

Decrying Sensible Housing Developments – Recapitulating Incremental, Partially Completed Low-Cost Housing, Egypt; Decades Later.

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Abstract

Housing provision for low income groups has always been among the major challenges and concerns of Egyptian Governments and institutions (central & local) since the early 1950's and till the present. Different strategies and policies were declared, adopted and implemented at large, with varying zeal and returns. Most of the said policies were abruptly abandoned without serious assessment of: the underlying objectives, process and product. Among the most ambitious housing policies adopted by the Ministry of Development & Housing, Egypt; in terms of objectives, implementation and scale was: "the Partially Completed Low Cost Housing Projects for Lower Income Families". The said policy recognized the potentials of the users, and the underlying concept (and products) was welcomed by the executives and politicians, as it enjoyed the image and external appearance of completed projects at its inauguration. The project conception and related prototypes were later undersold and abandoned by the Ministry and affiliated bodies, and scenarios of "Partial Completion" were avoided since. The Challenges of housing the poor and lower income families are still persistent in Egypt, as in most "Developing" nations. This supports the present paper's advocacy and objective recapitulation of the relevance of the conception of "Incremental" development, partial completion and users' deployment in housing developments.

The paper points-out earlier and closely related publications by the authors on the said issues, and comprises five sections; namely: An Introduction - Advocating Incremental Housing Developments - "Partially Completed Low-Cost Housing for Lower income Families, Egypt" Two decades later - Guidelines for Effective Incremental Housing Developments and an Epilogue: The Cost of Ignoring the Obvious: Problem Solving Processes & Planning Rationales in Developing Contexts.

1 Introduction: The Challenge of Housing Lower Income Groups in Developing Contexts – The Egyptian Scene.

Most Developing nations suffer from exploding and hard to harness Housing problems; primarily manifested in a steadily expanding gap between supply and demand in the lower socio-economic sectors of population. The problems are further accentuated by rapidly deteriorating housing stock, high rates of population growth, regional imbalance, urbanization explosion, low productivity, deficient housing & construction industry, inappropriate formal housing policies and inadequate housing and development legislations.

The current inherited housing deficit in the lower incomes sector in Egypt is arguably the sum of: the needed new housing stocks to cover: replacement of the deteriorating, illegal, low-standard stock, and the fresh demand of new comers to the housing market. The said deficit is estimated to total some 3.5 million housing units, Ettouney [1], Rageh [2].

The government, central agencies and the public sector institutions were and still are the sole supplier of low income housing since the mid nineteen fifties and till the present. Their collective contribution covered a humble fraction of the total built housing units during the past five decades; with most of the added stock (70% - 80%) attributed to the informal sector, [1], [2].

The housing problem in Egypt is characterized by a set of inter-related features, Ettouney, Abdel Kader [3], [1], [2]; including:

- An expanding affordability gap; where the completed “low cost” housing units are beyond the abilities of the lower income target groups.
- Exaggerated adopted building & sites standards of the newly completed formal “low-cost” dwellings.
- Casual/inappropriate locations and settings of low income housing projects – mostly located according to land availability, with little if any regard to: users’ needs, and urban activities (residential, community facilities and work-places and networks) integration and interrelations.

Though central and local governments and related agencies can never balance the housing deficit and meet the escalating demand in the lower income housing sector, through their preferred policies of provision of “completed” mass housing projects in newly-developed and existing urban areas.

The calls for coupling housing provision with: enabling prospective users/communities, decentralization and local control, positive community action and participation were hardly perceived and rarely adopted, [1], [2], [3].

2 Advocating Incremental Housing Developments.

In order to develop an effective housing policy for lower income groups, it was essential to review the related previous experiences in order to analyze, assess and build on. Thus extensive research has been undertaken, to compile and critically review local and international studies and applied research in the field. The said research followed the rational steps of the “problem solving” process. The process phases and sequence varies from one research group to the other. Some abridge the process into three main steps, namely: Conception, Implementation and Assessment/Evaluation. Others stretch into seven to nine steps comprising: Problem Identification, Data Collection, Data Analysis, Development of Alternative Solutions, Evaluation & Selection of Proposed Solution, Implementation, Monitoring &

Assessment of Implemented Solution (in order to identify the positive and negative aspects), Feedback and recycle; i.e. repeating the sequence with better: identification and understanding of the problem and means of addressing it. The “continuous” cycle of “Problem Solving” could/should be repeated as long as the problem and challenges persist and proposed policies, plans and actions (to meet it) are applied.

To meet the challenges of formulating “Incremental Housing Development” proposals for the lower income families, Egypt, the authors followed the afore-mentioned “problem solving” sequence; deploying the available wealth of information to cover the first steps. The “formal” housing policies, adopted by the government and related agencies; since the mid nineteen fifties, through the nineteen sixties and seventies were compiled and critically reviewed. Furthermore, the “informal” projects developed by the low income communities, were surveyed and analyzed. The said data and related information was covered in the numerable progress and final reports of the Egyptian New Settlements planning and development studies; within the ambitious national Reconstruction & Development policy initiated in the mid nineteen seventies. Those planning and development reports were the outcome of the comprehensive studies carried-out by joint Egyptian experts and international teams responsible for the preparation of development strategies and plans, including: The New Sadat City [4], The 10th of Ramadan City, The New Ameriyah City [5], The Six of October City [6]. Major joint research projects on housing and context (carried out and completed in the same period) also provided another source of useful data and information; including: the Cairo University MIT research on “the Construction Industry in Egypt” [7], the Abt Associates Inc., Dames and More Inc. and GOHBOR on “The Informal Housing in Egypt” [8]. The review phase also benefited from related published papers by the research team members, as those by; Goethert, R. [9] and Wheaton, W. [10].

The “Analysis” of the compiled data and findings allowed the proposition of alternative policies to address low income family housing. The policies recognized users’ potentials and abilities to complement the government (and related institutions) formal efforts in housing low income groups. Accordingly a policy of “Incremental Development”, embracing the conception of “Partially Completed dwellings”, was formulated and proposed, 1987, Ettouney, Abdel Kader [11]. The “Incremental Development” policy offered minimal housing prototypes comprising; dwellings of various areas (45, 60, 75 and 90 square meters), with a finished external envelope (façades and common/public areas) and unfinished interiors with basic electrical and sanitary installations. The concept aimed at combining; the completed external appearance of apartment buildings and sites, with the unfinished interiors - to be incrementally completed according to the means and needs of the users. The policy fostered the concept of “lowering the cost without lowering the standards”, since the standards are improved within time throughout the lifetime of the dwellings and the project, Abdel Kader, Ettouney [11], [12]. The authors benefited from being members of the research teams that studied earlier housing policies, as well as consultants to the Ministry of Development & New Communities, Egypt, responsible for formulating housing policies proposals. They were assigned to prepare the integrated design documents for “the partially completed dwellings” prototypes, in order to implement the suggested policy, [11], [12], [13].

Public and Private Sector general contractors were commissioned by the Ministry of Development & New Communities to execute the designed prototypes in projects distributed all over the Egyptian Governorates. Contracts for building about quarter a million dwellings in 26 Governorates have been signed in two years (1987 and 1988), [11], [12]. Additional units were contracted in the subsequent years; till 1992. The total number of built units could have reached three quarter of a million dwellings. The massive spreading of the implemented prototypes (footprints) and projects could be checked

through aerial imagery of the layouts provided by Google Earth satellite imaging. Figure 1 shows selected locations in the New Communities, Egypt; where the prototypes were built. A large number of the dwellings were built at the “New Communities”, in the Gt. Cairo Region, including: New Settlement # 1, New Settlement # 3, “Obour” New City, “Sheikh Zayed” and “6 of October” New City. Other units were built in housing projects located in Northern New Communities, Egypt; e.g. New Damietta and “Ameriyah/Bourg El Arab” New City, as well as in many other new and existing settlements. The planned large scale deployment of the “partially completed” prototypes called for further research aiming at appropriating the design of “partially completed” prototypes to fit the various development contexts and related determinants and to address the challenging issues of external outlook and internal organization. Thus a research project was initiated and jointly carried-out by: the FRCU, Cairo University, Egypt, and Florida International University, USA, to address the said issues of fitness between prototypes and contexts; it formulated approaches and presented applications (façade treatments and floor plans) to achieve visual identity, environmental fitness and cater for users needs, [12], [13].

3 Partially Completed Low Cost Housing for Low Income Families, Egypt; Two Decades Later - An Assessment.

More than two decades elapsed since the beginning of the implementation of the “partially completed dwellings” policy and related projects. It is necessary to review and assess the present status of the implemented projects, to complete the cycle of “problem solving”, and to find-out to what extent it accomplished the targeted objectives, and to point out the positive and negative aspects of the policy’s large scale implementation. The Ministry of Development and New Communities - after a change of its top officials in the early nineteen nineties - abandoned its adopted policy (without undertaking: proper assessment of the experience or evaluation of the implemented projects) and shifted to the provision of housing for middle and higher income groups. To pinpoint the relevance of “problem solving” cycles and rationales, the present work continues its discourse by briefly assessing the outcome of the adopted and later-abandoned “incremental development” policy and products. The brief assessment deployed a representative case study - a neighborhood located at “Sheikh Zayed” New Community, Gt. Cairo Region, Fig. 2. – to allow a qualitative investigation of the policy and related projects, as well as users’ participation in the development process.

The selected neighborhood comprises a completed housing project, that was financed by the government and the Ministry of Development through its “Housing and Development Bank”, Egypt. The dwellers/users are paying the dwelling costs by installments, at a low interest rate (not exceeding 6% per annum), for a duration of 40 years.

The study of the sample project addressed the following interrelated questions:

- Did the project reach the target users/socio-income group?
- Did the users/dwellers benefit from the concept of “incremental development” and the gradual internal completion of their dwellings?
- The duration/phase for the internal completion of the dwellings, and
- Did the approach help to maintain and/or upgrade the standards of the project?

As for the first question; over the past two decades there have been changes in the socio-income groups benefiting from the project. The users generally belong to low income group; though they socially belong to different social groups. The inhabitants comprise; laborers and artisans who mostly rented or bought the dwellings from the original owners; as well as highly educated, white collar professionals and

their families. The dwellings are predominantly occupied by single families, though some are shared by groups of individuals (as in the case of laborers and technicians); sharing the rooms and services.

As for the second question addressing the concept of gradual internal finishing, the answer is rather affirmative, (see also Abdel Kader, Ettouney [15]). The dwellers gradually finished their dwellings and beyond. In many cases they interfered with and gradually modified the external elements and details of the facades; closing balconies to acquire more closed spaces and better privacy, changing the colors of the façade areas related to their units, modifying: the details, materials, size and location of windows, and adding air-conditioning units, satellite antennas and advertising signs for rendered services by occupants (general practitioners, lawyers, accountants, etc.).

Regarding the third question, of the time span for the completion of internal finishing; it was found out that the related activities took a relatively long time (starting before moving to the dwelling and continuing intermittently thereafter till the present), with the same (completion/ finishing) action repeated and paid for twice or more, to meet the occupants' changing needs over time.

As for the fourth question regarding the achieved standards; it was clear that the slack/loose development control over users' interference with the external facades negatively affected the visual quality of the apartment buildings and the general outlook of the residential area. The neighborhood became repulsive to some of the earlier residents, belonging to certain social groups (with higher qualifications and white collar professionals), forcing many to leave the project.

The Ministry of Development and New communities, and the related agencies, the Housing & Development Bank and "Sheik Zayed" New City Development Office, with the shift in allocation policy, and provision of housing units to middle and higher income groups, changed the Master plan for the entire settlement, designated whole neighborhoods to private developers to build gated communities and higher incomes resorts, and to help in marketing the new developments it face-lifted the facades of the "partially completed" apartment buildings and upgraded the landscaping and the space-between, Fig. 2. The refurbished, upgraded, (and more expensive) project started to attract new settlers of relatively higher income and social status, than the originally targeted socio-income groups.

In order to effectively delineate, monitor and assess the mechanisms of "gradual development", a matrix table summing-up the stages of development, the phases of development of each stage as well as the actors responsible for development was formulated and developed. The table could be used at the various stages of development, to show the expected or proposed scenario before implementation, and to monitor and assess actions and performance after implementation and during the life-time of the project and components. The matrix table was presented and discussed in an earlier paper, by the authors, [16]. A new version of the matrix is presented in Table 1, allowing the combination of two stages of development, the planned/expected and the post implementation stage (two decades later). The juxtaposition shows that the actual phasing concept is more spread over time than predicted. It also points-out the continuous intervention of the Development Authority (Sheik Zayed New City Development Office) in the development process, in order to control the development and components, and to safe-guard and up-grade the standards of the dwellings, buildings and settings.

4 Guidelines for Effective Incremental Housing Development:

To complete the "Problem Solving" cycle, assessment of the implemented policy and related projects (based on post occupancy evaluation) should follow. Critical assessment is an essential step in the problem solving process and rationales, in order to pinpoint the positive and negative aspects as well as

the emerging potentials of the proposed conceptual framework and the actual experience. This may in turn allow enhancing the merits, compromising the pitfalls and drawbacks and exploiting the promising potentials. This has not been comprehensively undertaken by the responsible governmental organizations; prior to abandoning the implemented policy and products, and proposing new scenarios and conceptual framework for low cost housing (for the low income demand groups). The lack of impartial assessment denied the development and housing authorities the benefits and potential of the concept of “gradual completion” in saving capital investments and scarce resources, and hence allowing more low income families access to decent and affordable dwellings.

The assessment of the implemented policy and products and post occupancy monitoring, together with the findings and propositions of earlier works by the authors in this respect (Ettouney, Abdel Kader [11], [14], [15]); may be rephrased into a set of key guidelines for effective low cost, incremental housing development; namely:

- Acceptance and recognition of the ability of the target users/dwellers to effectively participate in the incremental housing process, through gradual development of their dwellings.
- Gradual housing development is the key for effective use of scarce housing (central & local) funds and resources; as it combines the merits of: less capital investment at the early phases of development, cost-effective partnership with actual users in the: completion, maintenance and upgrading of their habitats.
- Serious, creative and sustainable development control and interactive supervision should be rendered by governmental organizations and development authorities; to monitor and continuously assess development, provide technical support and manage the setting.
- Empowering local communities and civic society’s organizations in the gradual development process as guardians of: standards, environmental quality, collective image and community identity.

5 Epilogue: The Cost of Ignoring the Obvious: Problem Solving Processes and Planning Rationales in Developing Contexts:

Many policies for housing low income demand-groups were adopted and implemented in Egypt, over the past five decades; most (including the presented “partially completed” low cost housing) were abandoned and replaced by new policies and plans, without adequate assessment and critical evaluation. “Problem solving” principles, planning rationales and development processes, invariably call for building on and benefiting from valuable lessons; earlier experience provide. Innovative new policies should always be formulated and developed through the phases and stages of “problem solving process and planning rationales” cycles and sequences. The said cycles are comprehensive, flexible and open ended, comprising; goals and objectives definition, programs delineation, setting features, contextual determinants and resources recognition, analysis and evaluation of earlier experience, developing alternatives (proposals), implementation, and then: monitoring, continuous assessment and feedback. Two elements of the “problem solving” rationales are crucial in securing effective and sustainable policies and plans proposals (in housing developments among others), namely:

- Collecting and documenting (related data and information), analyzing and evaluating earlier experience, adopted policies and products; before the formulation of the new proposals.
- Continuous monitoring and assessment of the implemented policies, plans and products; after implementation.

Ignoring one or both of the seemingly obvious links in the “problem solving and planning rationales” is illogic and hardly justifiable. The obvious resulting costs of: wasting invaluable (time, money and material) resources, repeating mistakes and pitfalls and falling short from achieving reachable objectives; collectively make such negligence a serious decay against sense and sensibility. In turn it justifies the present endeavor and discourse in recalling and representing the seemingly obvious: the validity of “problem solving and planning rationales”, enabling communities and users and “sensible” Incremental Housing development.

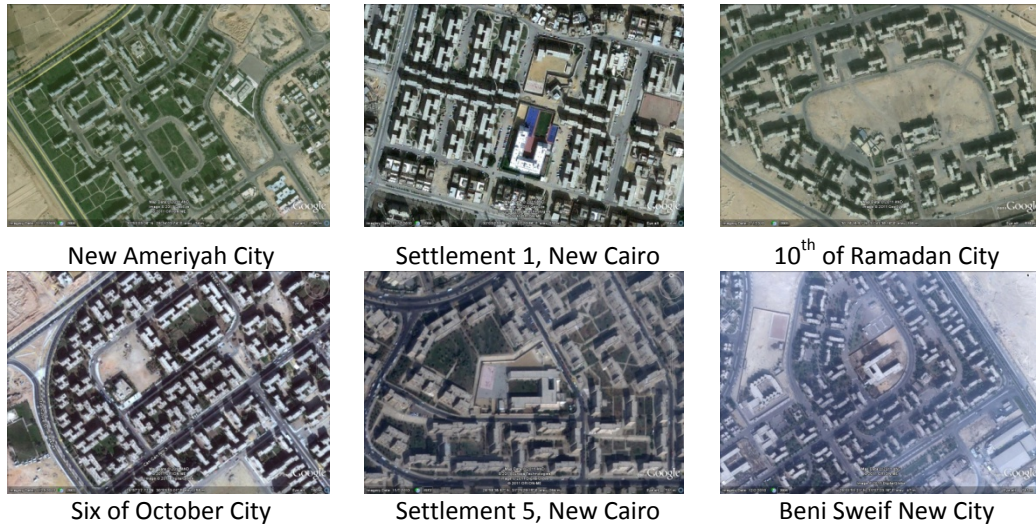


Figure 1: Different neighborhoods in different New Communities using the partially completed low cost housing prototypes.



Figure 2: Sheikh Zayed project before and after upgrading.

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References

- [1] Ettouney, S. M., Physical Aspects of Shelter Provision in Developing Countries – The Gap Between appropriate & practiced Low Income Housing developments, with Special reference to Egypt, ICTR, UNESCO, IAHS, London, England, (September 1987).
- [2] Rageh, A., “*ElOmran ElMisry*” *Egyptian Urbanism*, Egypt 2020, Third World forum, Academic Bookshop Press, Cairo, Egypt, Volume 1., (2007) -(Arabic).
- [3] Ettouney, S.M. and Abdel-Kader, Nasamat, The Egyptian New Settlements, A Critical Review with Reference to Adopted Housing Policies, Open House International, CARDO, New Castle Upon Tyne, England, (June 1989).
- [4] The Planning of Sadat City, Final Report: *The Plan & Elements of the Plan*, Sabbour, David Crane & Partners, Marcel Breuer & Associates et al., Ministry of Development, Egypt, (Sept. 1977-Oct. 1981).
- [5] New Ameriyah City Master Plan, *Main Report & Technical Report*, Hassan Ismail & Partners, ILACO & CEAT, Ministry of Development and New communities, Egypt (Oct. 1978).
- [6] Six of October City, Master Plan, Final Report, *Detailed and Implementation Plans*, General Organization for Physical Planning, Ministry of Development, Egypt (Nov. 1980), (in Arabic).
- [7] Cairo University/MIT, Technological Planning Program, *The Housing and Construction Industry in Egypt*, Interim report 1978, TAP Report.
- [8] General Organization of Housing Building and Planning Research (GOHBPR), Abt. Associates Inc., Dames and Moore Associates Inc., *Informal Housing in Egypt*, Egypt, 1982.
- [9] Goethert, R., *Some Comments and Conclusions from Experiences in Latin America*, Seminar Proceedings, Core Housing & Site and Services Projects for Low Income Groups, Cairo University/ MIT, Technological Planning Program, p. 51, January 29-30, 1979, TAP Report 76-6.
- [10] Wheaton,, W.C., *Economic Evaluation of Sites and Services Approach*, Seminar Proceedings, Core Housing & Site and Services Projects for Low Income Groups, Cairo University/ MIT, Technological Planning Program, p. 46, January 29-30, 1979, TAP Report 76-6.
- [11] Ettouney, S.M. and Abdel-Kader, Nasamat - *Partially Completed Low Cost Housing in Egypt, an Assessment*, International Journal of Housing Science and its Application, Vol. 15, No. 2, (1991), pp. 91-104.

- [12] Florida International University, FRCU Cairo University, *Formal Low cost Housing Prototypes, Egypt, Monitoring, Assessment and Development*, Joint Research Project, Final Report, First Phase, 1991.
- [13] Florida International University, FRCU Cairo University, *Formal Low cost Housing Prototypes, Egypt, Monitoring, Assessment and Development*, Joint Research Project, Final Report, Second Phase, 1992.
- [14] Ettouney, S.M. and Abdel-Kader, Nasamat, *Post Modern Walk-Ups, On the Transformation of an Ailing Conception – with Reference to Housing in Development Contexts*, International Journal of Housing Science and its Application, Vol. 21, No. 1, (1997), pp. 11-24.
- [15] Ettouney, S.M. and Abdel-Kader, Nasamat, *Users' Participation in Low Cost Housing Projects*, Post Occupancy Evaluation XXXI IAHS 31, World Congress on Housing, Housing, Process & Product, June 23-27, 2003, Montreal, Canada.
- [16] Ettouney, S.M. and Abdel-Kader, Nasamat, *Incremental Housing Development 2010: Lowering the Cost, Lowering-not the Standards – a Conceptual Framework*, International Journal of Housing Science and its Application, Vol. 35, No. 4, (2011), pp. 219-231.