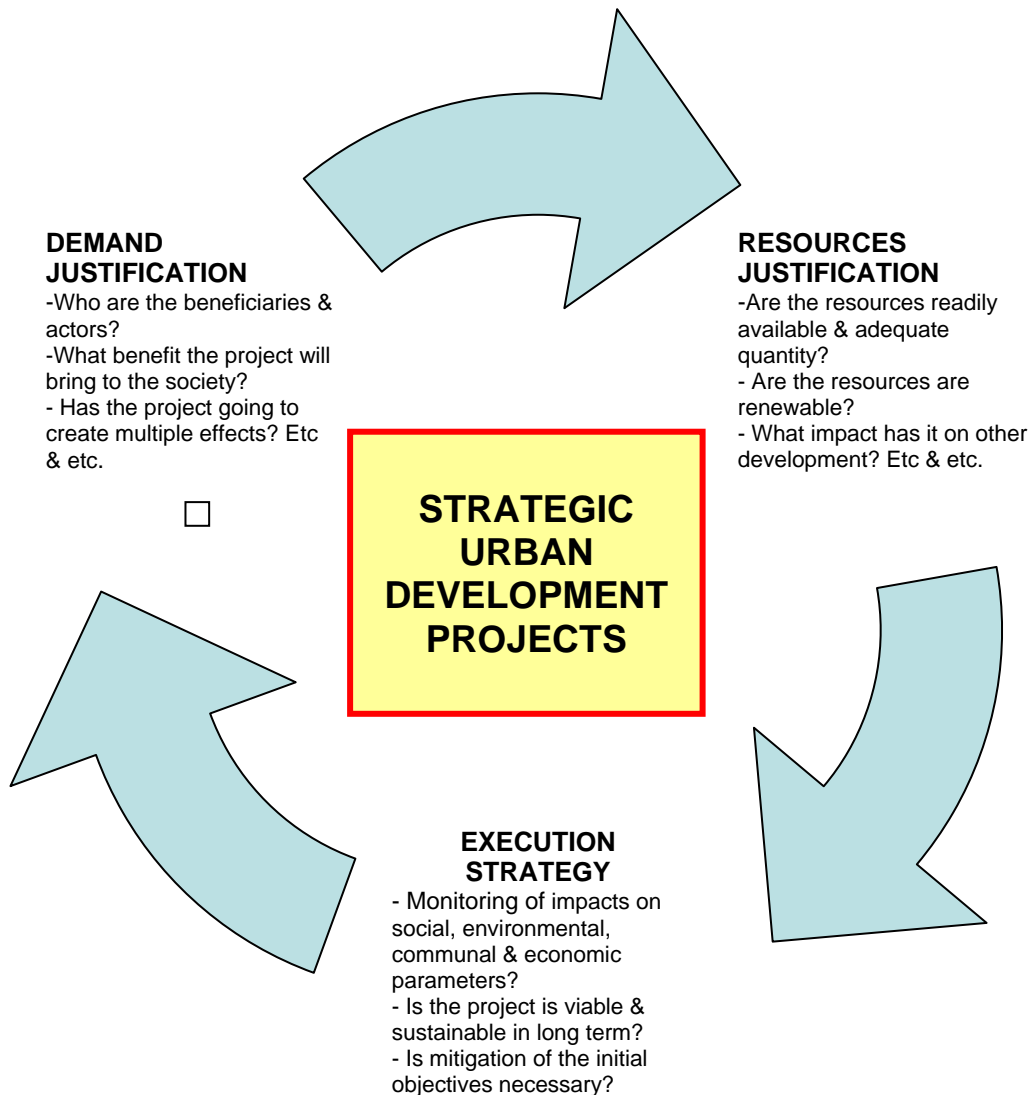


NEW METHODOLOGIES FOR VISIONING & DIMENSIONING TODAY'S URBAN DEVELOPMENT PROJECTS

Introduction:

To-day's urban development strategy is radically different from that of the of last century's conception. The planning ideas, particularly those have been practiced during 2/3rd of the last century, were basically limited to prepare the land use and infrastructure plans conceived by the engineers, architects or planners following their own ideas and visions. Working on a multi-disciplinary platform and particularly with the different stakeholders, citizens and other urban actors were not a common practice. There existed no consideration for consultation with the public or beneficiaries, resources or impact analysis (social or environmental), cultural diversities and especially integration of all actors living within a community. It was essentially oriented to the policy of demand driven and not on the consideration of resources, community capacity or environmental based. As a result, most of our urban development projects have become the stories of failure rather than success. Meanwhile, during the last decade, the tsunami of globalization associated with fast progress in ICT sector has brought unprecedented and profound changes in the distribution pattern of economic activities and population and the structure of the contemporary urban society. Under this situation, many old visions and conceptions in urban development are no more valid. Learning from those lessons, the strategy of urban development today, particularly related to the decision of **strategic urban projects**, has taken a new approach. It can be said that today's urban development policy is essentially based upon the trilogy of (1) **Justified evaluation and decision on Demand**, (2) **visioning of Resources capacities to meet the demand** and (3) **definition of execution strategy respecting the social imperatives and environmental sustainability**.



The new approach:

The introduction of social imperatives, resources capacity and environmental mainstreaming in the formulation of strategic urban projects constitute the root of all development strategies, in other words **sustainable development** conditions. They are in fact, the most important changes that differs today's planning approaches from those of the last century's. However, sustainable development strategy demands a **balanced co-relation** between each tenets of this trilogy. Therefore, the **strategic urban development projects** must satisfy four essential criteria, namely, (i) the development demand must be **justified and appropriate** in terms of the **strategic needs** of the **community**, (ii) the product aimed for must be **compatible** or **balanced** with available **resources**, (iii) it will produce **non-recyclable wastes** within the management capacity of the community and especially with **no risk** (compatibility) to the local **environmental ecology** and (iv) the **product** must be maintainable within the means of the **community capacity** and its **institutional structure** (governance).

These procedures need to be worked out, throughout the project execution cycle, under a constant monitoring and evaluation to ascertain their validity in terms of the project objectives. This interactive analysis is a key action for the success of the project.

Therefore, today's strategic urban development projects demand a **wider visioning and understanding** of the **systemic relations** of all the urban, social and environmental parameters and a **multi-spectral approach** (inter-disciplinary and transversal) both at the conceptual as well as at execution level of the project. Moreover, the operational procedure should be strengthened by a constant monitoring system during the implementation period of the project for evaluating its **impact** with the social, economical and environmental or other relevant parameters so as to adjust various inputs and actions accordingly. From these point of views, all the strategic urban projects would meet the four priority considerations, namely, they should be **(i) socially demanded and sustainable (acceptable), (ii) environmentally compatible, (iii) economically viable with the community resources and (iv) operationally governable** (supported by appropriate institutional structure and legal instruments).

Behind all project preparation procedures, an increasing importance is now being given on the **maximum participation** of the communities or the beneficiaries' right from the **draft conception or the presentation of the project**. To meet this requirement, we would need to set up a platform of **interactive (two-way) participatory process** from the very beginning of the project conception. The aim of this action is to develop a forum of **responsive tasks distribution** amongst the executing authorities, the target population and other stakeholders so that a **participatory and co-productive system of project execution** methodology can be set up. The objective of this action is to ensure that the project conception, its execution and its benefits can be shared appropriately both by the executing authorities as well as the beneficiary parties in order to develop a sense of **community ownership** of the project by all involved actors. Such partnership is the keystone for the **sustainability of the developed products**. In this respect, since 2000 more and more European Directives on the urban development strategies have been prepared which are being adopted in the national planning laws within the EC member states and even elsewhere in some of the advanced developing countries (Singapore, Brazil, India, etc.)

Why co-productive actions are necessary for the strategic urban development?

As the human behavior and its activities is rapidly changing and mutating with his changing environment (most importantly social, economical & spatial) since the 2nd half of the last century (after the world war),so the planning concept and approaches. Today's planning concept and methodologies of urban development projects have been confronted with **increasing paucity** of available resources, particularly the non-renewable ones, **increasing poverty situation** by pushing up the **threshold of vulnerability or critical living conditions** of a greater number of population affecting seriously the **social harmony, uncontrolled globalization** and the adverse impacts on our environmental systems by demand driven development activities continuously degrading our livability condition.

The new planning concept has now becoming more and more **resources and people (social) oriented** as well as respecting environmental imperatives at all level of project execution. The main objective of this new visioning is to render the development projects sustainable socially, economically and environmentally. The planners, developers and policy makers are becoming more and more aware of the **integrated aspect of urban and social parameters as well as the systemic relations** between the development, resources consumption, environmental degradation, public health condition and social welfare. We are also aware that any unbalance between these parameters will lead into **disaster situation**; it is only the question of time? We are also now aware that each stakeholder, individually or collectively, has a role to play (directly or indirectly) in the formulation and execution of strategic development projects affecting the future of our society and the living condition of our future generation. The executing authorities and agencies of development projects are becoming **more and more legally accountable** for

the consequences of the projects to life, society and environment. Therefore, **participation, cooperation, coordination, resources and tasks sharing** are some of the key actions for the **visioning and dimensioning** of the strategic urban development projects. Strategic urban development projects are therefore no more the affairs of the governmental authorities or the executing agencies only but demands a strong partnership and active participatory action from the part of all the urban, social and economic actors, community representatives and especially of women (as they are in fact the real builder of the future society).

What tools are necessary to make a co-productive approach for strategic development projects?

First of all, the strategic urban development projects are essentially oriented to the improvement of **social and quality of life**. Therefore, the first task is to develop a **framework of action** by which we can get involved the right partners and beneficiaries as well as social and financial stakeholders (directly or indirectly involved) right from the beginning or upstream level (the conceptual stage) of the project.

Why this is essentially required? It is because of the fact that - it is the local or regional population who will be living within the project area and its hinterland as well as their future generations will be going to bear the consequences of the project impact in long term and not the executing authorities of the project. More over, it has been observed very often, that the local population is more aware of the local conditions and their needs rather than the planning experts who are quite often not the resident of the concerned community.

On the other hand, the local communities do not always have adequate access to many vital and scientific data and appropriate information on resources, environmental conditions or other important parameters having strong bearing on the decision making factors. Therefore, **transparency of data** and their **easy accessibility** to all beneficiaries is one of the important steps to be undertaken from the very beginning of the project formulation process in order to usher a fruitful participation and a **co-productive approach to develop useful dialogues and partnership actions**.

Secondly, an adequate **cartographic** and other documentary representation are necessary in a comprehensive manner for all the natural and built-up elements, local resources together with their state and environmental conditions, etc., for presenting a better visualization of all constraints and opportunities for the participant public and stakeholders. It is better that they should be presented on a GIS base for preparing **interactive and simulated scenarios** to aid the local participants in the decision making.

Thirdly, an exhaustive EIA report needs to be prepared involving public authorities, citizens' representatives and stakeholders. This EIA report should include all mitigation possibilities, conservation necessities and potential risk situation vis-à-vis to the project implementation. This report will guide the decision makers aware of the impact consequences and hence to introduce the appropriate modifications both to the project programme and its dimension.

Fourthly, together with the EIA report an affinity matrix of activities (degree of complementarities between different activities) needs to set up in order to develop the appropriate land use plan based on their environmental performance and security criteria and the localisation of different polluting activities to avoid risk situation and to reduce polluting sources (agents). Such a land use plan will guide the development of appropriate infrastructure networks and road hierarchy **helping to improve better and safe mobility** as well as **less pollution** to the air and water.

Fifthly, a full economic analysis on the basis of **cost-effective performances** (direct, indirect, shadow cost and long term impact cost) is to be performed so that the project would not be a burden to the municipal finances and the tax payers but will create a **proactive medium** of sustainable development with **improved investment opportunities**. Unless such a co-productive approach is developed based on the **performance criteria** and functional requirements of the different proposed activities are defined the strategic development project will sooner or later become sources of risk situations (environmental, water resources, air pollution, public health and even flood disaster).

To perform all these activities, a **strong participative and co productive action** is necessary if we want to achieve a sustainable urban project. Most of the strategic urban development projects have failed to achieve their objectives because of the reason that there is an **inadequate contact and effective participation** from the part of the beneficiaries and other stakeholders from the upstream level of project formulation unto its execution period. Over dimensioning of the project in terms of the economic and the management capacity of the community is also responsible for the unsustainable condition of the products.

Review of some case studies in strategic urban development projects:

1. Application of strategic development plans in urban renovation; case study - ZAC Didot, 14th arrondissement, Paris, France

The comprehensive urban renewal scheme (ZAC) in the 14th quarter in Paris is oriented to the creation of social housing on the disused land of RATP. The project dates back to 1995. The proposal has been reviewed several times by the municipality without ever reaching a consensus. The fact is that the proposal has been prepared solely by an officially appointed planner-architect and never with the active participation with the local people. After the introduction of the new town-planning laws for the big cities of France, PLU (local area urban plan) and SRU (solidarity action in urban renovation), which calls for the obligation of public consultation, a new plan has although been finally adopted but has failed severely to attain the desired objectives. The reasons are as follows:

- i) The public consultations were invited on a plan already prepared by the municipality and limited only to receive the views of the local citizens on the plan and not to debate with them on the appropriateness of the plan in terms of local demand.
- ii) The housings that are realized were allocated mostly to the population not belonging locally. As a result, a sort of social conflict is gaining the ground with the new population and the local ones.
- iii) The plan devoid of many essential public facilities direly needed in the locality for achieving a better quality of life (parks, children's play ground, maternal school, etc.). This leads to further degradation of the quality of local livability condition.
- iv) The overall plan has not been conceived in a neighborhood concept. As a consequence, roads and open spaces become a sort of no-man's land frequented by the delinquent people coming from other areas and through traffic. Even the underground parking meant for the local people remain almost empty in spite of the strong demand for this facility in the locality for security reason. As a result the overall security situation of the area is degrading.
- iv) Little study has been made with the deserving road network (city traffic department has not been consulted during the elaboration process). As a consequence, increasing population concentration is creating now constant road blockage.

v) Increasing traffic concentration within the locality has accelerated the insecurity condition of the school going children within the locality, especially the handicapped one (there are 2 schools for them). There is also a substantial increase in respiratory diseases, particularly among the school going ones.

vi) An existing park has been also renovated with high cost. Little consultation has been made with the local people. The landscape architect was not a local resident. The new ground work completely disturbing the old one has led a wide range of old trees to death, leading a large variety of birds to leave the locality for want of nestling facilities.

vii) The local committee has been consisted of selected persons by the mayor instead of elected one by the citizens. As a result, urban renovation works are decided more or less arbitrarily rather than public consensus as required by the laws.

Lessons learned: The whole situation strongly indicates that the strategic urban projects need a continuous and interactive participation from the beneficiaries and the users and the city authority must provide an appropriate platform and operational support in carrying out the effective dialogues and working sessions with the community and other stakeholders in the preparation and the execution of development plans.

2. Application of strategic development plans for Protection of Historical monument, Taj Mahal, Agra, India.

This world famous monument, the tomb of Mumtaz Mahal, the wife of emperor Shahjahan has been built in the 17th century (1630 – 1652). It has been declared as world heritage monument. It is entirely built with white marble stone and its abundant floral decorations have been executed with semi-precious gem stones. It is located on the side of river Jumna in Agra. This monument can be considered as the raison-d'être of the city of Agra and a substantial part of its economy comes from the millions of national and international tourists visiting this monument each year and activities related to tourism and artisan. Due to uncontrolled development of manufacturing activities of polluting nature as well as tourist hotels and resorts in its vicinity, this precious monument has been threatened to severe degradation. On the other hand, uncontrolled land speculation related to hotels and resorts development, have severely threatened the surrounding green areas as well as the quality of the river water. The local authorities have been reluctant to put a stop to these activities for fear of decreasing the tourists activities. Even a master plan has become ineffective to stop this degradation of the environment of this national and world heritage building.

A group of eminent lawyers, NGOs and environmentalists has launched a law suit against the local authorities to stop all the sources of pollution threatening this monument. After a long legal battle for more than 5 years and awareness building activities, these NGO group have finally gained their cause and the national Supreme Court has given their verdict in favor of the NGOs' claims, directing the local authorities to take necessary actions to stop all pollution making activities around this monument and to assure its protection. Since then, no manufacturing activities of polluting nature has been allowed to install within the protected area of the monument while the existing ones have been directed to be removed, no building installation would be permitted within the protected zone of the monument and no motorized vehicle (except electric powered) can approach within a mile from the monument.

Though these restrictions have apparently saved the monument from the pollution menace but its life is still at stake from the unconscious actions of thousands of tourists. Everyday, tens of thousands of tourists (national and international) who visit this monument, walk on its fragile marble platform and gardens composed of rare plants and trees, touching the intricate marble sculptures and floral design of semi-precious gems stones and even picking them out from the

monument walls for their souvenirs. In this way, they are doing more harm to the monument than the atmospheric pollution!! Therefore, although measures have been taken to save this world heritage building but they are not based on a holistic approach of controlling all negative actions responsible for the deterioration of this monument and assures its efficient protection from degradation. No single authority, composed of the representatives from the department of tourism, archeological & protection of national monuments, local authority, national museum, chamber of commerce & industries, national handicraft board, etc, is holly responsible for the safe guard of this monument. As a consequence, the future of this national treasure is getting bad to worse day by day.

Lessons learned: A strategic development plans should therefore, consist of a holistic approach dealing with the systemic relations of all parameters accounting for the cause and effects conditions instead of being restricted to a limited objective. Although the tourism activities constitute the backbone of the urban economy of the city of Agra but the unconscious and damaging attitude of tourists need to be controlled in conjunction with other measures, namely, pollution control, if this world heritage, the Taj Mahal got to be saved from irreversible degradation in long run. Even at the sacrifice of some amount revenue earnings, no amount of money can be able to built-up a second Taj Mahal.

3. *Application of strategic development plans in urban environmental protection; case study of Colombo environmental protection project (COLEM), Sri Lanka.*

This is a decentralized cooperation project financed by the European Commission under AIDCO program. Partners are the City of Namur (Belgium), Paris and the Municipal Corporation of Colombo (CMC).

The environmental situation of this city, the commercial capital of Sri Lanka, is getting bad to worse every day. The project consist of addressing urban environmental problems related to air and water pollution, improved wastes management, better urban planning, disaster threat management and capacity building. The project life is for 2 years. The project is yet to be finished. Although there is a strong coordination existing between the three partners executing the project but at the local level, coordination between different local authorities as well as economic and civil societies responsible for various actions related to environmental issues is quite weak. As a result, sharing of important data and information communication, tasks and activities are not up to the desired level necessary for developing a common working platform for decision making and attaining the project objectives. More over, there is a serious lack in inter-departmental coordination within the CMC due the absence of an appropriate institutional structure to assure an effective framework of working in an interactive way, particularly concerning the converging objectives and actions falling within the municipal responsibilities. Although, the CMC has wide experience in working with a good number of international partners in urban development sectors but its organizational structure has been little revised since its independence and not adapted to the new paradigm changes in urban development approach, namely, public participation, partnership action, co-productive way of project implementation, linking social dimension with the urban problems, holistic approach to decision making process in urban management, etc.

This lack of inter-departmental exchange and unified action for addressing holistically the environmental problems thwarts all positive approach to redress the problems. Although, there exists a strong consciousness of the problems amongst the municipal officers at the individual level but coordinated action is not taking place for undertaking effective measures due to the absence of an appropriate organizational structure allowing a synergetic approach? Under such a state of decision making background, strategic decision on urban development program can hardly be realized effectively.

Therefore, the primary tasks of the project are:

- (i) To evaluate the dimension of the degradation condition of the parameters of each of the environmental issues.
- (ii) The reasons that hinder the free flow of real time data and information communication at the inter-departmental level as well as with other governmental authorities.
- (iii) Determine the missing links and lacunas within the existing institutional structure for developing holistic action for environmental control and amelioration.
- (iv) Legal instruments including strong awareness building program necessary for developing efficient public-private partnership actions in performing environmental tasks.
- (v) Searching out new avenues and actions for improved municipal finances, private investments to meet the development tasks for enabling better environmental condition of the city.
- (vi) Preparing a modern GIS base for tracking and monitoring efficiently the environmental issues and decisions.
- (vii) Find out more effective approaches allowing public-private participation in executing many environmental related jobs.

The project team has so far realized two public seminars for awareness building and exchange of views in collaboration and in participation with other public authorities, local communities and governmental agencies. It has also prepared a GIS base and completed the training of local personnel. It has established the sequences of tasks to be undertaken at the different departmental level of the CMC. The new institutional structure incorporating an environmental department with close link with other departments of the CMC as well as with other governmental agencies is under preparation in discussion with the CMC personnel and other organizations whose activities having strong bearing on the environmental affairs of the city (water, roads, port, etc). A strong emphasis has been given on this later part as it constitutes the backbone in controlling and managing effectively and holistically the environmental conditions of the city.

Lessons learned: Efficient environmental management for improving the overall livability condition of the city demands a holistic approach and the tasks need to be shared appropriately by the public authorities, citizens and all users of the city life. Is efficient management demands a constant monitoring of environmental parameters and awareness building amongst all the users of city space. The whole action need to be systemized under a common agenda and an official structure strongly reinforced by **appropriate legal and operational instruments** and under shared responsibilities between public, civic and private actors. Therefore, **institutional structure plays a vital role** in establishing co-productive ways to relate visioning and strategic urban projects.

4. Preparation of a strategic development plan related to the development of an industrial township near Dakar, Senegal.

The project has been financed by the Millennium Development Corporation of USA. It consists of creating an industrial development site including a new town for the local, regional as well as for the supporting population and national and foreign investors.

The site to be developed will cover an area of 1200 ha, situated about 30 km of the west of Dakar called Diamniado. Other projects that will also be carried out near the site are the new airport of Dakar, a mineral exporting port, a new university and a governmental complex. The

project operation has been composed of two phases – (i) feasibility studies and (ii) implementation of infrastructure.

For efficient operational purpose, a separate governmental entity has been created represented by the different public agencies and headed by one appointed representative of the President to ensure a one window operation in the matters of decision making.

Apart from the collection of vital information related to physical, geophysical, infrastructural, socio-economical and other environmental data, the project implementation methodologies have been discussed with different partners and fixed up right from the beginning. A committee of local area citizens' representatives under the chairmanship of the local Prefect has been established that includes women's organizations, fishermen, cultivators, orchard owners, etc. so as to create a real time exchange of the opinion, suggestion and wishes of the local inhabitants and economic actors to orient the project output more people oriented and socially accepted. Further to strengthen this liaison, a detailed socio-economic survey has been conducted with the local people to make them aware of the project outputs, its benefits and its impacts. A regular analysis of the results obtained has been conducted and its conclusion has been presented and discussed with the citizen's committee once in a month or as needed to clarify crucial issues.

It has often been observed during the discussion that some of the members of this citizens' committee took initiative to explain issues to their co-members in a better way than the project team members or governmental officials. This active participative attitude has helped the project team to pass the messages more comfortably to the local people and in gaining their confidence in the project outputs even against some of the politically initiated oppositions mounted in the site area.

As an outcome of such meetings, some of the project objectives have been reoriented as well as the extent of the project area but the overall progress of the feasibility study was highly satisfactory and justified demand oriented.

Lesson learned: The success of the strategic development projects depends highly upon their acceptance by the people and other stakeholders. To achieve this, a constructive and continuous exchange of dialogues and views is necessary with the citizens and other local actors to get the project outputs accepted. The most important aspect is that they must be convinced that the proposed outputs are for the benefit of all living in the project area or its impact zone. Working with the local people from the very start of the project conception is an essential task. Once this has been achieved, the other parts of the implementation procedure will follow its course without much constraint and in confidence of the target beneficiaries.

5. Preparation of a strategic action plan for urban poverty reduction in Chittagong city, Bangladesh:

The project was one of the sub-components of a global project which calls for the preparation of the Metropolitan area Master plan, flood action and environmental protection plan of Chittagong city financed by the UNDP and executed under UNCHS (1992 to 1995). The tasks are to develop methodology and recommendations and a working framework for urban poverty reduction. It was one of the first of its kind in urban area.

To fulfill the tasks, collaboration has been made with the Grameen Bank, successfully working in the rural areas of Bangladesh, economic department of the University of Chittagong, local chamber of commerce and industry and other NGOs involved in this field. The primary task was to undertake an intensive survey within the poor and the artisans of the city to determine what amount of minimum capital necessary varying from \$10 to \$100 to start their own enterprise or

self employment as beyond this amount the potential recipients will have difficulty in reimbursing their debt or risk of misuse. Two pilot project sites had been selected where most of the poor population of the city lives.

Following the survey and the analysis of results it has appeared that around 110 types of activities can be created, mostly informal and in service sectors. A good number of public meetings in presence of the representatives of the local authorities, civic institutions, NGOs and commercial organization have been organized for fine tuning and identification of the potential candidates and the donors as well as the activities. The project raised great enthusiasm among the people participated in the meetings. Because, they do not have any access to capital aid from any banking institution and the only source of borrowing the capital was the local money lender charging a very high interest rate. A large number of attendees were women possessing good artisan skill (weaving, embroidering, sewing, etc.) and exploited by others (export industries). Their dream was to educate their children to come out of the miserable life.

Many members of the local chamber of commerce were also enthusiastic of the program and have offered their help both financially as well as channeling the products of the candidates to the potential consumers through their network. Most important was that the Grameen bank representative who was delighted to follow up the project proposal within their national program.

Lesson learned: Strategic development projects need to visualize and targeting the attainable objectives in terms of the means, resources, condition and needs of the beneficiaries. It also needs to evaluate the long term impact and acceptance of the outputs in the society and the beneficiaries as well as real partners. Poverty reduction program is one of the most important tasks and responsibilities of today's society. Poverty saps out all the entrepreneurship of the man, degrades the human dignity, its identity and ultimately social exclusion. It helps to generate crimes and delinquencies in the society. The shadow cost of these effects is very very high to our society. A few dollars of investment amongst the poor has an immense multiplier effects on a human life and in term on the prospect of a achieving a better and just society with solidarity.

Conclusion

In this era of all out globalisation of human activities and movements comforted by the rapid progress of ICT, the world become one village and its dimension has been highly shrunken. This situation has completely changed the classical theories of the importance of spatial networking in economic development and as a result, the prospect of economic development of a nation has not been controlled by the state authorities but the people's adaptability to the new production equipments and the competitive offers of works by the multinational corporate organizations, looking constantly the reduction of the production costs.

Such changes have brought a profound change in the social structure not only national but also global at all levels. A severe competition has been declared at the global level attracting investors free of any protection barrier in trade and commerce under the benediction of the OECD. Many a so called developing country is now standing in the higher level of many industrialized ones (China, India, Brazil, etc.). This situation has highly influenced the need and preferences of individuals and their aspiration of living conditions simultaneously widening the socio-economic gap between the rich and poor. Under such circumstances, all local development actions have been strongly influenced by the people's aspiration and their capacity to support the development cost. Extra territorial demand is also becoming strong in terms of the offer of facilities, especially related to investment environment and quality of life. Investors are searching constantly the most appropriate space for the localization of economic activities followed by new human settlements or modifying the existing one.

Facing this demand, many spatial planning authorities are undertaking rapid development works without really visioning the impact and the long term demand of those developments, without consulting the beneficiaries, stakeholders, social actors and other potential consumers. Such actions can be comparable to high risk investment in a volatile market. During last century's planning activities, ignoring such people oriented planning and participatory approach, planners have created many unsustainable development and even highly risk zones of undetermined impact particularly to the living environment, carrying capacities of local resources and finances, social and cultural integrity and conflicts.

Today, the planning is a multidisciplinary and a holistic approach involving a multitude of urban, environmental, social and economic parameters; all are linked up by an interdependent systemic chain. This represent the **total system** of the space, be it urban, rural or natural. Any intervention to any link of this chain needs to verify its reaction with other links and the total system to avoid any risk situation. **Human activities are most important within this total system as they influence highly the sustainability of this chain.**

It is therefore most important to work with this element (human) prior to propose any strategic development or change within this spatial system to maintain the total system in a sustainable condition. This has obviously calls for participative working procedure for visioning the need of the development and other requirements to make the development sustainable and well integrated within the total system. The tool to attain such objectives is to work in a most cooperative way through useful public participation and multi-spectral approach right from the conceptual visioning of development projects unto execution stage and beyond through active monitoring and mitigating the development process constantly in balance with our environment, life security, social development and cultural integrity.