigenous materials and knowhow, and funding equally sourced by GERAMfERA and the beneficiary public organisation.

²⁷ Palleroni, Sergio., Merkelbach, Christina., *Studio at Large: Architecture in Service of Global Communities*, University of Washington Press, 2004

²⁸ Canizaro, Vincent., "Towards a Civic Environmental design", *Proceedings of the 2009 Annual Research Conference of the Architectural Research Centers Consortium: Leadership in Architectural Research*, Rashed-Ali, Hazem., Roff, Shelley., (Eds.), 2009, p59

²⁹ *Committee on Science and Technology in Foreign Assistance, Development, Security, and Cooperation, Policy and Global Affairs*, The National Academies Press, Washington, 2006, p25

³⁰ *International Monetary Fund Country Report, Bangladesh: Interim Poverty Reduction Strategy Paper*, 2003 p29

The topics covered by speakers at the 2-day Module 1 were: History & culture, Rural Health, Hygiene & Nutrition, Rural Building: Soil, Material & Technology, Women & children, Living minimally, Rural Muktiuddho (1971 War of Liberation), Agriculture & Economy, Community Service & Volunteerism, Media and Rural Development, Architecture, Rural Arts & Crafts, Natural Calamity & Rural Areas, and GERAMfERA. Also included were: opening, song & dance, commitment, certificates and closing.

The topics covered by speakers at the daylong Module 2 were: History, Culture & Religion; Agriculture, Forests & Environment; Rural Planning & Building: type, material & technology; Role of family and women; ICT; GERAMfERA; Health & Hygiene and Public Health; Rural Architecture; Youth involvement in development; and volunteerism. Also included were: opening, commitment, certificates and closing.



Figure 7a Urban participants of Pilot Module 1 (Urban-Rural Architectural Linkage) at Dhaka (L), and **Figure 7b** a lady participant giving her views at the Pilot Module 2 (Rural Enquiry into Architecture & Living) Seminar at Sutiakati. Photo Nizam

Module 3 turned out to be the most difficult. It was the consensus at Module 1 and 2 that we would design, build, and transfer a building for community-use to an organisation working for public welfare. Funding would be shared by GERAMfERA and the recipient establishment.

The major hurdles were sourcing the GERAMfERA fund, and selecting a suitable partner organisation having a land, willing to accommodate the GERAMfERA design and share the costs.

PILOT MODULE 3: THE PILOT PROJECT

It took almost six months of searching to pinpoint a patch of land (21x24m) measuring 12.5 decimals (504m²) belonging to Bangladesh Scouts Swarupkati (Nesarabad) Upazilla, District Pirojpur on which we jointly decided to erect facilities for Scouting activities and that which could be occasionally rented out for community functions as a source of earning.

Then we concentrated on the design of a Scout building that had a central hall, four patrol rooms, a small library for community use, and services. Some participants of Module 2 took part in the design process. We prepared a drawing for a 'tent' building (160m²) with 33% footprint using local materials (primarily wood) on a land leased by the government to the Scouts; estimated cost of Taka 20 lakh (US\$ 25,000 approximately).

The land and the design in place, the next stage was to obtain the GERAMfERA part of the fund; the Scouts were arranging their share from their resources. After several applications to

potential donors, a new beverage company agreed March 2014 to provide the fund in exchange of naming the new building after their new soft drink “Boom Boom”, a condition that was granted prior acceptance by the Scouts.



Figure 8 Preliminary proposals for Boom Boom Scout Bhaban, Swarupkati, Pirojpur, Bangladesh

“Boom Boom³¹ Scout Bhaban” (Figure 8) will be built hands-on by GERAMfERA participants from both rural and the urban areas. A base camp at the site will accommodate visiting “builders”, however intermittently, who will have the opportunity to lend some hand to the local mason, carpenter, electrician, plumber, and gardener.

CONCLUSION

The conclusion of the pilot project will be able to demonstrate that appropriate research, cooperation, and funding, as well as interaction between architects and the community can result in architecture that can perhaps make a world of difference to both benefactor and the receiver.

**The author is a practising architect at BashaBari Ltd, 332 Elephant Road, Dhaka 1205, Bangladesh.
<drnizam@gmail.com> www.geramfera.org*

³¹ A soft beverage of the sponsoring company