都市環境整備のための参加型開発手法

Community Action Planning for Urban Environmental Development

Dr.-Ing. Reinhard Goethert
Massachusetts Institute of Technology
The SIGUS GROUP

平成１０年６月

国際協力事業団
国際協力総合研修所

都市環境整備のための参加型開発手法

Community Action Planning
for Urban Environmental Development

Dr.-Ing. Reinhard Goethert
Massachusetts Institute of Technology
The SIGUS GROUP

平成１０年６月

国際協力事業団
国際協力総合研修所

国総研セミナー

テーマ：　"Participatory City Planning in Developing Countries"
「開発途上国における参加型都市計画」

講　師：　Dr.-Ing. Reinhard Goethert（ラインハート・ギョタート）
MIT(Massachusetts Institute of Technology) 建築学部教授
工学博士

日　　時：　平成１０年２月２４日（火）午後１３：３０～１６：００

場　　所：　国際協力事業団　国際協力総合研修所　２階　国際会議場

要　約

本報告書はアメリカ・マサチューセッツ工科大学建築学部・都市建築学科で教鞭をとるラインハート・ギョタート氏が当国際協力総合研修所が主催した国総研セミナー(１９９８年２月２４日開催)において行った講演、「開発途上国における参加型都市計画」の内容を報告書にまとめたものです。

内容は大きく３部に分かれていて、
第１部：参加型開発計画の概要、
第２部：コミュニティ参加によるワーク・ショップの実践、
第３部：MITで行っている研修活動における重点課題
というものです。

第１部では各種援助機関による事業展開に対して、参加型開発の実践とその理論的根拠の変遷、および成功事例といわれる事業におけるプラス・マイナスを見ながら、住民参加問題の背景と課題について概観しています。それを通じて「参加」の形態はどんなものであったかについて、幅広く参加の度合いや参加を招く事業段階の設定などについて考えました。そのために、最も一般的に行われている参加型開発の手法を４つ取り上げ、それぞれの場合について利用のされ方や手法それ自体に固有のメリット・ディメリットについて分析しました。ここでは都市全体の開発戦略と地域社会の要望とをどうつなぐかが問題であり、そのための１つのモデルを提案しています。MITが現在モザンビークで行っているプロジェクトを紹介しながら、この参加型開発手法についての具体的な進め方を題材にして、相互協力の技術を磨き、成果を高める努力として何を行っているか分析しました。

第２部では参加型のワーク・ショップを紹介して、如何にダイナミックな住民参加を促すかを検討しました。実際のワーク・ショップは南アフリカのごく貧しいコミュニティで行われた事例を見ながら、マイクロ・プランニングの手法を紹介しています。どんな準備をし、どこから開始し、どんな手順を踏み、またワーク・ショップを進行させるときの注意事項などについて紹介し、最後には円滑にワーク・ショップを運営する上で必要な留意事項などをまとめました。

第３部では、MITの特別カリキュラム「SIGUS」コースの研修内容を紹介しています。専門スタッフのための「研修員養成プログラム」、学生向けの現場研修

のための「コミュニティ再構築」コース、そしてこれも学生向けの「新人養成」コースなどを検証しながら、研修の目的に合わせたそれぞれのカリキュラムを見ることにしました。

これら一連の参加型都市環境改善計画の手法について、MIT は長い時間をかけて、開発に取り組んできたわけですが、この手法は日本の援助が取り組もうとする参加型開発事業の中でも利用する可能性の高いものが少なくありません。その意味でこの報告書が広く日本の援助関係者の業務に役立つ事を期待しております。

平成１０年６月

国際協力事業団
国際協力総合研修所
国際協力専門員　保科　秀明

COMMUNITY ACTION PLANNING
FOR URBAN ENVIRONMENTAL DEVELOPMENT

PLANNING WITH SUSTAINABILITY

Dr.-Ing. Reinhard Goethert
Massachusetts Institute of Technology
The SIGUS GROUP

Abstract

This paper presents an overview of the author's experience in community action planning in developing countries. It will cover three topic areas: an introduction and perspective on participatory planning, an example of how we undertake community participatory workshops, and the critical issue of training drawing on the experience at MIT.

The first section reviews the background and issues of participation from the perspective of outside development agencies. It looks at the shifts in use and rationale for promotion, and tradeoffs for successful programs. A framework is proposed for positioning the levels and stages of participation to facilitate understanding the wide range of participation forms. The four most prevalent techniques of community participation are presented and their use and inherent tradeoffs are explored. The section concludes by presenting a model for linking community inputs with strategic urban policies. A current project between MIT and Mozambique is used to highlight these links and also brings in the use of interactive technology as means for improving performance and access.

The second section introduces a participatory workshop to give a sense of the

dynamics of the process. An actual workshop in a very low income community in South Africa provides the setting for demonstrating the MicroPlanning approach. Preparing for the workshops, getting started, the key steps and techniques, and some issues of running workshops are briefly reviewed, as well as indicators of success and potential problems.

The third section briefly presents examples of training for participation at the SIGUS program at MIT. A "Training of Trainers" program for professional staff, the "Rebuilding Communities" field workshop for students, and the "New Practitioners" course for students illustrate the different approaches for training. The rationale and goals are discussed for each as well as the training cycle, topics, and outcomes.

CONTENTS:

INTRODUCTION

"Community Action Planning empowers communities to design, implement, and manage their own development programs. Its methods are participatory, community based, problem-driven, fast, and designed to inform policy from the grassroots."

What is 'community action planning?' I will use that terminology to encompass the field of participatory planning, linking users with professionals in active dialogues toward achieving jointly defined goals. The concern is at the community level, not urban policy.

Participatory planning is becoming increasingly important as an element in development. It is unusual if projects to not have some aspect of participation incorporated into its program. This concern with participation of the users is driven by the simple fact that projects have not been very successful, despite increased professional inputs. Outcomes just did not meet goals, sometimes they were outright failures. Sometimes projects were irrelevant: they did not fit with needs of the community and were at best ignored and at worst vandalized. There is no doubt that the mismatch of project with needs, and lack of acceptance of projects by intended benefactors is a waste of scarce resources, not just financial, but also scarce technical and administrative resources. Political 'capital' and goodwill can also be lost which are the most difficult to overcome in the future.

Participation has been viewed in different ways as it has become more used. Initially it as seen as an ideal of way of cost savings, a means toward an end. Participation offered a way toward full cost recovery and affordability by passing on costs to the users. It also was seen as a way to secure agreement by communities,

particularly when projects were controversial. It offered a way to make difficult decisions - a joint agreement is easier to accept than if a decision was imposed. It was rarely seen as a way to develop and empower communities. The ultimate form is where both professionals and community are seen as equal partners with each making a valid contribution to sustainability.

Critics of participation argue that it results in concealed exploitation of labor. Since the 'exploitation' is apparently self-motivated, resistance is not feasible. The exploitation is invisible so that people are unaware of it happening.

The drive for participation is from both ends: from the professional perspective, it is a search for a better way since the lack of clear success by conventional approaches, the loss of confidence in technical solutions alone, and recognition of limited resources by government. Government can work with communities in best deciding how to distribute scarce resources. Communities drive participation by their demand to have a say in projects that affect their lives. They share the loss of confidence in imposed technical decisions with the professionals.

Governments have found that participation works well when there is a need to reach many users, although this is a very low level of involvement. Services can be delivered faster when the wider user group is involved. Negotiation of problematic issues, particularly in reducing and avoiding conflict and in the allocation of resources is another advantage. When governments are weak, bringing in communities in defining and implementing projects is particularly useful, and have found that this is imperative when issues are unclear. In summary, working with communities increases sustainability by lowering waste and better allocation of resources in general.

It works less well for governments in situations where communities are accustomed for government to take the lead. Participation would represent a disruption and challenge, and in many cases implies a lowering of services. In very

technical situations some argue that communities cannot contribute, although it is believed that if the issues are framed well, this would not hold true. Governments definitely should not enter into a participatory relationship when they cannot, or would be unwilling to uphold their contribution.

Tradeoffs in participation may be grouped under additional effort: some argue that it clearly will take more time, although others point out that when considering the entire process, participation actually speeds the process. There will be additional administration, and it will require staff with special skills which are not generally available. Staff often are reluctant and view consulting with communities not professional. Will the cost be higher? It depends if the time proves to be longer, or if in fact it is more effective and shorter. For the community, participation – particularly if it becomes excessive and all-encompassing – requires considerable time and effort. For the low income where multiple jobs are common there may not be an opportunity to participate. For them participation implies a high opportunity cost.

Three things are probably fundamental and needed when undertaking participatory programs: 1) appropriate methods and techniques must be available; 2) staff must be skilled in working with alternative techniques and non-traditional clients, and 3) a culture of community participation helps immeasurably. All three should be present to facilitate the process.

How can understand participation?

When participation is discussed there is considerable variation as to what constitutes participation, and because of this there is often misunderstanding. Essentially participation is the relationship of the community with 'outsiders'.

'Community' has both a spatial and social dimensions. There are various types of communities, some highly organized and cohesive, and others with only a spatial

relationship and no social identity. 'Outsider' is a metaphor for the city via its representatives, the practitioner or professional. This may include the technical staff of municipalities, hired consultants, or NGO representatives. The role of the outsider varies, from active involvement as in the moderation of a workshop, to a passive role when acting as a resource. Outsiders will always be outsiders: they can never fully understand the situation of the community, nor speak on their behalf. However, they do have much to contribute, and the appropriate structure and format of tools and techniques is the link to allow this to occur.

The outside – community relationship has different degrees or levels of involvement, depending on the relative amount of control. Several authors have suggested families of levels but the most quoted are those proposed by Arnstein in a paper of 1969. She argues eight degrees of redistribution of power to communities: manipulation (the lowest, or none), therapy, informing, consultation, placation (tokenism), partnership, delegated power, and citizen control.

In our book, 'Action Planning for Cities', we suggest 5 levels of involvement: none, indirect, consultative, shared control, and full community control.

• None: Here the outsider is solely responsible in all respects, with no involvement of the community. This occurs commonly in circumstances demanding sophisticated technical know-how. These programs that are not essentially site-specific, and others citywide. A city-based sewage treatment plant is one example. Excluding community involvement from projects has a high element of risk in that projects may not fit the needs of the community. However no participation offers a quick response when urgent action is needed.

• Indirect: This is similar to *none* but information is site-specific. The outsider takes full responsibility for project work, and receives information about the local situation from secondary sources: reports, census, etc. The community is essentially treated in

the abstract and does not directly feature. This is possible in areas which are politically stable and where extensive information is available. For example, determining the amount of water used per day for sizing pipes in a network when upgrading a community. Two factors are required for successful Indirect participation: 1) availability of sufficient reliable data; and 2) skill in collecting and analyzing data. Absence of either one makes the indirect approach problematic.

• Consultative: Outsiders build on information directly received from a community. Their role is principally to gather information and decide actions accordingly. There are several forms of consultation, from information gathering and decision making, from large group consultation to individual surveys and interviews. In one form the outsider presents ideas and solicits feedback from a large number of participants, and then bases action on interpreting the information received. This is typical of public assemblies where the intent is mostly to transmit information and little feedback is required. This is customary with large projects which affect a community but are not directly related to it, for example, in the case of a highway that will pass in the vicinity. The structure and techniques of consultation with larger groups become particularly important to achieve maximum participation, ironically the very nature often precludes effective participation. Community surveys and individual interviews are appropriate here. The RPA family of techniques is one of the more effective ways to involve communities as direct participants in the process of data collection because they are low cost, fast, and solicit local insights. Often Consultation has been used as a device to rationalize public actions. Public presentations are so managed as to become self-serving and the event becomes strictly pro forma with feedback unwelcome.

• Shared: At this level the community and outsider interact as far as possible as equals. Each starts with the premise that the other has something to contribute and due deference is given. Both are therefore stakeholders in the project, and this is

considered the most important level for effective community/city interaction. Concerns from the larger strategic level as well as concerns from the local level present valid issues for discussion. The effect of forcing the recognition of different viewpoints could lead to creative solutions which arise outside of customary practice. Four methodologies offer successful techniques for shared interaction: Community Action Planning (or Micro Planning as it is also known), Planning for Real, and ZOPP are all methods that have been successfully applied.

• Full Control: The community dominates and the outside practitioner is a resource. The outsider observes or provides technical help when needed. Properly, this is not shared participation but rather the complete empowerment of the community. Empowerment is one of the often-stated goals of community participation, and this level represents the dream in practice.

In our book we further propose that the various relationship are only valid with regard to the stages of a project or program. Appropriate community participation is not fixed, and in some cases; for example, implementation with heavy machinery, participation would not be feasible. Five stages are identified:

• Initiation: This stage begins the process. Perceived problems, lack of basic needs, deficient services, new policy initiatives are some of the ways the process of participation begins. The basic goals and objectives are defined at this stage, and the general scope is decided. No specific skills are needed to initiate a project.

• Planning: Here the specific parameters are decided. The activities would be defined, the budget determined and agreed, and the resources needed are identified. This is the key stage in a project. Some skill is needed, but good judgement is the priority and technical expertise can be provided as a resource. Techniques of planning are necessary, although they can be quite simple and uncomplicated. The general planning of the implementation stage is also included here.

• Design: The spatial and/or project details are developed at this stage. Often technical expertise is needed at this level.

• Implementation: The project is executed at this stage. Buildings are built, infrastructure is installed, programs are established, and people are trained. Practical management skills are necessary for smooth and timely implementation.

• Maintenance: This is the long-term, on-going repair and upkeep of the agreed project.

A matrix linking the stages of project or program with the levels of participation is suggested to understand the appropriate relationships and to assist in choosing among techniques. It helps to understand where community involvement would be most necessary, or where the community would be better served through other methods, albeit with limited community inputs.

The matrix assumes three underlying premises: 1) Community participation is not taken as an end it itself, but more as a means toward community development. This is not to say that community participation per se is not desirable, but instead should be biased toward tangible outcomes. 2) Both city and community interests are equally legitimate and mutually reinforce each other. 3) Appropriate techniques vary according to the degree – or level – of participation desired or achievable and related to the stages of a project. The modality of interaction is considered the most important.

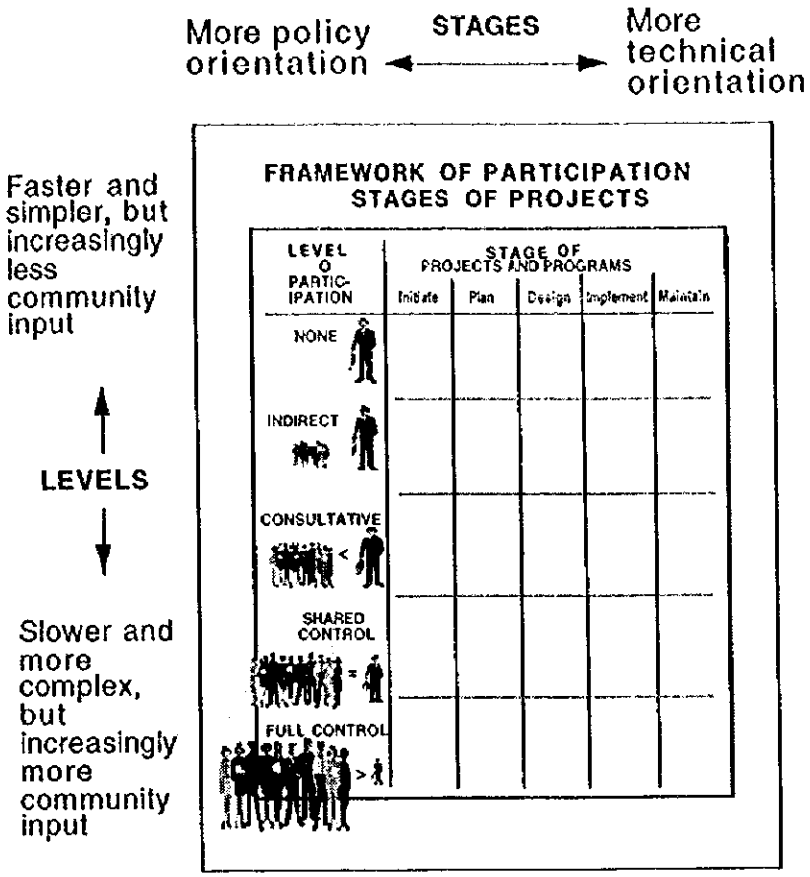


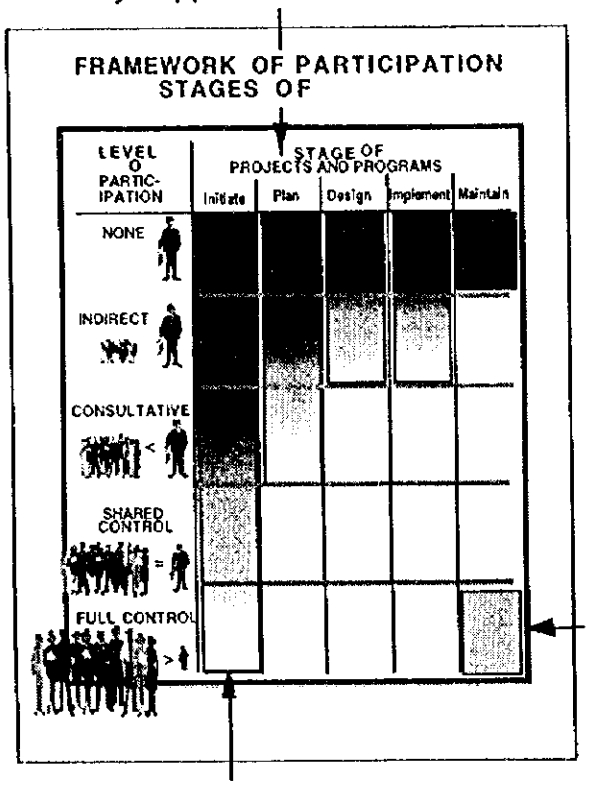
Figure 1:
The Basic Matrix of STAGES and LEVELS of Participation

The matrix can be used to explore appropriate areas of intervention.

Each project or program has its distinctive 'footprint'. A typical project without emphasis on participation takes a 'stair-step' form. The characteristics of this type of project is stereotypically as follows: it could be initiated at all levels and the level of participation declines as one moves on through the stages of project or program. There is widespread conservative reluctance to involve communities in the design and implementation of projects. Communities are seen as a threat to professionals and/or are seen as not being useful, for example, they are seen as having no skills. Participation is also seen as slowing the process, making implementation, budgets, and timetables difficult to meet.

Planning is carried out at several levels: from no/ little participation for technically complicated projects, to consultative for those requiring community support and ratification.

Figure 2:
Participation in a Typical Project



Although municipalities consider maintenance as their domain, communities are still involved, albeit in a non-formal manner, thus lowering the burden on municipalities.

Projects are initiated at all levels by municipalities or as a result of community pressure.

The ideal form of participation takes on a 'bowtie' form in the matrix. The key is shared control in plan-making where each stage of the project involves the community and the city in a relationship which serves their mutual interests best. The bias is on decision-making and delivery of agreed outputs, and participation per se is not the main criteria.

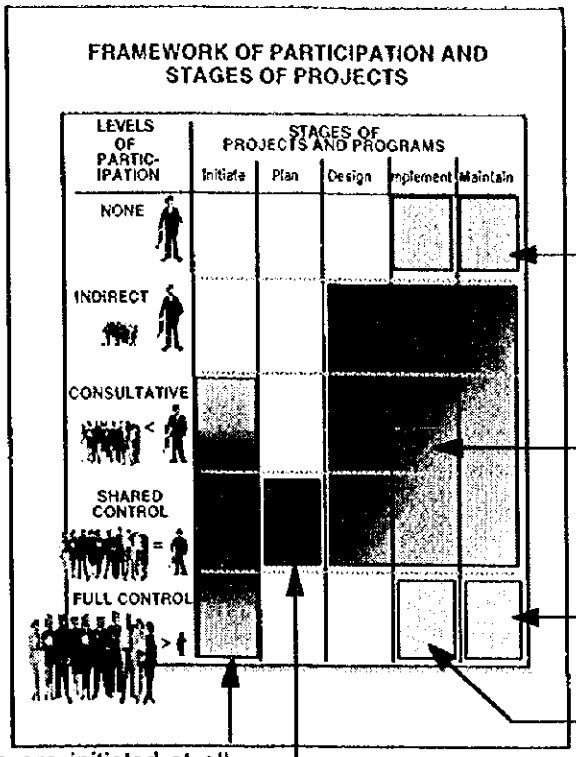


Figure 3:
The Ideal Form of Participation

- Municipalities continue to handle maintenance focused on large-scale, city-wide services and infrastructure
- Involvement of local people offers opportunity for innovation, income generation, and training.
- Communities become formally involved in maintenance.
- Communities assume some of the implementation, either together with municipalities or on their own.
- Projects are initiated at all levels by municipalities or as a result of community pressure. Important is a community role to avoid unneeded or inappropriate projects.
- Shared decisions are the most critical in effective participatory programs.

• The Initiation stage may be at the 'Consultative', 'Shared Control', or 'Full Control' level. The underlying requirement is that the community has a role in all cases, and can take the initiative if needed. It is bottom-up biased since the community would be the direct initiator and recipient of the action.

• The Plan stage is seen as the most crucial for the community and the city to be jointly involved. This is the stage at which key decisions are taken and the full project program is defined. Communities have the choice of further active involvement, for example as in implementation to lower costs, or they may choose to share responsibilities, or even not to participate further. It is important that all vested interests have been considered.

• The Design stage is less crucial for full community involvement. However, it offers

the potential advantage of inducing innovative solutions if methods and ways can be devised to involve and work effectively with communities. The tradeoff is more time intensive preparation. It also requires a change in customary practice and an acceptance that technical knowledge does not assure primacy.

• The Implementation stage is also less critical, but it should not be seen as rationalizing the 'cheap labor' myth. In some cases implementation is better carried out by the city authorities, particularly when large machinery is necessary or because of technical complexity. Implementation may be programmed as income generation and when direct involvement by the community becomes important, or for skills training.

• At the Maintenance stage both city and community are involved. Each participates according to where and what it can best contribute. In some cases communities can provide labor and shift funds saved to other uses. Alternatively, hiring of local people can be a means of putting income into a community. Garbage collection is a larger area activity but also a community activity. Day-to-day maintenance of school buildings can readily be managed by community members, while major repairs often require significant financial resources and technical skills. Clear, definite tasks must be agreed and a realistic assessment of capacity must be made for shared maintenance to be successful.

Four Main Families of Community Action Planning

Reviewing the interactive techniques of participatory planning, four stand out as 'complete'; starting with identification phases on through to programming for implementation. The four are: Community Action Planning, developed by Reinhard Goethert and Nabeel Hamdi from their experience in projects worldwide; Planning For Real, developed by Dr. Tony Gibson of the Neighborhood Initiatives Foundation, England; Goal Oriented Project Planning (ZOPP), championed by the German Agency for

Technical Cooperation; and the Urban Community Assistance Team, developed by the American Institute of Architects. Each of these has codified a disciplinary approach, yet each is still flexible in use and execution. Each is a consistent systematic methodology. These are comprehensive approaches and not just a bundle of techniques which provide provide ways of undertaking specific tasks.

The family of PRA (Participatory Rural Assessment) techniques promoted by Richard Chambers is not considered 'complete', but is a series of very effective ways of using local participants as collectors of data. The information gathered is then analyzed by researchers or others. Many of the PRA techniques are used in the four primary participatory methodology families.

All of the four families share several common characteristics:

• All are problem-driven. The starting point is the identification of problems, not a collection of wishes.

• All offer a ranked order of priorities. One of the key outcomes are the agreed choices of actions to take. This makes CAP an effective tool for city administrations in deciding where to allocation budget resources.

• All are pluralistic. All are based on the inter-play of the divergent stakeholders in a community, ranging from community members themselves to outside professionals to city administrators and technical staff.

• All are transparent and understandable. Each stage is publicly agreed and displayed. There are no hidden or 'behind the curtain' activities.

• All progressively document the process. Each stage is built on and derived from the previous stage, and is openly presented throughout the workshop to facilitate understanding and allow a return to previous issues.

• All use an interactive workshop format. Short, focused workshops are the heart of each.

• All focus on implementation. The end result of successful community planning is programming which leads to concrete achievements.

COMMUNITY ACTION PLANNING (CAP) was initially developed in Sri Lanka by Goethert and Hamdi in their work with UNICEF and the National Housing Development Authority. The book "Making MicroPlans" (the initial name of CAP) by Goethert and Hamdi documents the basic technique, which was subsequently expanded in their book "Action Planning for Cities" (1997). Currently wall charts and guidebooks are available to assist in learning the approach. CAP is characterized by small groups of mixed residents, government staff and interested outsiders, working over a 2-4 day period. Simple charts are filled in by each group and form the method of structuring inputs and documentation. The workshops are easy to set-up and the costs are minimal. Subsequent to the development of the methodology in Sri Lanka, the approach has been used by many others worldwide, in Bangladesh, South Africa, Boston (USA), Poland, and it is being used extensively in Central America by the regional version of ILUA. It has not been successful in Boston because of the underlying political commitment required. There local authorities feared that the outcomes would not match official expectations, despite their funding of the preparation of a locally-oriented handbook. The methodology was selected by the World Bank's Economic Development Unit for its municipal programs throughout Latin America and translated into Spanish.

PLANNING FOR REAL was developed in the 1970's by the Neighborhood Initiatives Foundation of England by Dr. Tony Gibson in his work with community groups. The defining characteristic is a model built by community members or children as the mediating vehicle for gathering inputs. Planning for Real is distributed in the form of a 'kit', a small box which contains basic instructions on how to conduct sessions, a sample model, cutout masters for physical items – for example, houses –

and non-physical attributes – for example, problems and opportunities: play areas, high crime areas, etc. Instruction is provided through four 'packs': publicity, suggestions menu, priorities, and follow-up. Each provides props and suggestions with techniques in managing the sessions. The style of the kit is simple and deliberately crude, which makes it accessible and unforbidding to communities. Small cards with issues are placed on the model anonymously, which are subsequently organized, vetted, and prioritized through the use of a 'now, soon, later' technique. Focus is on developing self-reliance in the community through small 'can-do themselves' actions. Planning for Real is increasingly being used throughout the world and the kit has been translated into several languages.

ZOPP (or GOPP when translated into English) stands for Goal Oriented Project Planning, a technique developed by US management thinking and initially adopted by USAID in the 1960's. It is currently championed by the GTZ (German Agency for Technical Cooperation) and used frequently by other European agencies. GTZ often brings a highly trained and paid external consultant to moderate their ZOPPS, and to achieve moderator status a special course must be completed. An elaborate custom-built suitcase is provided to ZOPPs with markers, pins, glue-sticks, varied colored shapes and sizes of paper strips. A typical session is led by a moderator with participants sitting facing large sheets of paper fixed on panels, walls, etc. As participants go through the exercises, the results are affixed to the sheets with pins to allow adjustment and glued permanently at the end of each day. This information is typed at the end of each day and becomes a part of the workshop record. The relatively formal and detailed approach uses a highly structured problem-solving technique, in a rigid sequence of steps. The PPM – project planning matrix – summarizes the results of the workshop and feeds directly into project management and implementation. ZOPP is often a precondition for projects funded by European agencies.

URBAN COMMUNITY ASSISTANCE TEAM is an approach based on R/UDAT (Regional/Urban Design Assistance Team) developed by the American Institute of Architects in 1967. It is known by various names including Action Planning (primarily in England), Community Weekend, Design Day, etc. (The Urban Community Assistance Team is the name I give to the R/UDAT methodology. It is changed since it better expresses the spirit of the approach and avoids confusion with Otto Koenigsberger's use of the term.) The key feature is an invited interdisciplinary team of professionals who address problems at various scales, ranging from city and regional issues down to neighborhoods. The Team together with local supporters then prepares recommendations and development schemes. The Urban Community Assistance Team is touted as an urban management technique where all vested interest groups are invited to participate. Because of the large number of professionals, the cost is relatively high and requires much up-front preparation.

Some Comparisons in Choosing Among Techniques

How does one decide which approach to use? Each has unique characteristics which are appropriate for different situations. Community Action Planning is a quick-entry approach with low costs and works well with communities already organized to some extent. Planning for Real is premised on longer term involvement which strengthens and mobilizes communities. Costs are also low. ZOPP is ideal for seasoned and sophisticated participants in the detailed structuring of projects. Costs and upfront preparation is high. The Urban Community Assistance Team (U/CAT) approach is a short focused in-and-out approach which can be used to mobilize communities. Because of the reliance of outside professionals it offers high visibility. Costs are high and much upfront preparation is required.

The four approaches can be combined into a continuum where each is used to its

best advantage. The U/CAT could be used for the initial entry into a community. Interest would be developed and the community given a push to start activities. Planning for Real could then be used a more deliberate manner to solicit issues from the community through its model approach. Community Action Planning could provide quick definition of priority areas and strategies and options to approach issues. ZOPP could then be used to define the schedule for implementation and the resources (expertise, costs, materials) needed.

Where Do We Stand with Community Participatory Planning?

Despite the strong rhetoric for many years now, the ideal relationship is rarely seen. 'Ideal' is defined as a situation of equal partnership -- neither community nor outsider dominates, but each contributes from their strength and perspective. The use of PRA (participatory rapid/rural appraisal) techniques is increasingly common, with NGO's leading in use. This is very understandable since it fits well within their basic philosophy. Large development agencies embrace participation in planning, but in practice do not give up control. The World Bank and others have long recognized and promoted the benefits of participation, but project definition is still essentially a top-down decision structure. Project officers are still held accountable, and are reluctant to stake their success on the foibles of community participation. Often 'consultative' is featured as satisfying the need for participation. Full acceptance of community involvement implies a fundamental change in attitude: it requires accepting that technocratic professional approaches are not sufficient and thus there is a loss of customary professional control.

Expanding Community Participatory Planning into a Planning Continuum

How can community projects inform city plans? How best to build co-ordinate

among the many local programs, so as to enable cities to allocate resources efficiently and equitably? What roles can communities play at the city level, and what roles can city authorities play at the community level?

In the customary relationship city planning, Master Plan defines programs and projects which are passed down to communities. The process is essentially a 'top-down', professionally biased process. The Master Plan is prepared under expert professional guidance, based on traditional 'data intensive' methods. Professionals collect data about communities and then filter and structure the information for use in the Master Planning process. Using the Master Plan as one input, the city then proceeds to develop and initiate programs and projects for the communities. Although the process is cyclic there is only limited involvement of communities and the cycle flows in one direction. The link is through professionals.

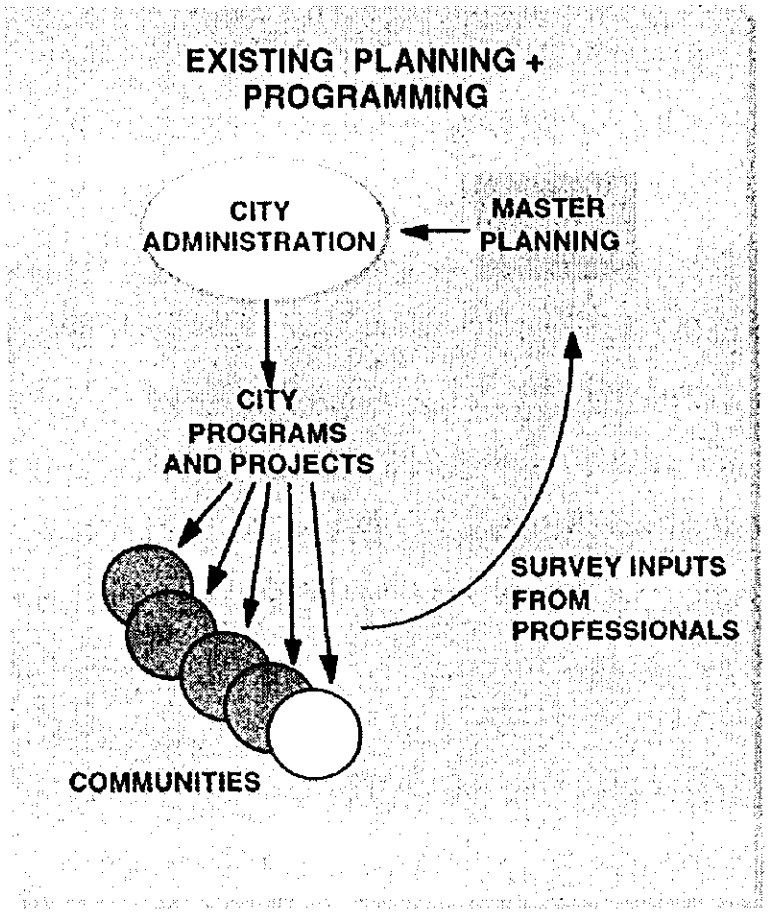


Figure 4:
The customary Relationship

A 'top-down' professionally biased process.

Proposed is a linked planning and programming process which uses a community participatory workshop as the interface between urban-scale concerns and community concerns. The process is essentially an exchange of information, and a forum for developing programs and projects.

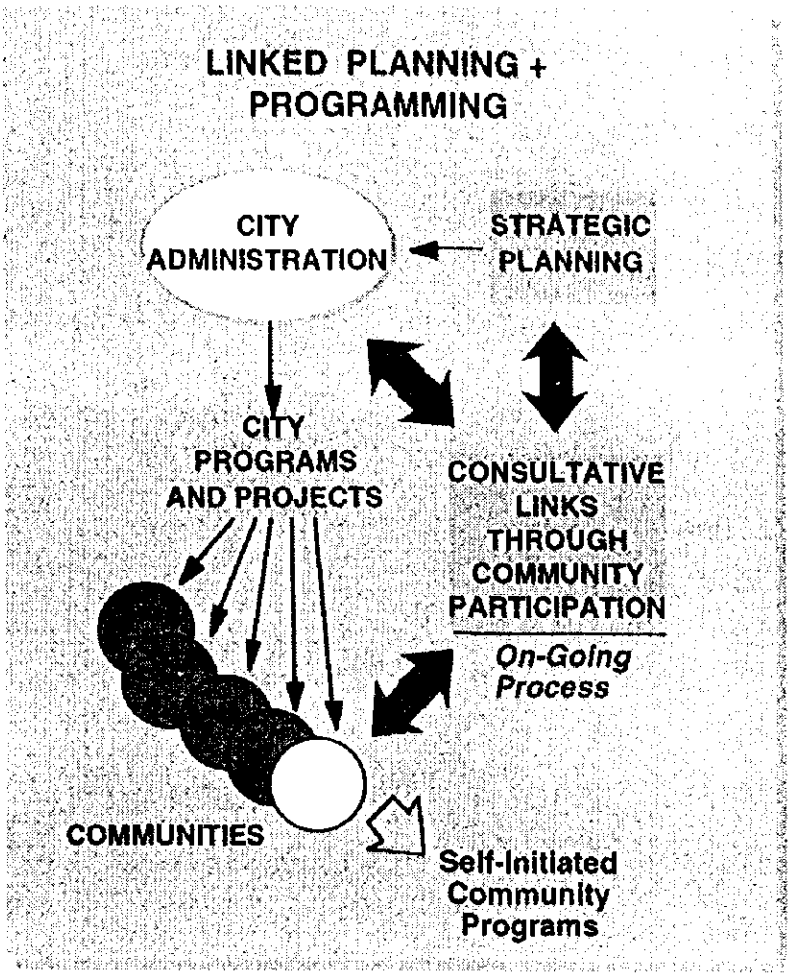


Figure 5:
The Proposed Community Participatory Workshop Continuum

A shared process

In the proposed model there is a changed relationship between the communities and city authorities. The process is still a cycle, but the cycle now flows several ways and encourages activities outside of the cycle itself. Interjected at the crucial juncture of community and city is a participatory relationship which acts as information interchange and defines priorities and options. In effect the professional's role is replaced with a interactive action-planning workshop. Community projects now have

a vehicle to inform investment planning at the urban level and conversely city policies and programs can inform choices made by communities. Transparent and widespread access to information is vital to ensure informed choices with a higher chance of implementation. Communities consider their own capabilities when identifying projects and development options, but they also must be aware of the capacity of the city. The action planning process of deciding priorities and courses of action would allow communities to take this in account, focusing the tradeoff between time, funding, and outside and internal resources. For example communities may choose a faster option, which implies more community contribution and less support from the city, or they may choose a delayed option with little community input and heavy reliance on city provisions but also riskier since situations can change rapidly.

In order to achieve a good community -- city link, there are three areas which need further development. As was seen at the community level, there are several codified methodologies of participatory planning which have been tested extensively and are in widespread use. Although improvements could always be made, the various approaches work well. This area probably needs little further development.

The first area of needed innovation are the links among the communities (1 in Fig. 6). It would seem that communities share many similar problems and could share many solutions. In addition, coordination among the communities increases the political pressure on the city in achieving promised commitments. Methods need to be found that provide a means for communities to keep in touch.

The second area of innovation is development of a channel for information flows between communities and the city (2 in Fig. 6). How, what form, in what way can you feed information up from the communities, and how feed information down from the city level to make it readily accessible? The channel must simple and readily accessible. Are elected representatives an acceptable 'channel'?

The third innovation is to make the planning process receptive to information from the communities (3 in Fig. 6). Feeding information into the planning process is not sufficient by itself: the receivers must be ready, able, and willing to use the information.

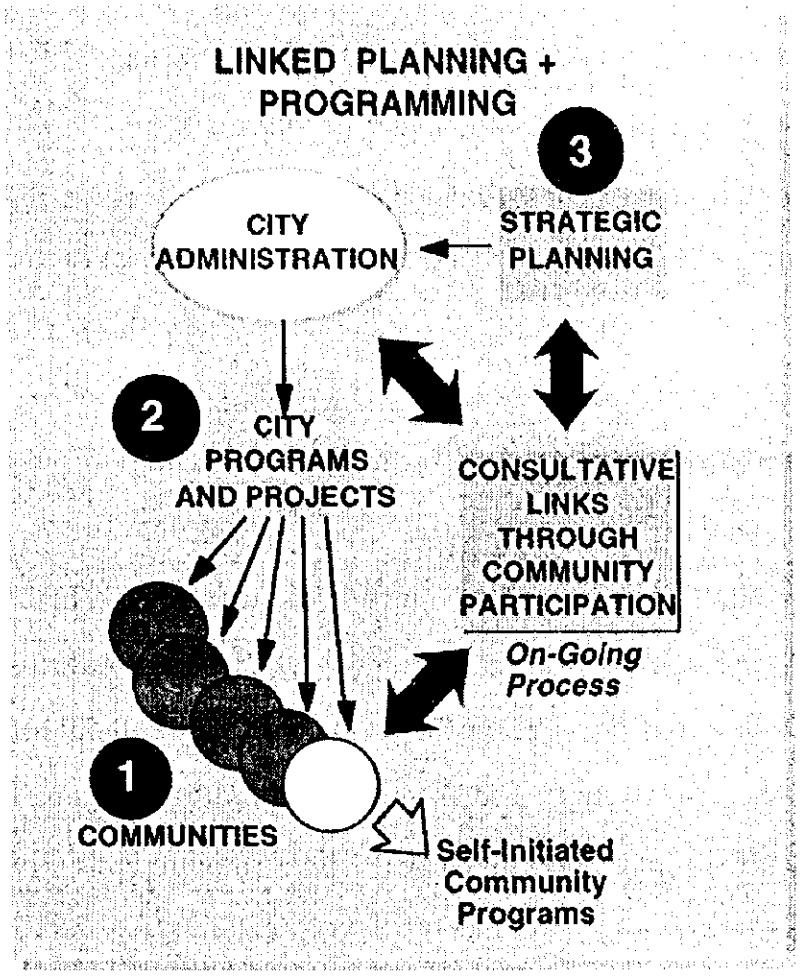


Figure 6:
Iinnovations for a New Planning Continuum

3 Make structural planning receptive to community inputs

2 Develop channels for information flow

1 Develop community-community links

Information flows should also be established between the community-city and the national levels. Community projects should also inform investment planning at national levels fed up through urban channels, and conversely national policies and programs should inform choices made by communities.

A project just being starting targets the three areas of innovations in community-based planning in the context of 'distance learning' opportunities in

Mozambique. The project is a joint effort of the SIGUS group at MIT, the Eduardo Mondlane University (UEM), Maputo, Mozambique, various ministries of the government, and the World Bank Resident office. The initial activities focused on developing communication links among the three main partners: Cambridge: MIT, Washington, D.C.: World Bank, and Maputo: University and Resident Advisor. A series of interactive video conferencing sessions started the dialogue and exchange of information. An internet site was established for supplementary information dissemination, and a second site was used for more active bulletin board discussions. Strategies are being explored for using field-based interactive-video in promoting cross community links.

There are several issues that may prove to be problematic at the city level and should be considered in an community participatory planning process which links upward:

• The sudden demands imposed on city services may prove to be unmanageable as the priority projects filter up from the communities. In cities with already deficient and stretched administrative capacities would projects prove to be impossible to implement resulting in a loss of credibility? In one sense the work of the city is simplified in that choices are narrowed already at the community level and less political maneuvering need take place. In many cases projects can be combined into broader city-sector programs. For example, a water supply improvement program could be implemented for larger areas of the city if deficient water supply repeatly arises in the communities.

• Cities must rethink the role of the institution(s) which become involved in participatory planning. Are the institutions seen as primarily a clearing-house for passing on information, or should they be 'mega-agencies' with added implementation responsibilities?

• Does the model encourage counterproductive competition among communities? This

already seems the prevailing situation and decisions are made on the basis of political access and the degree of community organization. However, using a city-wide process defuses the politics and encourages the spread of programs more equitably, and it becomes more difficult to show favoritism. And again, projects can be combined into programs reaching more communities. A city would need to make explicit the criteria for decisions, agreed with the communities. For example, communities who put more of their own resources into a project could receive higher priority.

• Would the communities be too involved in their own struggles to participate effectively? The workshop format requires little time, but follow-up pressure on the city would require more involvement which may not be forthcoming.

An Innovative Technique: The Bertaud Computer Model Revisited

In the early 1970's, Alain Bertaud developed a model to simulate a project and quickly show the implications of infrastructure standards, financing options, and project layout. The model was developed for the programming of a project during the period when site and services projects were just being developed by the World Bank and others. It offered an analytical tool in tackling the dilemma of making a project affordable to families while at the same time recovering costs for the project developers. In the model one can quickly test alternatives of land use patterns, pricing options and family contributions, achieving a better balance among affordability, cost recovery and the physical product.

The model is driven by a few basic formulas which were adapted to the various computers, initially for sophisticated hand-held calculators (for example the TI 59, HP 67 and 97 series, the HP41, the Sharp 1250A) and then for the IBM PC and Apple II in VisiCalc and later in Excel and Lotus spread-sheet format, which are still applicable today. Subsequent improvement in the model in 1982 focused on the design of a

detailed site plan driven by the parameters of the initial affordability criteria. This became known as 'Code 80' or 'Code PC' but is characterized by some as not being particularly 'user-friendly'.

To start the model, basic information needs to be input, for example, percent of park area, standard of infrastructure, street width, square meter cost of house construction, family income, financing terms (year, downpayment, percent) and so on. Density, plot size, capitalized value from each family are calculated from the initial inputs. Once the data is in, the model is cyclic; i.e., given a desired lot size, then what would the income need to be? Or, given an income, what standard of services could be provided? Any number of permutations can rapidly be explored, on the spot. The model does not give 'correct' solutions, but only determines outcome given a certain set of parameters.

The model never became as widely used as initially thought, although it was applied in the development of projects in Thailand, Indonesia, Sri Lanka, India, Latin America and continues to be used sporadically. The shift away from site and services projects by development agencies, the relatively simple but still necessary data collection, the latent fear of technology, the mistrust of 'manufactured' data, the 'mystique' of computers, perhaps all contributed to the lack of its widespread adaptation.

Early on it was recognized that the model may be an effective tool to facilitate dialogue. In the World Bank technical report describing the model in detail, it states on the first line: " ...a tool for technicians, administrators and policymakers..." It also notes that it may be useful for "...user groups seeking to identify real possibilities.." To quote from Bertaud himself, the model "helps to improve the dialogue among planners, engineers, financiers and other technical staff from the beginning to the end of the planning process, avoiding the rigid and inflexible project design schedule" and "to

improve conditions for community participation..." Dialogue was not seen as involving the users, but extending only to professionals. This 'professionals-only' dialogue is no longer sufficient, if it ever was, and one wonders if now it can be expanded in facilitating community-based participatory planning, particularly using the hand-held computer versions. There is little reason why community representatives could not be added to the list of users as Bertaud outlined. Or, better, the model could be the basis in community workshops for defining options, and professionals could be invited. In other words, the model could be driven by community participants with professionals providing a resource, instead of professionals using the model with additional community inputs. In community workshops one of the issues is choosing among alternatives. Knowing cost tradeoffs make this decision-making more relevant and more likely that it could be implemented.

I have used the hand-held version in classes at MIT in role-playing situations, with students acting as planners, architects, financiers, social workers, engineers and community representatives. Each receives a 'script' which includes basic cost data and standards, and the background of their character. These sessions mimic real-life community situations, and provide an interactive format for understanding project design when involving communities. The model itself is of secondary importance, for the point of the class exercises is to understand the interactive dynamics among the different actors.

In summary, the hand-held computer versions offer a new life for the Bertaud model with a different set of users. It now becomes the neutral medium for balancing the varied interests in community development. It uses a similar pedagogic techniques as in Planning for Real, where the model becomes the focus around which issues are debated.

HOW DO WE DO COMMUNITY ACTION PLANNING WORKSHOPS?

This section will highlight a recent workshop in South Africa as an example of the Community Action Planning methodology. The setting will be briefly presented, the structure outlined, and some of the issues arose will be briefly discussed.

The workshop took place in the agricultural town of Schweizer-Reneke, North-Western Province. Typical of many South African towns, its broader municipal area accommodates a population of 145,000 segregated into four distinct ethnic neighborhoods. The town itself accommodates about 8% while the district of Ipelegeng – the site of the workshop – represents 80%. Housing in Ipelegeng is largely built through self-help, mostly of corrugated tin sheeting and recycled components. The area is largely deficient in basic services. Electricity is generally available, but water is generally provided through standpipes and about 75% use bucket latrines. Malnutrition, dehydration and diarrheic diseases are common. A small kindergarten provides day care, there is a small community hall and a small understaffed clinic.

A CAP workshop was held as a pilot with two linked objectives, both of which were targeted toward assisting the Government of South Africa to implement it's now-cancelled Reconstruction and Development Programme. The first was to to undertake a pilot project to demonstrate the methods and principles of CAP in a 'learning by doing' setting. The second goal was to feed-up community priorities and the lessons learned to influence policy at both the provincial and national level.

The workshop was held April 24-29, 1995, and included some 20 participants representing the range of community organizations and interests. It was moderated by a team from CENDEP from Oxford Brookes University (England), SIGUS from MIT (United States) and from the Department of Property Development and Construction Economics, University of Natal in Durban, South Africa.

Typical of CAP workshops, there were 4 phases:

1) Deciding what was needed (identifying key problems and priorities)

2) Sorting out how to achieve what was needed (preparing proposals)

3) Assessing what will get in the way of implementation (project viability)

4) Building a plan of action (tasks, partners, schedules, organizations, etc.) and getting projects going.

Simple charts are used to gather inputs from the participants in each of the stages. these remained on the walls and allowed the participants to review – and change if needed – the previous decisions. The outcome at the end is a summary plan of action which include: specific tasks, partners in carrying out the tasks, possible funding sources, immediate 'next day' tasks, the project team, and an indicative schedule of work.

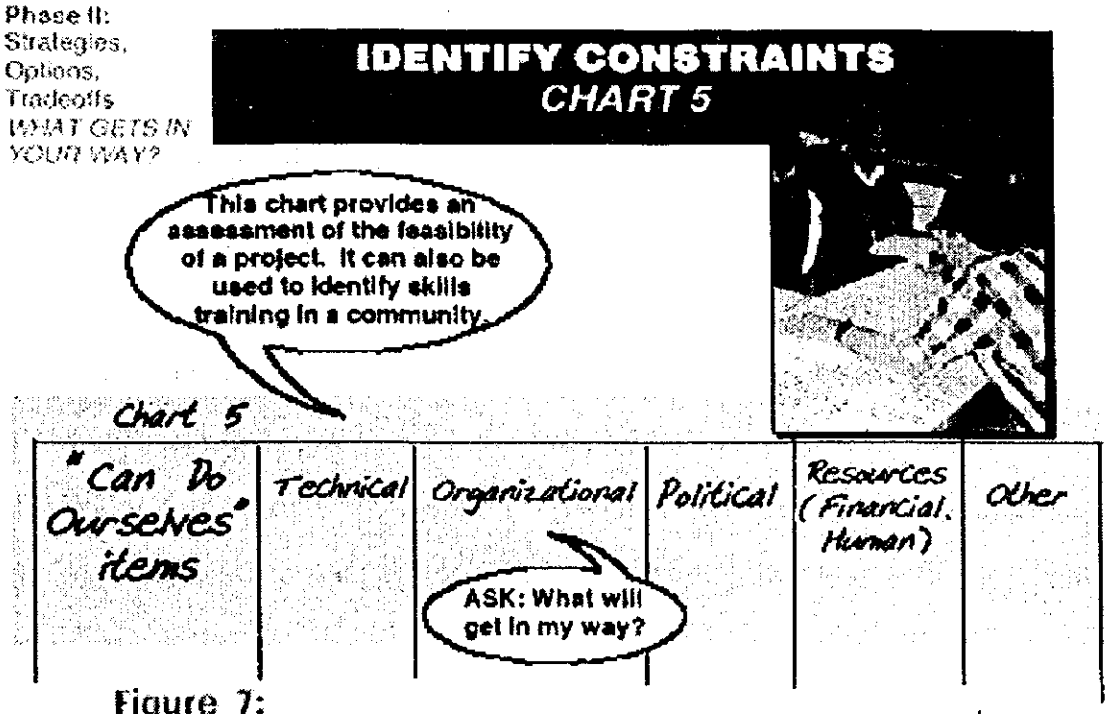


Figure 7:
Simple Charts are used as the focus of interchange

It is difficult – if not impossible – to capture the dynamics of the event. However, a quote from an article published in 'asc' magazine helps to illustrate the process:

"...the group sits down together around a table and begins to articulate its thoughts and feelings. The 'experts' from Britain and America quickly lose their aura and become cheerful, almost humble, facilitators asking questions which at first are not too difficult to answer: 'So what are the main problems here" What are they problems? To whom are they problematic?' Participants are urged to see the host of issues which spring to mind as opportunities rather than problems. Large sheets of newsprint and at fat felt-tip pens obligingly record long lists of apparently insurmountable hurdles as groups cluster around tables, heads bend in communal concentration. Emerging at last from their huddles after a short hour, the newsprint is put against the wall and one spokesperson is democratically press-ganged into presenting the findings. 'Well, it's the water supply, as you all know, the pipes are leaking and we can only draw water twice a day and then the water has little things floating in it.' The representatives of the other groups follow with similar tales in a depressed living environment. 'Right! Get back into your groups and let's have some solutions', comes the slightly shocking response. 'Divide your next sheet into four columns and describe a series of projects which will deal with these problems.' And so the process carries on for four days - huddle, present, huddle, agonise, rethink, present, rework, re-present - until gradually the action plans take shape.' *(Note: Excerpt from an article by Mark Napier of the Building Technology Division of the Centre for Scientific an Industrial Research (CSIR), Pretoria, South Africa.)*

At its conclusion of the S-R workshop a planning unit was established and four project coordinators were selected from the community to pursue the tasks identified, grouped in four areas: health, income generation, water and sanitation, and housing.

The workshop highlights several key aspects:

1) The process can be quick and effective. Although this workshop was 6-days, it was too long, since from other experiences 2-3 days could be equally effective. A short time avoids disruption and the problems of continuity of inputs by representatives. The 'problem-driven' approach is an effective way which avoids many pitfalls of participatory inputs. Few outside resources were necessary - it was an inexpensive process.

2) Follow-up toward implementation is the most difficult to assure and critical for effective workshops. In the Schweizer-Reneke workshop the outcome was two-fold: a) an outline of a specific project which included details of resources needed, timetable, persons responsible, approximate costs, etc. and most importantly a local 'Project Team' who agreed to monitor, coordinate, and push the project, and b) the immediate next tasks, for example, 'Meet Tuesday at 9:30 with the City Engineer to establish .....' Several techniques may be used to maintain momentum: build ownership/responsibility for the outcomes, publicly identify specific liaison persons, identify tasks in detail, set specific dates, link outcomes with 'status' in the community, and try to parallel self-interests, whether individuals or community.

3) The collective inputs from many communities in an area like Schweizer-Reneke provides better budgeting and resource allocation. Funds and development programs are better targeted when based on the priorities of communities the programs are intended to help. This again indicates the need for two kinds of mechanisms currently lacking: a) how do you spread community workshops in larger cities to encompass all of the communities? and b) how do you feed-up information from the communities in an effective manner? CAP becomes truly powerful when the collective community priorities become a key factor in setting city, province and national resource allocation – budgeting – strategies.

4)Dissemination is an important component and responsibility, particularly for 'outsiders'. In the Schweizer-Reneke example, a handbook was prepared as a way of capturing the experience and providing a reference for passing it on to other communities. With today's technology, a handbook could be prepared 'on the spot' using the actual procedure, participants and outcomes. Or, perhaps video technology could be used to show other communities and teach moderators the dynamics of the process.

Two issues which one should keep in mind when undertaking workshops: How to avoid dependency. How can you make sure that the community does not rely on outsiders to take initiative before continuing. And from the other perspective, one has to avoid that the outsiders take over the process.

And when the workshop is over, there are several indicators for success, which may be summarized as follows:

- Something visible should be done immediately.
- The community should be left with a sense of accomplishment.
- The community is left better organized, and can proceed on its own.
- A longer term program is initiated which extends beyond the life of the immediate tasks.
- The experience is captured and can be transmitted to others.

HOW CAN WE TRAIN FOR COMMUNITY ACTION PLANNING?

Preparing professionals for working with communities is a difficult task, and some even argue that it is something that cannot be trained. They counter that a person is capable or he is not, and community work cannot be learned through teaching. It is clear that some people have more facility for community based work than others, and we offer courses that deal with the range of possible contributions.

The following quote by the late Prof. Donald Schoen of MIT sums up our approach very elegantly:

> *In teaching, "there is a very dry, high ground where you can practice the techniques and use of theories. Down below, there is a swamp where the real problems lie. The difficulty is to decide whether to stay on the high ground, where you can be rigorous but deal with problems of lesser importance, or go down into the swamp to work on problems you really care about but in a way you see as hopelessly unrigorous. One consequence is that those who stick to the high ground become not only separate from reality, but increasingly divergent from it."*

In all of our programs we strive to include the element of reality. We want to keep into the 'swamp' as much as possible, believing in the field new approaches are being developed which we as professionals could not conceive.

We offer programs at three levels: a course for students in a classroom setting – The New Practitioner, a workshop for students in a 'hands-on' field setting – Rebuilding Communities, and a training program for professional staff which couples training with implementation in an actual community – Training of Trainers.

In all of these programs I have found that the most important aspect is ATTITUDE. A person who works with communities must believe that communities can make equal contributions. They must accept that equal an partnership is the ideal relationship. After attitude, the next biggest effort is learning how to work with

people. How to talk with people, how to meet people, in general how to feel comfortable when working in an un-accustomed manner. I have found that staff do not know how to work with people. And last, our training addresses the transfer of skills and techniques.

I have found that a customary educational setting is the least effective. The classroom setting is not a particularly useful way to prepare for community work. Furthermore, it is difficult to explain and to capture the dynamics of what happens in a workshop. We have tried videos with only marginal success, role-playing works better, but best is 'learning by doing.' In addition, working in a community with real concerns is a wonderful way to focus the interest and the effort. The outcome is then twofold: first you have a trained cadre of staff familiar with community work, and second you have real solutions for real problems in the community chosen as the training site.

TRAINING OF TRAINERS is a program that was developed in Sri Lanka for the training of Junior Technical Officers in community improvement workshops. The trained cadre in turn trained other staff throughout Sri Lanka, with the goal of reaching all Junior Technical Officers in the various districts.

The outcome of the training workshop was a development plan for the community in which the training occurred and a cadre of trained staff who now could be trainers in their own right. Upon completion each staff member received a 'Trainer's Kit' which consisted of reference guidebook; small card-sized steps to follow which could be placed in the pocked for instant reference when running a workshop; pins, tape, markers for working with the wall charts; and a trainer's T-shirt for identification and to give a measure of prestige to the staff.

Each workshop runs for 2-3 days, depending on the local situation. The first training session is for orientation, which included 'getting started' and 'the first session'

exercises. The second session has four exercises: identifying problems, defining options, selecting actions, and identifying skills needed. In the last session the activities were summarized and the workshop was reviewed.

Each group of staff participated in a 3-workshop cycle. The first workshop was moderated by a previously trained staff. The role of the participants was essentially to observe. At the beginning and end of each day, the participants would hold a debriefing session to review what they have observed The last exercise – what skills are needed – was only for the trainees to identify what skills they would need to possess for effective community work. The other sessions had dual roles of addressing actual issues of the community as well as training staff.

In the second workshop the trainees would be called upon to moderate specific sessions. They would be asked to prepare an outline beforehand, and be ready to moderate when called upon. In the 3rd and last workshop the trainees would prepare and moderate the event entirely. The trainer would be the observer, and debrief the staff at the end of each day and at the end of the workshop.

After the trainees had gone back to their respective districts and began their community improvement programs, they expressed three reservations about their new role and activities. First, they indicated that the position lacked prestige. Most had been trained in other fields, particularly architecture and engineering and their community work was viewed as a step down. Second, they voiced concern about advancement: since work with communities was relatively new and unfamiliar, what would be their future? Would they be locked into community fieldwork and be unable to advance professionally? Essentially, they were worried about their long-term carrier opportunities.

These 'training of trainers' workshops proved to be quite successful, and over 350 trainers passed through the program.

REBUILDING COMMUNITIES is a series of training workshops providing 'hands-on' experience at the community level, exposing students to the vulnerable income groups which comprise the majority. The program is primarily offered to graduate students at MIT and Oxford Brookes University who are training to work in the planning and development fields. It is offered in January of each year in a different developing country setting.

Key characteristics of the workshops include:

- Freedom and responsibility for participants to define their own areas of exploration and action.
- Participatory interaction at the community level through hands-on testing of technique.
- The very real and immediate nature of problems and opportunities which exposes students to the reality of issues.
- The integration of host institutions into the pedagogical aims and structure. Local hosts provide the introduction into the community and prepare introductory presentations to assist in understanding the context.

The 2-week program starts with 1-2 days of presentations by local experts as background and to understand local perspective. A field trip is then undertaken transecting the range of housing. Two-three days are spent exploring and testing rapid participatory techniques. Two-three days are targeted for issue identification, followed by 3-4 days of project definition. In conclusion teams present their findings to their host communities and separately to a professional audience, testing presentation technique to diverse audiences.

The students learn participatory assessment techniques and are asked to work with the communities in developing specific project proposals. The presentation of their proposals to the community encourages very conscientious involvement. Essentially the format is one of 'learning by doing'.

Workshops have been held in communities of the following developing countries:

• The ECUADOR WORKSHOP examined the impact of a planned waterfront redevelopment on the downtown of Guayaquil, with particular focus on the surrounding low income communities. Five areas were explored: adjacent hillside squatter communities, a faded artist's community, an abandoned market, large street vendor population, and inner city low income housing. Hosts were the Foundacion Malecon 2000 and the University of Guayaquil.

• The JORDAN WORKSHOP targeting vulnerable villages south of Amman in Karak. It addressed the impact of future regional development and its effect on the lowest income communities. Eco-tourism as a development driver was explored as one of the approaches for economic improvement on the rural villages. The host was the University of Jordan, Amman.

• The PERU WORKSHOP addressed the complexities of deteriorating inner cities and the ongoing conflict by the multiplicity of users and their often perceived divergent interests. The basic issues addressed revolved around the questions of 'Whose city' and 'Is there a common ground?' The host was the Facultad de Arquitectura, Urbanismo y Artes, Universidad Nacional de Ingenieria, Lima.

• The BELFAST WORKSHOP was arguably the most complex and difficult, despite the overwhelming amount of information, the misleading familiar setting, the common language. and the welcome reception. The workshop was located in the divided and contested areas of West Belfast, in the Springfield Road, Falls Road, and Shankill Road area. The workshop was favored by a lull in the 25 year conflict which was shattered on the last day of the workshop by a bombing in London announcing the end to the sectarian ceasefire. The host was the School of the Built Environment, Queen's University, Belfast, Northern Ireland.

• The INDIA WORKSHOP addressed issues of a very poor squatter community nested in the midst of an older now-established incrementally developed housing project .

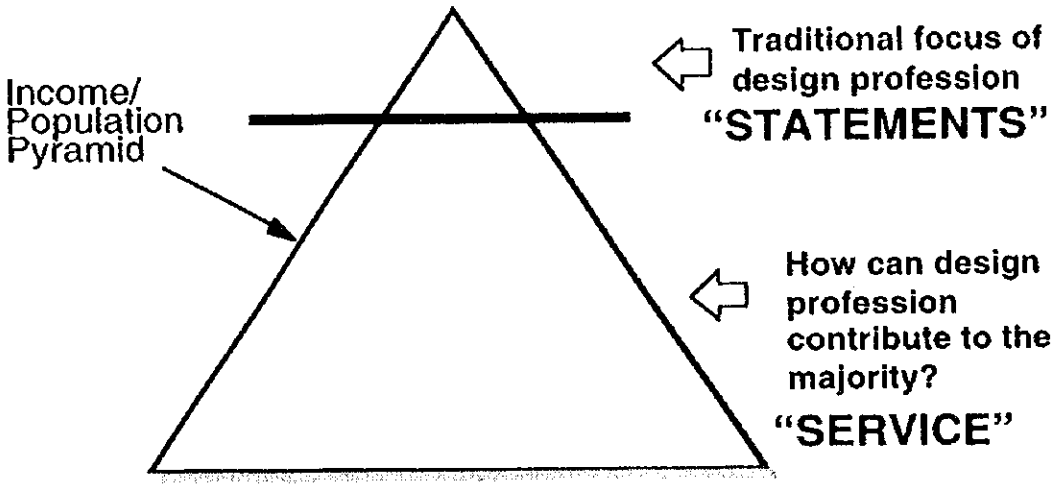
The focus was on approaches in revitalizing urban slums with the case study of Dakshinpuri. The host was the TVB School of Habitat Studies, New Delhi.

• The JAMAICA WORKSHOP targeted a very low income marginal community in Kingston, the capital city. The Southside community is located in a prized expansion zone of a revitalizing downtown. How does one balance development with community? The host was the Caribbean School of Architecture at the College of Arts, Science, and Technology, Kingston.

THE NEW PRACTITIONER course is offered during the regular term at MIT and targets students who are interested in acquiring professional skills to work at the community level. The focus is on learning the critical dialogue skills between user and professional. Extensive field visits and actual trials of techniques are the characteristics of the course. The course addresses the question: "How can the design professional contribute to the unserved 90%?"

Three principles drive the course: 1) user involvement is essential to good design; 2) a service-oriented paradigm is necessary in rethinking roles and contributions; and 3) tools and techniques necessary for effective dialogue need to be learned, since professionals are not familiar with how to deal with alternative clients and groups.

Figure 8:
The Basic Issue: How Serve the Vast Majority?



The course argues the need for a new paradigm in both 1st and 3rd world contexts. It explores the various active/direct tools and techniques available, including action planning techniques, games, model-making, and the Participatory Rapid Assessment family of techniques. It covers the indirect/passive techniques as ways to reach the lower income, including handbooks, leaflets, do-it-yourself (DIY) computer programs, video instruction, and the internet. The course concludes by exploring characteristics of the 'new practitioner' and the new paradigm of practice.

Field visits supplement the course to give students a sense of the current field and to meet active practitioners who meet the 'new practitioner' criteria. They visit community groups, government agencies and are required to attend community meetings where planning issues are presented. They visit DIY (do-it-yourself) home builders and DIY homecenter suppliers.

REFERENCES

Participatory Planning

Goethert, Reinhard and Nabeel Hamdi. MAKING MICRO-PLANS: A community based process in programming and development. Intermediate Technology Publications, London. 1988. Spanish translation by World Bank, 1992.

Hamdi, Nabeel and Reinhard Goethert. ACTION PLANNING FOR CITIES: A Guide to Community Practice. John Wiley & Sons, London. 1997.

The World Bank. PARTICIPATORY DEVELOPMENT AND THE WORLD BANK: Potential Directions for Change. Edited by Bhuvan Bhatnagar and Aubrey C, Williams. Discussion paper No. 183. Washington, D.C. 1992.

Basic Methodologies

Neighborhood Initiatives Foundation, 1995. PLANNING FOR REAL KIT: A TOOL FOR COMMUNITY-LED NEIGHBORHOOD IMPROVEMENT. Telford, England.

GTZ (Deutsche Gesellschaft fü r Technische Zusammenarbeit), March 1988. ZOPP (AN INTRODUCTION TO THE METHOD). Deutsche Gesellschaft für Technische Zusammenarbeit, Eschborn. 31 pages.

AIA Regional Urban Design Committee, 1985. R/UDAT HANDBOOK. American Institute of Architects, Washington, D.C.

Wates, Nick, 1995. ACTION PLANNING: HOW TO USE PLANNING WEEKENDS AND URBAN DESIGN ACTION TEAMS TO IMPROVE YOUR ENVIRONMENT. The Prince of Wales's Institute of Architecture.

Bertaud Model:

The Urban Edge. "Housing Schemes Aided by New Software," Vol. 10 No. 1, January 1986

World Bank. THE BERTAUD MODEL, A Model for the Analysis of Alternatives for Low-income Shelter in the Developing World. Urban Development Department, Technical Paper Number 2. Washington, D.C. 1981.

JICA