Participatory urban appraisal and its application for research on violence

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SUMMARY: *This paper emphasizes the importance of conducting participatory research on violence and describes the range of participatory urban appraisal tools that can be used to do so. This includes tools that can document the perceptions of poorer groups regarding the kinds of violence (economic, social or political), the extent, causes (and the links with poverty and exclusion) and consequences of violence, as well as the strategies for coping with or reducing, it. The use of these tools is illustrated with examples drawn from the findings of research on violence in 18 low-income communities in different cities in Colombia and Guatemala. The paper also outlines a conceptual framework on violence, poverty/exclusion, inequality and social capital that can help in the research design and in analyzing the findings.*

I. INTRODUCTION

THE PURPOSE OF this paper[1] is to present some guidelines for undertaking participatory urban appraisals (PUAs) on violence. These are the outcome of a previous set of guidelines utilized in a policy-focused research project on community perceptions of violence in Colombia and Guatemala.[2] This project examined the perceptions of the causes and consequences of violence among the urban poor, as well as the potential interventions identified to reduce violence in 18 low-income communities in the two countries. This paper discusses the rationale for and importance of conducting PUA for research on violence, as well as relevant conceptual frameworks, and then makes an assessment of PUA tools for research on violence, with examples drawn from the research on Colombia and Guatemala.

II. PARTICIPATORY URBAN APPRAISAL FOR RESEARCHING VIOLENCE

THE IMPORTANCE OF violence as a major concern in developing countries is now firmly established. The recent interest in the complex relationship between violence and development has been prompted by a number of important issues. First, increasing levels of urbanization are perceived to encourage violence in the context of urban poverty and inequality. Second, in many countries currently undergoing democratiza-

tion efforts, "everyday" violence has continued unabated. Third, the globalization of crime and violence engineered by powerful criminal organizations such as the Mexican and Colombian drug cartels, the Jamaican posses or the Chinese triads has brought the issue of the "global criminal economy"[3] to the forefront of international debates.[4] Finally, and perhaps most significantly, violence affects the macro and micro-economic growth and productivity of countries, and it impedes the capacity of governments and civil society to reduce poverty, inequality and exclusion.[5]

Although it is now recognized that violence severely undermines broader development goals of growth and sustainability, much policy-related research on the topic, especially in Latin America, is dominated by quantitative research methodologies. An important trend has been the measurement of the costs of violence. In particular, homicide rates have been used as the main way of assessing changes in violence levels within countries,[6] along with victimization surveys.[7] While obviously important, such quantitative methodologies fail to capture how people actually experience violence on a daily basis. Moreover, they neglect the arena of perceptions of violence. Since perceptions affect citizen well-being, even when they are not borne out by statistical evidence, these are particularly important.[8]

Qualitative participatory approaches at the micro or community level provide insights into the experiences of violence among low-income groups in a way that macro-level analyses cannot. A recent study on urban violence and poverty in Jamaica, which was the precursor to the current research project in Colombia and Guatemala, highlighted the usefulness of PUAs in exploring the perceptions and meanings of violence among the urban poor.[9] PUAs not only allow low-income groups to identify the extent to which violence-related problems affect their communities but they also encourage the urban poor to assess the causes and consequences of violence. Furthermore, this approach can also facilitate the identification of interventions from the perspective of the poor, rather than policy makers or scholars.

Colombia and Guatemala are both countries whose development is affected by high levels of violence. Given the suitability of PUA methodologies for examining the dynamics of violence, the research described in this paper was designed around a series of PUAs in 18 low-income urban communities.[10] As well as documenting the causes, dynamics and possible solutions relating to violence as perceived by the poor, the research also addressed the types of violence prioritized by communities and the coping strategies created in contexts of extreme violence.

Drawing on this research, a range of broader aims can also be addressed using PUA methodology for policy-related research. These revolve around conceptual, operational and capacity-building goals.

Conceptually, PUA as a methodology can facilitate research that examines the interrelationships revolving around the violence, poverty/exclusion/inequality and social capital nexus. Social capital plays a central role within this, especially in terms of whether violence erodes or strengthens it, and the ways in which it can be reconstructed.

Operationally, PUA can contribute to the design and implementation of municipal and community-level projects that build sustainable peace and social capital. Furthermore, they can be used to develop mechanisms whereby violence reduction issues can be "mainstreamed" into other sectoral projects (for example, social investment funds or infrastructure projects).

8. Moser, C., S. Lister, C. McIlwaine, E. Shrader and A. Tornqvist (1999), "Violence in Colombia: building sustainable peace and social capital", Environmentally and Socially Sustainable Development Sector Management Unit Report No.18652-CO, World Bank, Washington DC.

9. See reference 2, Moser and Holland (1997).

10. In Colombia, PUAs were carried out in three communities in Bogota and one each respectively in Cali, Medellin, Bucaramanga, Giron, Yopal and Aguazul. In Guatemala, research was undertaken in four communities in Guatemala City and one each respectively in Huehuetenango, San Marcos, Esquipulas, Santa Cruz del Quiche and Santa Lucia Cotzumalguapa.

11. In Colombia, the teams were drawn from: the Universidad Nacional; the NGO CEMILLA (Centro de Microempresarial del Llano); a women's NGO (Fundacion Mujer y Futuro); and a group of consultants who had previously worked with the Alto Comisionado para la Paz. In Guatemala, the teams included: one from the Centro de Investigaciones Economicas Nacionales (CIEN); a research organization, Asociacion para el Avance de las Ciencias Sociales en Guatemala (AVANCSO); and a women's NGO, Asociacion Mujer Vamos Adelante (AMVA).

12. Norton, A. (1998), "Analysing participatory research for policy change", in Holland, J. and J. Blackburn (editors), *Whose Voice? Participatory Research and Policy Change*, Intermediate Technology Publications, London , pages 179-191.

13. Moser, C. and J. Holland (1998), "Can policy-focused research be participatory? Research on violence and poverty in Jamaica using PRA methods" in Holland and Blackburn (1998), see reference 12, pages 44-56.

14. See reference 4.

In terms of **capacity-building,** PUA methodology involves the training of local researchers, NGOs and activists in a range of techniques and tools. In Colombia and Guatemala, for example, the research involved eight counterpart organizations and around 40 people from a range of university, NGO and community development backgrounds.[11] All were involved in the training, fieldwork and analysis of the research. Furthermore, all fieldwork and analysis information was shared transparently among the organizations for their own use with everyone having co-ownership of information. All the organizations were keen to use their knowledge of participatory methods to further their own research and applied work. Similar outcomes in terms of capacity-building also emerged from the Jamaica project with the 12 researchers involved continuing to work in the field of participatory appraisals on other projects, as well as providing training for others.

Overall, it is recognized that policy-focused PUA research is distinct from research where participation and empowerment are the primary goals.[12] The main difference is that policy-focused research is often less concerned with the direct empowerment of communities although it is often an important consequence of the research process.[13] In the current context, the counterpart organizations planned to return to research communities after the completion of the study, to share the information which in some cases led to the development of a community plan.

III. CONCEPTUAL PERSPECTIVES FOR RESEARCH ON VIOLENCE

a. The Violence, Poverty/Exclusion/Inequality and Social Capital Nexus

ALTHOUGH THERE ARE inherent contradictions in using pre-conceived conceptual frameworks when using PUA methodologies, it is useful nevertheless to define some of the concepts that may be important in research on violence in urban poor communities. A nexus that recognizes the interrelationships between relevant concepts may influence the themes and design of the methodology, especially the tools chosen. Of particular importance in the research in Colombia and Guatemala was the violence, poverty/exclusion/inequality and social capital nexus. It is important to emphasize that this is not an *a priori* framework; members of the research teams and the communities themselves identify whether and how these concepts are significant and may present their own interpretations of analytical frameworks. Therefore, the following definitions are a set of guiding principles and themes for designing the methodology, outlined here for reasons of clarity.

Definitions of violence – although there is a huge diversity in definitions of violence,[14] a three-fold categorization of political, economic and social violence provides a useful classification. These are identified in terms of the primary motivating factor, either conscious or unconscious, for gaining or maintaining political, economic or social power through force or violence. These definitions are deliberately broad and not necessarily mutually exclusive in terms of specific violent acts committed. For example, a guerrilla group may kidnap a local official to make a political statement, yet the same group may kidnap a wealthy landowner to generate revenue. A youth gang member may commit a robbery as a social initi-

ation rite with his peer group, while another youth robs to feed a drug habit. Indeed, these three types of violence represent a continuum, comprising overlapping dimensions of political, economic and social violence.[15]

Definitions of poverty – the most useful definition of poverty in the context of using PUA to examine violence in urban poor communities revolves around dynamic and multi-dimensional conceptualizations that embrace notions of security, well-being and self-respect.[16] Integral to this is the concept of vulnerability which emphasizes the importance of coping strategies and the long-term nature of deprivation related to access to and ownership of assets. These assets may refer to labour, human capital, housing and infrastructure, household relations and social capital. While the urban poor may not be poor in terms of static poverty line measurements, they may be vulnerable due to their lack of assets such as housing or human capital endowments.[17]

Definitions of exclusion – also multi-dimensional and dynamic, exclusion refers to deprivation or *inequality*. It goes beyond the analysis of resource allocation and includes power relations, agency and social identity, often incorporating the mechanisms by which people are excluded.[18] In turn, exclusion denotes a lack of social cohesion and human dignity and is a central element in processes of discrimination and marginalization.[19] It is useful to identify four main types of exclusion: *economic* exclusion when individuals do not have the option of participating actively in productive systems; *social* exclusion when individuals lack access to social services (health and education), opportunities for social participation and decision-making, and social legitimacy and status; *political* exclusion, based on notions of citizenship, when individuals have no opportunity for political participation and access to democratic processes and do not have the right to personal security, rule of law, freedom of expression and association; and *cultural* exclusion, which takes two forms: first, marginalization when individuals do not participate in the basic codes required to communicate and interact with the community, and second, when individuals suffer discrimination because they are viewed as inferior.[20]

Definitions of social capital – as with definitions of violence, there is a multitude of conceptualizations of social capital.[21] For reasons of clarity, social capital can be conceptualized in a broad sense to refer to the rules, norms, obligations, reciprocity and trust embedded in social relations, social structures and societies' institutional arrangements which enable its members to achieve their individual and community objectives.[22]

Two important sets of distinctions can also be made. The first relates to the difference between informal social capital at the micro-institutional level (such as communities and households) and formal social capital at the level of the market, the political system and civil society.[23] The second refers to the distinction between structural and cognitive social capital. The former relates to the membership and nature of formal social institutions; this therefore extends beyond the nature and strength of organizations, as in the definitions proposed by Narayan and Pritchett.[24] The latter denotes the nature of informal social institutions in terms of values relating to trust and social cohesion in households.[25]

Another axis of differentiation is between the sources of social capital and the effects or consequences.[26] In addition, the negative aspects of social capital should also be stressed; these may include exclusion of outsiders and excessive claims on group members, restrictions on individual freedom and downward leveling of norms.[27] Relating to this is "perverse" social capital which refers to collective action with negative

15. See reference 8.

16. Chambers, R. (1989), "Editorial introduction: vulnerability, coping and policy", *IDS Bulletin* Vol.20, No.2, pages 1-7.

17. Moser, C. (1998), "The asset vulnerability framework: reassessing urban poverty reduction strategies", *World Development* Vol.26, pages 1-19.

18. de Haan, A. (1998), "Social exclusion: an alternative concept for the study of deprivation", *IDS Bulletin* Vol.29, No.1, pages 10-19.

19. Menjívar, R. and F. Feliciani (editors) (1995), Análisis de la exclusión social a nivel departmental: los casos de Costa Rica, El Salvador y Guatemala, FLACSO, PNUD, UNOPS, PRODERE-Edinfodoc, Guatemala City, page 25.

20. Bhalla, A. and F. Lapeyre (1997), "Social exclusion: towards an analytical and operational framework", *Development and Change* Vol.28, No.3, pages 413-433; also Figueroa, A., T. Altamirano and D. Sulmont (1996), *Social Exclusion and Inequality in Peru,* Research Series 104, International Institute for Labour Studies, Geneva.

21. Groothaert, C. (1998), "Social capital: the missing link?" Social Capital Initiative Working Paper No.3, World Bank, Washington DC; also Harriss, J. and P. de Renzio (1997), "An introductory bibliographic essay. 'Missing link' or analytically missing? The concept of social capital", *Journal of International Development* Vol.9, No.7, pages 919-937.

22. See reference 8.

23. See reference 8.

24. Narayan, D. and L. Pritchett (1996), *Cents and Sociability: Household Income and Social Capital in Rural Tanzania,* Policy Research Working Paper 1796, WB, Washington DC.

25. Uphoff, N. (1997), "Giving theoretical and operational content to social capital", mimeo, Cornell University.

26. Woolcock, M. (1998), "Social capital and economic development: toward a theoretical synthesis and policy framework", *Theory and Society* Vol.27, No.2, pages 151-208.

27. Portes, A. (1998), "Social capital: its origins and applications in modern Sociology", *American Review of Sociology* Vol.24, pages 1-24.

28. Rubio, M. (1997), "Perverse social capital: some evidence from Colombia", *Journal of Economic Issues* Vol.31, No.3, pages 805-816.

29. McIlwaine, C. (1998), "Contesting civil society: Reflections from El Salvador", *Third World Quarterly* Vol.19, No.4, pages 651-672.

30. See reference 17.

31. See reference 8.

aims and outcomes, such as the activity of gangs or drug dealers.[28]

Finally, it is also important to point out that many forms of formal or structural social capital often fall within the remit of *civil society*, especially small-scale community based organizations. The way in which social capital serves as an engine for civil society may therefore be conceptually relevant.[29]

The creation of such a nexus acts as a conceptual foundation for PUA research on urban violence. While the nexus allows for the recognition of the interrelationships between the concepts, it is sufficiently flexible that the exact nature of the linkages is left open for the researchers and community members to determine. This conceptual clarity is particularly important when designing specific tools to explore perceptions of violence since, ultimately, it will be communities who decide the definitions.

b. The Costs of Violence to Communities

Also from a conceptual perspective, it is important to highlight the ways in which violence can induce costs to communities. While this issue is most relevant in the analysis stage of research (see below), it may also be relevant when designing the methodology. An earlier study of Ecuador, the Philippines, Zambia and Hungary illustrated how violence was identified as a major problem in urban poor communities, fundamentally affecting how people were able to accumulate assets and the nature of their coping mechanisms.[30] This can be linked with the erosion of capital which, at both the national and community levels, can refer to physical, human, social and natural capital.[31] At the community level, violence can erode capital in the following ways.

Violence erodes the physical capital of communities. This relates primarily to the opportunities for employment and, in turn, is manifested in high levels of unemployment. More specifically, violence erodes various types of physical infrastructure such as transport systems, roads, and housing within communities. For example, robbery and insecurity affect community transport systems, when bus companies refuse to provide services to particular settlements or curtail services in the evenings. Other problems include vandalism of small-scale businesses or workshops, affecting their ability to function.

Violence erodes the human capital of communities. This relates mainly to education and health care services within communities in terms of users and providers. For example, children may leave school earlier than planned because of security risks encountered there, such as gangs congregating around schools, often related to pressure to take drugs. In addition, teachers in low-income settlements may receive threats, therefore leading to shortages of teachers willing to work in such areas. Health services may also be affected in similar ways in terms of threats to health workers.

Violence erodes social capital of communities. This may be associated with the ways in which cognitive social capital such as trust and unity within communities deteriorates in contexts of violence. In terms of structural social capital, violence may affect the ability of formal and informal social institutions to operate; cooperation is eroded by fear which undermines the incentive to work together. At the household level, violence erodes informal social capital endowments within families, such as norms, shared values and so on. In addition, inter-household social capital networks break down when unity is affected by widespread insecurity and violence. However, at the same time, social capital may also be constructed

in these contexts, especially around illegal organizations, gangs or informal protection groups that are established to deal with violence.

Violence erodes natural capital of communities. While not as important in urban as in rural communities, violence erodes land use, which is often a critical asset for urban poor communities. In addition, it may relate to other natural assets, such as rivers, that may be used for leisure and laundry purposes; violence in communities often means that these areas cannot be used.

This framework is useful when quantifying information at the analysis stage of a PUA (see below).

IV. PREPARATIONS FOR PUAs ON VIOLENCE

THERE ARE A number of issues related to using PUA methodologies for policy related research on violence. It is important that these are taken into consideration in the preparation stages of the research.

a. Constraints of Using PUA in the Context of Violence

The first issue relates to the problems associated with conducting PUA research in communities experiencing high levels of violence. There are obvious dangers inherent in this process, both practically and substantively. Safety is therefore a fundamental issue for both communities and researchers.

In terms of safety for communities, the issue of ensuring anonymity of the participants in group discussion and interviews, as well as creating pseudonyms for the communities, is a key decision. It is often advisable to change names to protect individuals and communities from possible retribution. In both Colombia and Guatemala, the names of communities were changed in the field notes and analysis. In many cases, community leaders themselves chose the pseudonyms for their settlements.

In terms of safety for researchers, the design of the research teams should ideally include people with guaranteed access to communities. Therefore, collaboration should involve teams of people and/or organizations already known within the community. This minimizes entry time, helps in negotiating with gatekeepers, as well as ensuring safety for the teams when conducting the research. This was the case in Colombia and Guatemala. Although caution has to be exercised, it is also important that research is conducted as equitably as possible in terms of informing community members of the study aims and ensuring the key community power brokers are included in discussions. This assists in preventing further conflict from developing.[32] Indeed, the most expedient way of initiating research in communities is to begin with an open meeting with community leaders and residents to explain the aims of the research.

Also linked with the previous point is the perception of safety among the researchers themselves. It should not be assumed that researchers feel comfortable in low-income communities with high levels of violence. Depending on their prior experiences, fear may be an issue among researchers. Although selected organizations should have knowledge of research communities, not all researchers will have worked intensively with community members in the informal manner required of PUA. In Guatemala, some of the researchers experienced anxiety when working "in the streets" given that previously they had only worked with specific

32. Hamilton, C., A. Kaudia and D. Gibbon (1998), "Participatory basic needs assessment with the internally displaced using well-being ranking", *PLA Notes* No.32, pages 9-13.

33. Lykes, M. Brinton (1997), "Activist participatory research among the Maya of Guatemala: constructing meanings from situated knowledge", *Journal of Social Issues* Vol.53, No.4, pages 725-746.

34. Recuperación de la Memoria Histórica (REMHI) (1998), *Guatemala: nunca más,* Versión Resumen, Informe del Proyecto Interdiocesano, DR Oficina de Derechos Humanos del Arzobisopado de Guatemala.

35. The Recuperation of Historical Memory (Recuperacion de la Memoria Historica - REMHI) project was conducted by the Office of Human Rights of the Archdiocese of Guatemala. Based on oral testimonies, the report documented 55,021 cases of brutal atrocities, of which 79.2 per cent were attributed to the Guatemalan military. Unfortunately, it is perhaps best known due to the assassination of the director of the project, Monsenor Juan Gerardi Conadera, in April 1998, 48 hours after the findings were made public.

36. See also reference 13, Moser and Holland (1998) on Jamaica, pages 49-50.

community organizations.

Another potential constraint is that individuals or groups may be reluctant to discuss topics directly or indirectly relating to violence. In the case of political violence, this may be due to trauma or to fear of the consequences. This has been documented in the case of Guatemala, where the brutal atrocities committed during the civil war have influenced the openness of people to share their experiences. As a result, a "strategy of silence" based on fear, especially among the indigenous population, has limited the extent to which people are able or willing to discuss topics relating to violence.[33] Having said this, those who provided oral testimony, collected via the *Recuperacion de la Memoria Histórica* project[34] also noted the cathartic role of sharing their experiences.[35] In the research project in Guatemala, a reluctance to share experiences was evident in most communities, referred to by the researchers as the *cultura de silencio* (culture of silence) created by the political violence of the past. In some communities, traditional systems of support had been disrupted and trust had been severely eroded. Nonetheless, a number of strategies were employed to deal with this, one of which included speaking to youth and children who were too young to have had direct experiences of the atrocities of the 1980s, and who tended to be more affected by other types of violence currently affecting communities, such as gangs (*maras*) and drug-related violence.

This was also an important issue in Colombia, especially in places affected by political violence. The *ley de silencio* (law of silence) was most evident in one community in Aguazul where the guerilla and paramilitary were active, regularly entering the community and threatening and occasionally killing the inhabitants. However, once again, the researchers developed various strategies to deal with this. In this case, it involved making appointments with community members to return to talk with them at "safe times" when there was no danger of the guerilla and paramilitary arriving. In addition, focus groups were often conducted in back rooms of houses, out of sight of the rest of the community, rather than in the street.

In relation to social violence, discussions of intra-family violence were often difficult. Indeed, a number of issues emerged in relation to this. First, young people were more willing to discuss violence within the home than older community members. In addition, women were much more likely to raise the issue than men, mainly because men were the primary perpetrators. Second, it was often only possible to explore intra-family violence from the perspective of alcohol abuse. When alcohol arose as a topic in focus group discussions, it was often a conduit for talking about violence in the home, given that it was cited as a major cause of domestic abuse. This, therefore, became a strategy to examine intra-family violence if and when alcohol was mentioned as a problem.

Finally, decisions about the issue entry point of research are critical. For example, it is expedient to indirectly discuss the issue of violence when explaining the research objectives. In Colombia and Guatemala, the main starting point for discussions on violence-related issues was the identification of community problems. During this, community members talked about types of violence as part of their broader discussions of other concerns. This is consistent with PUA's aim that issues should emerge from the people themselves rather than being imposed by the researchers. Therefore, violence should not, *a priori*, be assumed to be a problem, with the first stage of a PUA exploring community perceptions regarding the priority given to violence as a concern and the gravity of different types of violence.[36]

b. PUA in Urban Areas

Until recently, participatory appraisals have been conducted primarily in rural areas, in agro-ecosystem analysis and field research on farming systems, reflecting the foundations of the methodologies.[37] However, increasingly, these methodologies have been used in urban contexts. As Mitlin and Thompson[38] highlight, there are often differences in rural and urban contexts, in terms of:

- nature of livelihood opportunities: urban communities depend more on services, manufacturing and public sector employment;
- access to natural resources: urban communities have fewer opportunities for direct household exploitation of fuel, food and water;
- community heterogeneity: urban communities often are more diverse with residents from a wider range of backgrounds;
- tenure: urban communities often have greater access to legal tenure although tenure insecurity is fairly widespread in both contexts;
- local government: this is often stronger and more visible in urban areas.

At the same time, the blurring of the boundaries of the rural-urban divide results in surprising similarities between the two areas. But, care should be taken not simply to transpose ideas without modification from rural research to urban. A case from a PUA in Ghana, for instance, showed that some members of poor urban communities refused to undertake wealth ranking on the basis of ignorance of other people's levels of livelihood; only in crises do rich relatives come forward and demonstrate their wealth.[39]

A number of practical issues should therefore be taken into account in urban contexts. The most important is the ways in which communities are defined. As Mitlin and Thompson[40] point out, territorial boundaries in cities may be ambiguous. It is therefore crucial to identify the limits of communities at the outset according to the inhabitants themselves, whether these are administrative or based on perceptions of boundaries. In Colombia, limits between communities were often arbitrary. However, an important way of distinguishing one community from another was to identify the existence of a local improvement committee. These committees are responsible for one community alone and if there are two, this usually means that the community had been divided into two separate settlements.

Another important practical issue also mentioned by Mitlin and Thompson[41] is the scheduling of participatory exercises. Unlike in rural communities, people in urban settlements often work long hours outside the community. It is therefore important to ask which time of the day is most suitable for finding people in the area. Flexibility is critical and researchers should be willing to work in the early morning or evening when security allows.

V. TECHNIQUES FOR PUA ON VIOLENCE

a. Community Profile

ALTHOUGH BACKGROUND INFORMATION about the community can be collected using PUA tools (see below), it is also useful to elicit some basic characteristics before entering the community. A simple community profile

37. Chambers, Robert (1994), "The origins and practice of participatory rural appraisal", *World Development* Vol.22, No.7, pages 953-969.

38. Mitlin, D. and J. Thompson (1994), "Addressing the gaps or dispelling the myths? Participatory approaches in low-income urban communities", *RRA Notes* No.21, pages 3-12.

39. See reference 12, page 190.

40. See reference 38, page 6.

41. See reference 38, page 6.

should therefore be constructed by the counterpart organizations. This profile should provide basic descriptive information on the community and its resources such as, for example, demographic and social data – location, geographic characteristics, brief history, population size, number of dwellings, ethnic population and predominant household structures. In addition, information on economic activities is also useful – major types of income generation, access to credit, land tenure, as well as community infrastructure and facilities – water, electricity, sanitation, schools and health posts. Finally, some basic information on the nature of community organizations should be included, such as the number and types working and operating in the community (for an example from Belize, see Moser[42]). This information can be elicited from secondary data sources such as census data, household surveys and other studies of the community as well as from other information available to counterpart organizations.

b. Research Techniques for Conducting PUA

PUAs can be conducted through a range of techniques within communities. These are distinct from the tools used to gather information, and refer to the fora through which issues can be discussed with community members. These techniques include the following:

Group discussions. While there are various techniques for collecting information, group discussions are the most commonly used. They encourage extended analysis and conversation among community participants. The size of groups can range from two to three people to 25-30, although it is advisable to divide up larger groups into sub-groups of around 10-15 participants. There are also different types of groups which include:
- interest groups – with people in the community who share a common interest. For example, specific occupational groups, a religious group, neighbourhood gangs, a parent-teachers association or members of a sports group;
- mixed groups – with people from all walks of life representing the community as a whole;
- focus groups – with people convened to discuss a particular topic[43]

These types of groups overlap as both interest and mixed groups may also be focus groups in terms of discussing specific topics.

The composition of groups depends on a number of factors, including gender – with single-sex groups as well as mixed groups; age and generation – with mixed age groups as well as young, middle-aged and elderly groups; and race and ethnicity (especially important in Guatemala, although also significant in Colombia) – mixed race groups as well as specific discussions with particular ethnic groups. It is important to identify the gender, age and ethnicity of all participants throughout the research process. This is also important at the analysis stage with perceptions often varying depending on these factors. For example, women and men and young and old tend to identify different types of community problems. In Guatemala, indigenous groups tended to discuss access to employment and education and the issue of fear to a much greater extent than the *ladino* (white/*mestizo*) population.

Other techniques that can be used to collect information through PUA tools include:
- semi-structured interviews (on a one-to-one basis)
- direct observation

42. Moser, C. (1996), "Community needs assessment guide: mini-guide for the Belize social investment fund sub-project menu", mimeo, World Bank, Washington DC.

43. See reference 42.

- ethno-histories and biographies (on a one-to-one basis)
- local stories, portraits and case studies[44]
- triangulation

44. See reference 42.

The issue of triangulation is also extremely important when conducting policy focused PUA. This consists of asking different groups the same questions, and provides a means of cross-checking. In one community in Guatemala City, for example, a number of groups independently discussed the gang rape of a young woman and the lynching of three men who were held responsible. This had passed into the historical memory of the community and was corroborated by a number of sources. However, triangulation goes beyond this type of cross-checking and serves to incorporate the views of different constituencies who have influence over the communities from inside and out.[45] This is usually achieved through conducting focus group discussions with organizations or key informants who may not live in the community itself but who have an in-depth knowledge of the area and its population. These may be focus groups or one-to-one, semi-structured interviews with the following types of organizations and/or institutions:

45. See reference 13.

- the police force
- judicial sector representatives
- the Church - different religions
- women's groups
- NGOs working within communities (as well as CBOs)
- hospitals and health centres
- educational establishments
- the mayor and municipal representatives

In Colombia and Guatemala, the most common form of triangulation undertaken was with teachers in local schools who provided different perspectives on the problems and issues affecting children and youth. In addition, a number of local mayors and municipal workers were also interviewed, along with some police chiefs. In one city in Colombia (Bucaramanga), a focus group was held with the director and some of his employees in the *casa de justicia* (a judicial centre that provides legal advice for low-income populations) while in another (Medellin), the director of a reinsertion programme for the former guerilla group, M19, was interviewed.

c. Locations for Conducting PUA within Communities

There are two main ways of conducting a PUA within communities, both of which can be combined. The first is to establish focus groups and carry out interviews in a local community centre or communal building. This involves negotiating its use with community leaders beforehand and basing the research geographically within the building. It allows community members to come to the centre to participate in activities at pre-arranged times, and is useful when working with large groups or with particular interest groups such as parent-teacher associations or "community mothers" (who run home based child care programmes in Colombia). However, conducting PUA in a community centre often excludes certain groups who do not normally participate in community activities.

The second method is to implement the tools while walking through the community, "in the street", in shops, beside football pitches or basketball courts, or outside people's houses with informally identified focus groups. The latter gives greater flexibility and access to a more representative cross-section of community members, some of whom may be reluc-

tant to go to a community centre. For example, gang members or groups of drug addicts are unlikely to attend a pre-arranged meeting which involves community leaders yet may be willing to talk while sitting beside a basketball court smoking drugs and "hanging out". This informal approach was crucial in Colombia and Guatemala for working with excluded groups often directly involved with violence such as the gangs and drug addicts, or with sex workers or recyclers (people who live from recycling rubbish). While there are advantages and disadvantages to both methods, a combination of the two is ideal.

VI. RESEARCH THEMES AND TOOLS FOR PUA ON VIOLENCE

A SERIES OF themes should be addressed when conducting PUA on violence, each with a range of tools that can be used to elicit information. These research themes derive from the background discussions concerning the violence, poverty/exclusion/inequality and social capital nexus. A number of tools are identified and their use depends on the context of the discussions; it is not necessary or possible to implement all the tools in a given group discussion. In addition, the tools may or may not identify the issue of violence. If community members raise violence-related problems as important issues then it is possible to implement a violence specific tool. However, it is not a prerequisite.

Although the basic rules of PUA should be followed in terms of allowing the group rather than the facilitator to determine the agenda, ensuring that participants write or draw themselves ("handing over the stick") and encouraging visual rather than written or verbal accounts of situations or issues,[46] it is possible to invent modifications to the tools. In Colombia and Guatemala, the researchers and participants created some innovative changes to the basic sets of tools in order to address some specific issues relating to violence. Where relevant, these are included below.

The tools identified in this section are drawn from a wide range of sources on conducting PUAs. However, they concentrate on the manual produced by Selener, Endara and Carvajal[47] as well as information from the PUA conducted in Jamaica.[48]

a. Community Characteristics

Information on community characteristics is the foundation of a PUA on violence. The tools associated with this should be implemented at the beginning of the PUA so that the context is established at the outset. In particular, the transect walk should be carried out on initial entry into the community, in conjunction with community leaders. This high profile walk is especially important in communities with high levels of violence. It not only dispels suspicion of outsiders but also informs researchers of potentially dangerous places that should be avoided. For example, during the transect walk in the pilot community in Bogotá, Colombia, community leaders identified one street, informally referred to as the "*calle de crack*" ("street of crack"), where drugs were sold and consumed. While they did not prevent researchers from going there, it was useful to know the location of this street.

The matrix on general data is most usefully conducted with community leaders or people who have lived in the community for a long time.

46. See reference 2, Shah (1995).

47. Selener, D., N. Endara and J. Carvajal (1997), *Guia práctica para el sondeo rural participativo*, Instituto Internacional de Reconstrucción Rural (IIRR), Quito. (Daniel Selenor, of IIRR, was the PUA trainer in both Colombia and Guatemala.)

48. See reference 2; also, reference 13; and reference 42.

Unlike many of the other tools, it is only necessary to implement this once or twice at the beginning of the research. This matrix may also be combined with the one for social organization, for ease of implementation. Table 1 includes an example of a matrix from the community of Villa Real, Esquipulas, Guatemala conducted with seven community leaders (six men and one woman) who were members of the *comité de desarrollo local* (local development committee).

b. History of the Community and Violent Events

As with the matrix on general data, information on the history of the community provides an important context for conducting research on

Table 1:	Potential Tools for Eliciting Information on Community Characteristics with an Example of a General Data Matrix from Guatemala
Tool	Example of issues raised
Transect walk	• Ice-breaking - critically important to dispel suspicion of outsiders • Identification of territorial markers, especially relevant for gang boundaries • Spatial identification of "safe" and "dangerous" locations
Matrix on general data	• General information about community • Matrix that covers population, infrastructure, source of income generation by gender, family size and division of labour, migration, communications and ethnic groups
Matrix on social organization	• Matrix that includes a list of organizations within and outside the community and their role
Participatory mapping of: i) *barrio*/community ii) insecurity/security	• Spatial characteristics within community - can be combined with transect walk • Community maps - most important characteristics can be drawn such as boundaries, houses, roads, police stations, health post, schools, etc. • Maps of insecurity - identification of "safe" and "dangerous" places by gender
Matrix on General Data, Villa Real, Esquipulas, Guatemala (with seven community leaders)	
Foundation of community	1980
Geographical orientation	Community is in the east of the city To the north: San Sebastian; to the South: Chacalapa To the east: Vista Hermosa; to the West: Basilica
Public services	Water: 100% coverage Electricity: 100% coverage Telephones: 75% coverage Rubbish collection: 75% usage
Population	200 families; average of 7 people per family with a total of 1,400 people 60% of the population is female and 40% male
Ethnic groups	Majority are *ladinos*, and the rest from a range of ethnic groups: Chortí, Mam, Q'eqchi, Pocoman
Migration	Foreigners: 15-20% are Hondurans or Salvadoreans Majority from the department of Chiquimula Minority migrants from Zacapa, Cobán, Quetzaltenenago and Quiché
Transport links	No bus service - service only available from centre of the city
Sources of income-generation	Men: commerce (33%), agriculture - migrate to landholdings on daily or weekly basis (33%), artisans (33%) Women: housewives (majority), commerce - selling handicrafts, tortillas and cooked food (second most important), white-collar workers in banks, cooperatives and the municipality (minority)
Average earnings	Women earn an average of 30 quetzales per day Men earn an average of 50 quetzales per day

violence. It introduces a temporal element which may be central to changes in violence, poverty/exclusion/inequality and social capital. The most important tool for eliciting this information is the matrix on the history of the community. This identifies the key events that have affected the population since the foundation of the community and should be conducted with more elderly or established members who have an in-depth knowledge of the changes that have taken place.

Table 2 lists potential tools for gathering information on the history of communities and gives an example of a matrix of the history of the community of Colombia Chiquita, Aguazul, Colombia. It highlights the key events and the extent to which they were linked with violence, such as the arrival of the paramilitaries, as well as the effect on the community which, in this case, prompted people to hide.

Table 2:	Potential Tools for Gathering Information on the History of Communities with an Example of a History Matrix from Colombia
Tool	Issue
Matrix on history of the community	• History of the community • Identification of periods of violence and violent events • Identification of changes in poverty and social institutions
Time line or seasonality analysis	• Visual representation of changes in the community according to specific issues. For example, how robbery, levels of unity or drug use have changed

History of the Community Colombia Chiquita, Aguazul, Colombia (by three community leaders, all members of the communal action committee)

Date	Key events	Violent acts	Effect on the community
May 1994	• Foundation of barrio with 316 families	• Conflicts with the police who tried to move them out	• People stayed where they were People from Casanare (30%), Boyoca (15%), Santander (15%), Costa (15%), Arauca (15%), others (10%)
1994	• Creation of Junta de acción comunal (communal action committee) • Oil boom • Aqueduct committee	• Political fights with the mayor over existence of barrio • Fights over land titles among the population • Death of first community leaders	• *Barrio* improved • Terror and fear, but people continue working • Water pipe and tank installed
1995	• Establishment of septic tank		
1996-1997	• School built (1997)		• Education for the community • State provided places and pay for teachers
1998	• Aqueduct (1998) • People collaborate among neighbours	• 14 people killed, 2 disappeared • 10 families threatened • Stigmatization of the inhabitants (accused of being guerillas, drug addicts, prostitutes) • "Luxury cars" arrive*	• Benefited the *barrio* • Deaths: 2 leaders, 12 community members "People become accustomed to take away their dead" • 10 families fled the barrio • Moral suffering • Hide/lose oneself
1999	• Process of adjudicating land titles		

* "Luxury cars" are what the paramilitaries arrive in.

c. General Problems and Types of Violence as Perceived by Communities

Listings of general problems affecting communities are a cornerstone of PUA methodologies. From a practical point of view, they provide an excellent ice-breaker and a good entry point for group discussions. In addition, from a research perspective, they can ascertain how far communities perceive violence as a major problem compared with other concerns. This can be done through focus groups listing the problems that affect their communities. If violence-related problems emerge, then the extent to which violence dominates the concerns of the community can be assessed.

Using various ranking tools, general problems can also be prioritized. Participants can set up a scoring system using cards or voting mechanisms, or a tool called an "onion" whereby the most important problem is placed at the centre of a set of concentric circles.

A more visual way of identifying problems is to use a venn or flow

Table 3:	Potential Tools for Identifying General Problems and Types of Violence
Tool	Issue
Listing	• Types of problems perceived by different groups • Types of violence perceived by different groups • Identification of meanings of violence, insecurity and danger
Ranking using scoring or "onion" diagram	• Based on the listing, this ranks problems or types of violence according to importance rather than frequency
Venn or flow diagram	• Identifies main problems or types of violence using circles; ranking can be achieved by adjusting the size of the circle according to level of importance

Figure 1:	Venn/flow Diagram of General Problems Affecting the Community, 14 de Febrero, Bogotá, Colombia

Participants: 2 men and 4 women aged between 25 and 64 years
Community and City
14 de Febrero, Bogota

Key:
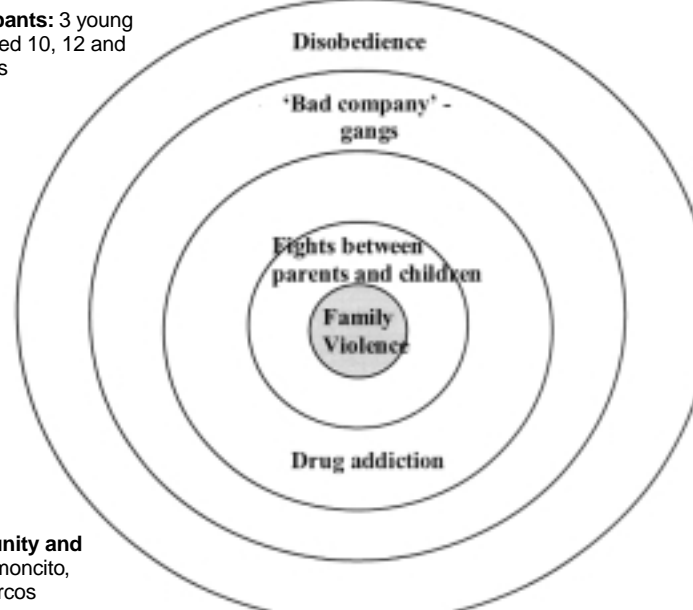The larger the circle, the more important the problem

diagram with problems drawn within circles whose size varies according to the importance of the problem. This also allows for the relationships between problems to be identified. Figure 1, for Colombia, shows that the most important problem is the lack of unity within the barrio – lack of cognitive social capital – followed by lack of security related to violence. In this example, violence related problems emerged strongly, with drug addiction, gangs and insecurity being identified as major concerns.

If violence emerges in the general listing, then it is relatively easy to move on to other tools that consider causes and consequence of various types of violence. It is also possible to move to listing types of violence affecting communities as a direct result of the listing of general problems. Types of violence can also be ranked using the same methods of scoring or the "onion" diagram. Figure 2 shows an example from the community of Limoncito, San Marcos, Guatemala, drawn by three boys aged between 10 and 15 who were chatting by the side of the road. They first made a simple list of the types of violence affecting the community and then ranked them using an onion diagram. Although they noted that all types of violence are interrelated, they felt that violence in the home was the most important type. Interestingly, they defined disobedience as a type of violence; one of the boys said that he had been taught this in school.

Another important issue relating to violence is identifying the meanings of violence in different contexts and countries. In Colombia, violence is closely interrelated with insecurity (inseguridad). Indeed, the term "insecurity" is often used instead of "violence" as the latter is often understood only as political violence. In Guatemala, a similar distinction is made between violence and danger (peligro).

Figure 2: "Onion" Diagram for Ranking Types of Violence, Limoncito, Guatemala
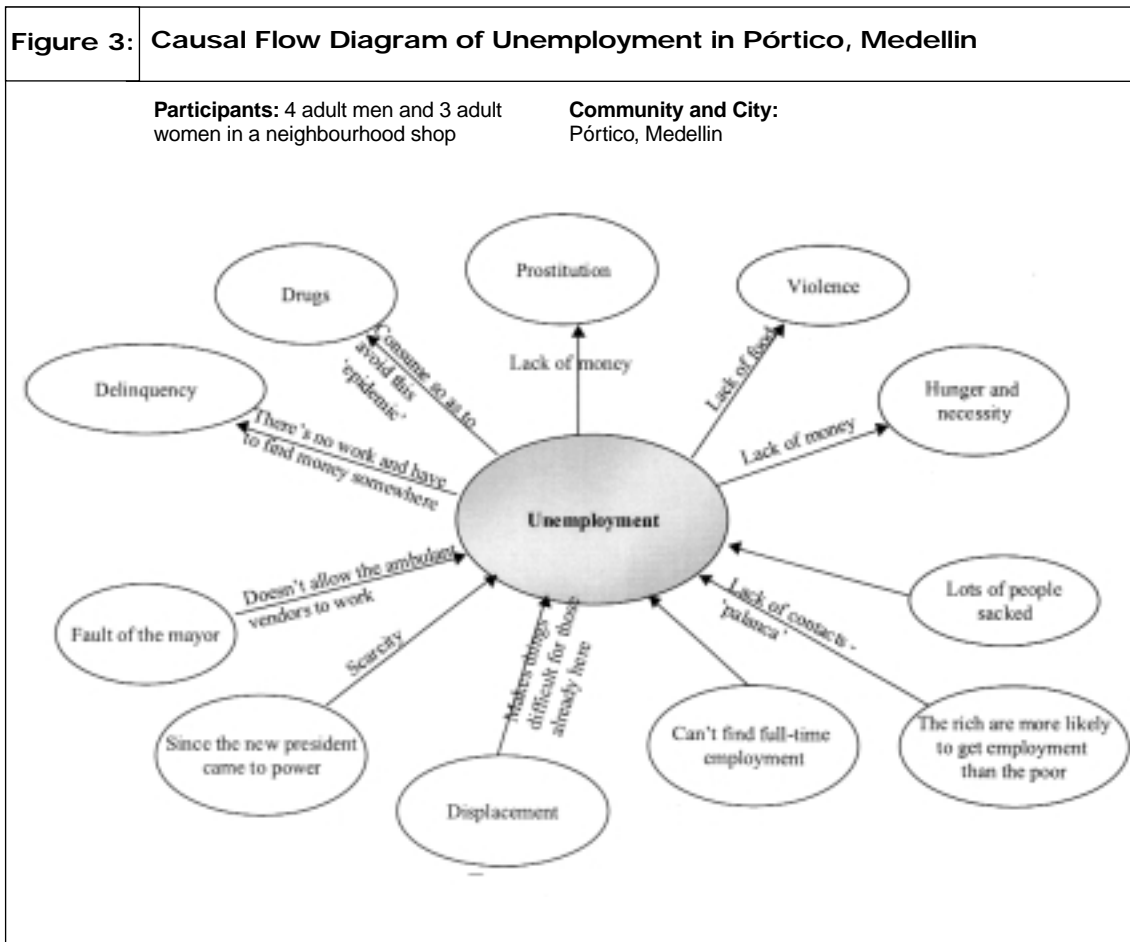
Participants: 3 young men aged 10, 12 and 15 years

Disobedience

'Bad company' - gangs

Fights between parents and children

Family Violence

Drug addiction

Community and City: Limoncito, San Marcos

Table 4:	Potential Tools for Examining Poverty, Well-being and Violence
Tool	**Issue**
Well-being ranking	Mapping of community according to levels of well-being defined by communities
Listing and ranking	• Characteristics and ranking of well-being, insecurity/violence and exclusion/rejection
Drawings	• Identification of poor man/woman and rich man/woman • Identification of sources of fear
Matrix of sources of livelihood/ work in community	• Identifies main types of livelihood/employment by gender
Causal flow diagram	• Identifies links between poverty or (un)employment and violence

d. Poverty, Well-being and Violence

It is important to explore the meanings of concepts such as poverty, well-being and violence, as well as the interrelations between them. While listings of characteristics of violence have already been discussed, it is also possible to identify meanings of poverty or exclusion. In an example from 14 de Febrero, Bogotá, Colombia, one focus group of seven members of a

Figure 3:	Causal Flow Diagram of Unemployment in Pórtico, Medellin

Participants: 4 adult men and 3 adult women in a neighbourhood shop

Community and City: Pórtico, Medellin

parent-teacher association listed types of "rejection" experienced in their community and then ranked them according to importance using an "onion" diagram. The most important type was "rejection because of brand names" (not using/wearing them), followed by "rejection of drug addicts, homosexuals and blacks". It is also possible to explore the relationships between poverty and/or employment and violence. This is most effectively done through causal flow diagrams.

Figure 3 provides an example of a causal flow diagram from the community of Pórtico, Medellín, Colombia by seven adults who were talking in a neighborhood shop. This illustrates their perception of the complex relationships between livelihood, unemployment and violence. The causes of unemployment are identified along the bottom of the diagram, with the consequences along the upper half.

e. Changes over Time in Levels of Violence, Social Capital and Exclusion

Trend analysis allows for more specific analysis of changes in particular issues. Thematically, this may assess how levels and types of violence, social capital or exclusion have changed over time or have become more or less important. In terms of the tools, it is possible to identify particular time frames. For example, time lines can be implemented according to changes over one day, a week, a month, a year or over a number of years. Matrices of trend analysis, on the other hand, tend to focus on the longer term and identify future aspirations in relation to a particular issue.

f. Causes and Consequences of Different Types of Violence

The causes and consequences of violence are obviously of major importance for PUA on violence. While this can be done with reference to violence in general, it is more relevant to identify causes and effects of different types. This can be assessed through the application of causal flow diagrams, problem trees and matrices of trends. All of these tools help to identify relationships between political, economic and social violence. For example, in Colombia and Guatemala, intra-family violence emerged as leading to other types of violence outside the home, such as delinquency, gang and drug-related violence. In other words, it is possible to identify the nature of the continuum of violence in different contexts. In addition, it is possible to assess the relationship between violence and other factors such as employment, education, social capital and exclusion.

Figure 4 illustrates a problem tree from the community of Jericó,

Table 5:	Potential Tools for Trend Analysis
Tool	Issue
Matrix of trend analysis (may use scoring)	• Identification of the major changes in community problems and/or types of violence • Identification of what happened "before", "now", "what will happen if nothing is done" and "desired future"
Time line	Perceptions of changes in problems or types of violence over different time frames

Table 6:	Potential Tools for Assessing Causes and Consequences of Different Types of Violence
Tool	Issue
Causal flow diagram	• Analysis of causes and consequences of violence in general and specific types of violence • Identification of relationships between different types of violence and other factors
Problem tree	• Analysis of causes (in the roots) and effects (in the branches) of particular types of violence
Matrix of trends	• Description of the type of violence "now", "before" and "what happens if nothing is done about it" • Identification of causes and effects

Figure 4:	Problem Tree of Intra-family Violence, Jericó, Bogotá, Colombia

Participants: Adult women aged between 28-38 years

Community and City: Jericó, Bogotá
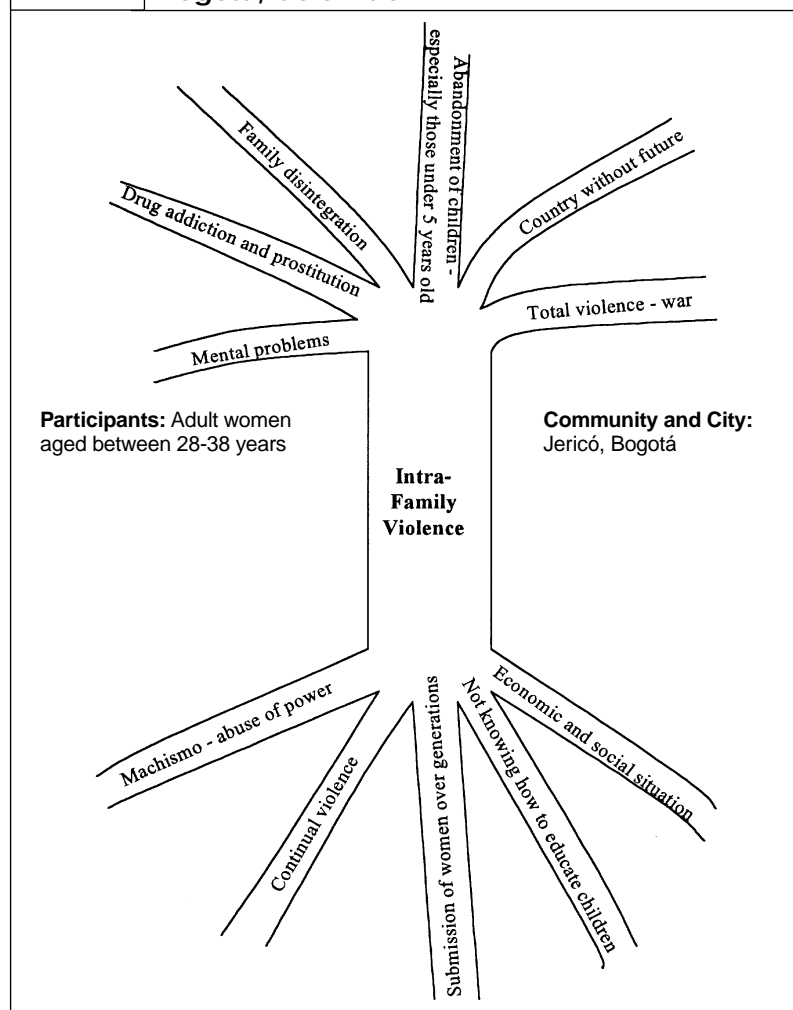
Bogotá, Colombia drawn by a group of adult women. As well as highlighting the main causes and consequences of intra-family violence, it also shows how violence within the home can lead to other types of violence. As well as "total war", it can lead to drug addiction and prostitution, among other things.
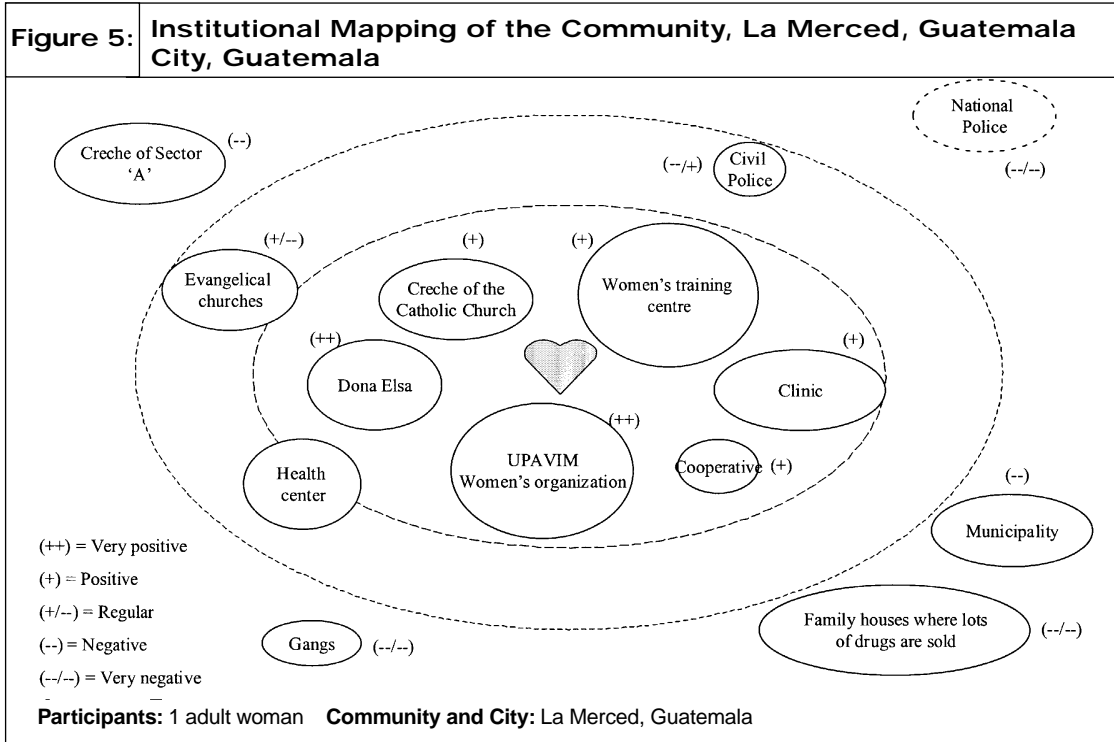
g. Social Capital and Mapping Social Institutions

Analyzing the levels and nature of social capital within communities can incorporate formal and informal or structural and cognitive types of social capital. With reference to informal or cognitive social capital, the issue of trust and collaboration among neighbours and communities is extremely important. In addition, the concept of fear is also crucial to analyses of violence. Causal flow diagrams can be used to identify the causes and consequences of trust, union or fear and the extent to which these are linked with violence, as well as time lines to see how trust, union or fear have changed. In addition, listings can identify the most trusted and least trusted people and institutions in the community. In turn, they can be represented visually through mapping institutional relations. Levels of trust can also be ascertained through a preference matrix using a scoring method. This lists the main people and institutions in a community and uses scoring to measure whether they are trusted or not (in addition to other criteria - see Table 7). Flow diagrams can also be used to identify the nature of networks of relationships among neighbours in terms of lending money, child care and so on.

Listings of formal or structural social capital can also identify the types of institutions that exist within communities. Evaluations of the institutions people value or consider to be effective can also be carried out

Table 7:	Potential Tools for Assessing Levels of Social Capital
Tools for assessing levels of cognitive social capital	
Tool	Issue
Time line	• Identification of how trust, fear or union have changed over time
Causal flow diagram	• Identification of causes or consequences of fear, mistrust or lack of union • Identification of networks among households and individuals
Preference matrix on social institutions (using scoring)	• According to institutions identified, can assess levels of trust in an institution, participation within the institution, whether the institution recognizes people's rights and whether it has been successful in solving a problem
Tools for assessing the levels of structural social capital	
Tool	Issue
Listing and ranking	• Identification of institutions and/or individuals within and outside the community • Ranking of their importance • Identification of institutions that address violence
Preference matrix on social institutions (using scoring)	• According to institutions identified, this can assess levels of trust, participation within the institution, whether the institution recognizes people's rights and whether it has been successful in solving a problem
Institutional mapping/map of institutional relationships	• Identification and evaluation of important institutions • Identification of negative or "perverse" social capital • Identification of nature of relationships between institutions

Figure 5:	Institutional Mapping of the Community, La Merced, Guatemala City, Guatemala

National Police

Creche of Sector 'A' (--)

(--/+) Civil Police

(--/--)

(+/--) Evangelical churches

(+) Creche of the Catholic Church

(+) Women's training centre

(++) Dona Elsa

(+) Clinic

(++)

Health center

UPAVIM Women's organization

Cooperative (+)

(--) Municipality

(++) = Very positive
(+) = Positive
(+/--) = Regular
(--) = Negative
(--/--) = Very negative

Gangs (--/--)

Family houses where lots of drugs are sold (--/--)

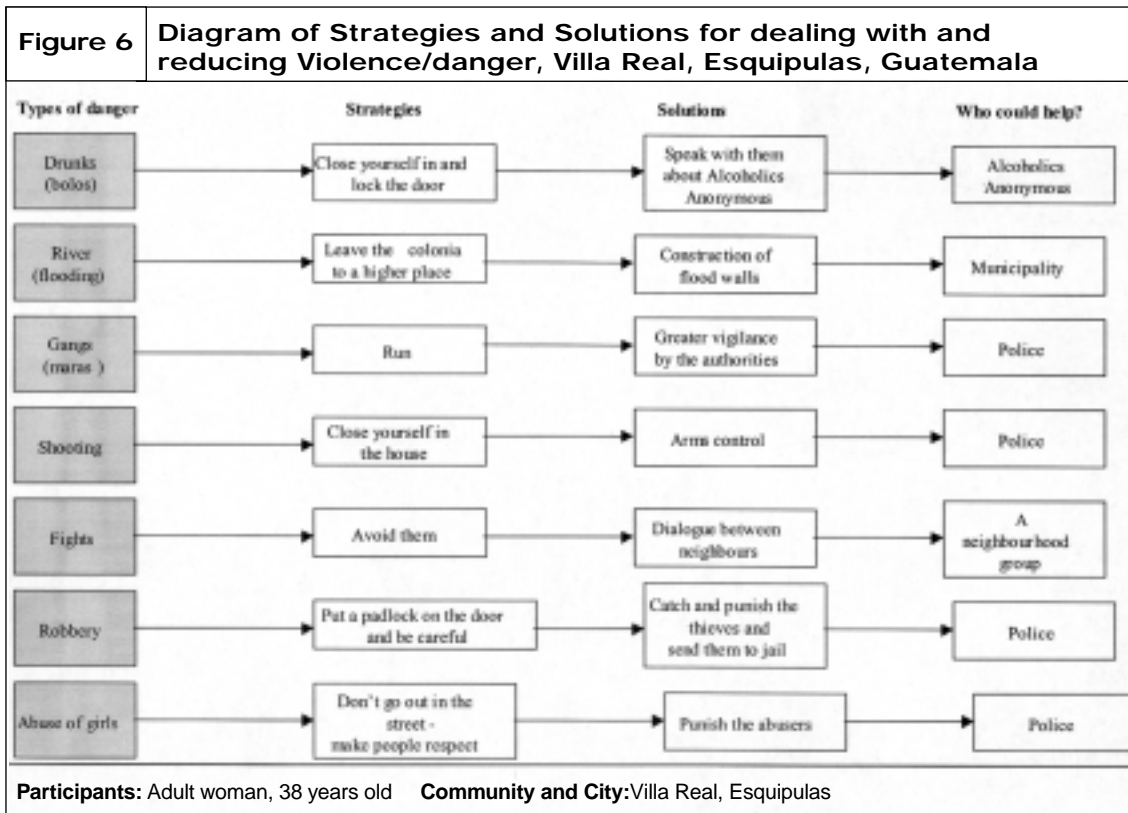**Participants:** 1 adult woman   **Community and City:** La Merced, Guatemala

through preference matrices using scoring. In addition, institutional mapping identifies whether the most important institutions are viewed as positive or negative. The flexibility of this tool allows for the identification of negative or "perverse" social capital such as gangs, drug dealers or consumers, or other institutions involved in propagating violence (see Figure 6). Another advantage of this mapping tool is that it provides visual representation of relationships between institutions and organizations and, if required, the nature of these links.

The institutional map drawn by a woman in La Merced, Guatemala City (see Figure 5) identifies the most prominent institutions in her community, with the size of the circles denoting their importance. In her view, the women's organization UPAVIM is the most important institution in the community. Those closest to the heart, in the centre of the diagram are the most integrated into the social fabric of the community although they are not necessarily positive institutions. For example, the crosses and minuses evaluate the institutions according to her perception of the benefits they bring the community. This example also highlights negative social capital in the form of "gangs" and "family houses where lots of drugs are sold". Furthermore, she considers a person, Dona Elsa, who is one of the founders of the settlement and a source of support for many when they have problems, to be an institution.

h. Strategies and Solutions for Dealing with and Reducing Violence

In policy-focused research using PUA, communities' own perceptions of strategies and solutions to deal with and reduce violence are crucial, especially if these differ from the views of policy makers. While in the eyes of

Figure 6	Diagram of Strategies and Solutions for dealing with and reducing Violence/danger, Villa Real, Esquipulas, Guatemala

Types of danger	Strategies	Solutions	Who could help?
Drunks (bolos)	Close yourself in and lock the door	Speak with them about Alcoholics Anonymous	Alcoholics Anonymous
River (flooding)	Leave the colonia to a higher place	Construction of flood walls	Municipality
Gangs (maras)	Run	Greater vigilance by the authorities	Police
Shooting	Close yourself in the house	Arms control	Police
Fights	Avoid them	Dialogue between neighbours	A neighbourhood group
Robbery	Put a padlock on the door and be careful	Catch and punish the thieves and send them to jail	Police
Abuse of girls	Don't go out in the street - make people respect	Punish the abusers	Police

Participants: Adult woman, 38 years old   **Community and City:** Villa Real, Esquipulas

researchers, strategies and solutions may be distinct, in practice, people tend to see the two as closely linked. An assessment of coping strategies can examine the impact of violence in terms of the short-term measures people have to take in order to avert violence. Solutions, on the other hand, are usually more long-term, and tend to be associated with the actions of outside agencies and organizations. Colombia and Guatemala exhibited the most tool innovation relating to these themes. Although established

Table 8:	Potential Tools to Identify Coping Strategies and Solutions
Tool	**Issue**
Listing and ranking	• Listing of coping strategies and solutions • Ranking of the most important ones
Matrix of strategies and solutions	• Identification of coping strategies and solutions according to types of problem or violence • Identification of the institution or entity that can help
Diagram of strategies to cope with violence Diagram of solutions to reduce violence (can be combined)	• Visually identifies the strategies and solutions to different problems and types of violence • Can distinguish or combine strategies and solutions • Identification of existing and proposed solutions, as well as the institution or entity that could implement them
Dream communities	• Identification of the characteristics of a dream community

tools such as listings and matrices can assess basic information on strategies and solutions, there are fewer visual exercises. Variations were therefore developed (see Figure 6). In some cases, strategies and solutions were combined in one tool whilst in others, separate tools were used. An important distinction when applying tools for solutions was to identify the difference between existing solutions and proposed or ideal solutions.

A combined diagram of strategies and solutions is shown in Figure 6, drawn by a woman from the community of Villa Real, Esquipulas, Guatemala. She identified the main types of dangers in her community, then outlined the main short-term ways of coping with these and then the long-term solutions. The diagram also identifies the institution or organization that could implement the solution that she suggested.

i. Summary of PUA Tools for Researching Violence

While there are no set rules on the number of tools that should be used when conducting a PUA on violence, experience from Colombia and Guatemala highlighted the usefulness of providing a summary of PUA tools and a recommended number of exercises to be implemented in one community over a one-week period. The summary in Table 9 outlines the basic tools which can serve as the foundation of a PUA on violence in a community. Obviously, other tools can be implemented depending on the context, and this serves only as a guideline. Despite the drawbacks of imposing particular tools and a recommended number of exercises, the experience of providing a summary was positive in practice. It is particularly useful in large projects such as those undertaken in Colombia and Guatemala where research teams work simultaneously in a large number of communities. Furthermore, it allows for a basic set of information to be collected, making cross-community comparisons considerably easier.

VII. COMBINING PUA WITH OTHER RESEARCH TECHNIQUES

INITIALLY, PUA METHODOLOGIES were entirely qualitative in nature. More recently, however, PUA has increasingly been complemented by traditional social science techniques such as household questionnaire surveys. It is now recognized that neither technique is comprehensive. Policy makers interested in community perceptions, for example, also require baseline data from which to present results to audiences used to dealing with quantitative information for planning purposes.[49] It is recognized that participatory appraisal can fruitfully be combined with other forms of traditional methods that elicit quantitative information.[50]

This can be achieved in a number of ways. The most common is conducting a small household survey in the community where the appraisal is also carried out. In a soil conservation and agro-forestry project in Malawi, for instance, a random sample, pre-designed questionnaire survey of 30 households was conducted in each community, followed by in-field analysis of survey results. This provided the basis from which to continue with more in-depth participatory methods.[51] "Sequencing" is also an important issue and it must be decided whether to conduct a household survey before, during or after a PUA. Another case from El Salvador, for example, highlighted how participatory research may be an important precursor to household surveys.[52]

While the research project in Colombia and Guatemala was conceived

49. Abbot, J. and I. Guijt (1997), "Creativity and compromise", PLA Notes Vol.28, pages 27-32.

50. Davis, R. (1997), "Combining rapid appraisal with quantitative methods: an example from Mauritania", PLA Notes No.28, pages 33-41.

51. Leach, M. and J. Kamangira (1997), "Shotgun wedding or happy marriage? Integrating PRA and sample surveys in Malawi", PLA Notes No.28, pages 42-46.

52. Gammage, S. (1997), "PRA and its complementarities with household survey methodologies", PLA Notes Vol.28, pages 47-54.

Table 9:	Summary of Main PUA Tools on Violence and Recommended Number of Exercises
Tool	**Number of exercises**
Matrix of general data	1-2
Matrix of social organization	1-2
Listing of general problems	15-20
Ranking of general problems (scoring, "onion" diagram or flow diagram)	5-7
Listing of types of violence	15-20
Ranking of types of violence (scoring, "onion" diagram or flow diagram)	5-7
Map of institutional relationships	3-5
Preference matrix on social institutions	7-10
Participatory map of the community	1 +
Participatory map of secure and insecure places	5
Matrix on history of the community	1-2
Matrix of trends on general problems	2-3
Matrix of trends on types of violence	5-10
Time line - daily, weekly, monthly	3-5
Time line - yearly	3-5
Timeline - long-term (over period of a number of years)	3-5
Causal flow diagram on types of violence and/or other problems	10-15
Problem tree	3
Listing of strategies to cope with violence	10-15
Diagram of strategies to cope with violence	5-7
Listing of solutions to reduce violence	10-15
Diagram of solutions to reduce violence	5-7
Drawings	10-15

in qualitative terms, some basic socio-economic information about each of the research communities was also needed. A short survey based on a simple questionnaire that covered educational level, employment status, household structure and housing tenure was therefore conducted. Thirty questionnaires were conducted in each of the communities while the PUA

was being implemented. Although not representative, this data allows for some approximation of the characteristics of the research populations.

VIII. ANALYSIS OF PUA ON VIOLENCE

ANALYSIS OF PUA goes beyond the scope of this paper. However, a number of brief points are relevant. Analysis of a PUA on violence can take two forms. First, the identification of broad patterns (from in-depth content analysis of the exercises) that can then be illustrated using the most appropriate tools. Second, is the quantification of information. This is based primarily on listings of general problems, types of violence and types of solutions. Using the universe as the total number of listings (i.e. the number of times a listing was conducted), it is possible to categorize the issues and calculate percentages. Returning to the framework outlined in Section III on the costs of violence to communities, it is possible to classify problems identified through listings of general problems according to violence related problems and the four types of capital (see Table 10 from Colombia).

IX. CONCLUSION

GIVEN THE LIMITED number of PUAs on urban violence, this paper has provided some basic guidelines. At the same time, it is recognized that the basic premise of participatory appraisals is their inherent flexibility and that the impetus should come from the communities themselves. Nevertheless, the conceptual framework described in the paper is a useful starting point for research design, as well as a way of systematizing analysis. Furthermore, there are particular PUA tools that are more suitable for exploring violence than others. Therefore, while it should be stressed that the guidelines presented here are entirely flexible, and based only on a potential range of tools, it is hoped that they will assist future PUA researchers working on violence.

Table 10:	Types of General Problems According to Violence and Types of Capital, Colombia				
Violence	Physical capital	Human capital	Social capital	Natural capital
• Drug related violence • Insecurity • Intra-family violence • Robbery • Fights • Gangs • Loitering (vagancia) • Killing • Rape • Alcohol related violence • Prostitution • Guerrilla activity • Paramilitary activity • Threats	• Unemployment • Lack of public services • Poverty • Housing problems • Transport problems	• Lack of access to education • Lack of recreational facilities • Lack of health services • Hunger	• Lack of unity/trust • Absence of the state • Discrimination/stigma • Corruption • Lack of trust in police	• River (flooding and pollution) • Environmental hazards • Erosion • Natural disasters