Sida

FEBRUARY 2003 • ERM – ENVIRONMENT RESOURCE MANAGEMENT

Background Study for the Swedish Country Strategy for India 2003–2007

Urban Development and Environment in India

Foreword

India has the second largest urban population in the world. Today, around 280 million Indians live in urban areas, and there are currently 35 cities – compared to 23 in 1991 – in the country with a population of above one million. Along with this mushrooming of cities, the urban environment is facing increasing pressure from industrial and vehicle pollution, the disposal of solid and hazardous waste, and, not the least, the inability of municipalities to provide basic services such as safe water and sanitation.

Even though the direct costs of environmental damage are extremely hard to quantify, it is clear that the consequences, for the affected families and communities in particular, and the development of the country in general, are formidable. The most severely hit are often the poor, the number of whom is expected to triple to 200 million or more in the next 25 years.

The Swedish International Development Cooperation Agency (Sida) is currently in the process of preparing a new country strategy for India. As part of this exercise, Sida has commissioned the Environment Resource Management Consultants (ERM) to write an issue paper on the three inter-linked areas of urban poverty, urban environmental management and urban governance. On this basis, ERM was asked to propose a strategy for Swedish assistance in urban areas, including

- The objectives of co-operation
- Approaches and methods of co-operation
- Levels of ambition and possible areas of co-operation
- Institutional and financial mechanisms of co-operation

We are pleased to share with you their findings and recommendations.

New Delhi, February 2003

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Published by Sida 2003

Embassy of Sweden, New Delhi

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Printed by Elanders Novum AB, 2003

Art no: SIDA2190en

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1 Introduction

1.1 Background to the Assignment

The Swedish International Development Cooperation Agency (Sida) has appointed Environmental Resources Management (ERM) to provide consultancy services for preparation of an *Issues Paper on Urban Environment in India.* The consultancy commenced in June 2001, and will be completed in September 2001.

1.2 Purpose of the Issues Paper

The main purpose of the Issues Paper is to develop, through a consultative process, an agenda for further discussions between Sweden and India on cooperation in the field of urban environment.

The main focus of the paper is on the *cooperation strategy*. This includes:

- The objectives of cooperation
- Approaches and methods of cooperation
- Levels of ambition and possible areas of cooperation
- Institutional and financial mechanisms of cooperation

The cooperation strategy we outline covers with *three main topic areas*:

- The relief of urban poverty
- Urban environmental management
- Strengthening decentralised urban governance.

The aim of the report is to provide a practical overview of the key issues and strategies that may guide an aid cooperation program. The report discusses possible objectives of the cooperation program, strategies, target groups, expected outputs, and corresponding activities for a program. The report is not intended to provide a general or comprehensive description of urban environmental problems or to formulate individual projects.

The terms of reference for the assignment are attached as Annex A.

1.3 Introduction to Urban Issues in India

Currently some 300 million people live in Indian cities and towns. In the 1991 Census, there were 23 cities with a population of over 1.0 million people, 65 cities with more than 0.5 million people, and 300 cities or towns with more than 100,000 people.

The scale of the problem of the urban poor in India is huge by any count. Drawing on the Official Poverty Line of Rs 454 per capita per month estimated by Planning Commission, Tewari (2001) reports that the poor population in urban areas totaled 67 million in 1999–2000. This represented nearly one–quarter of the urban population. DFID (2000) estimates that 100 million people live in slum settlements in urban areas in India. Although seventy per cent of the Indian population still lives in rural areas (with, according to the World Bank, 37 per cent below the poverty line), if the urban population rises to 40 per cent of the population in the next 25 years, as is expected with the growth in rural–urban migration, the urban poor could double to 200 million people or more.

The processes of economic development and urbanisation have placed serious pressures on the environment in India's cities and towns (as has been summarised in Tewari, 2001). The Indian government is attempting to address these issues through its own budgetary resources, with donor assistance and increasingly through efforts to encourage private sector participation.

Annex B provides an overview of urban poverty and environment issues in India, and of the key institutional players.

1.4 Timetable for the Assignment

Sida issued a contract to ERM in June 2001. Following a visit by two members of the team to Stockholm for initial discussions with Sida staff, the team undertook a four week mission in India in August, which involved both international and Indian ERM staff.

The schedule for the assignment also forsees a second visit to Sida-HQ for further discussions after the submission of this report.

1.5 Structure of the Issues Paper

The Issues Paper is structured as follows.

– *Section 2* discusses the factors which should be considered during Sida's preparation of a cooperation strategy.

– *Sections 3–5* cover the three main urban topic areas listed above, namely: poverty, environmental management and governance.

– *Section 6* outlines and discusses potential cooperation strategies for Sida's further consideration.

Supporting materials are provided in Annexes.

2 Cooperation strategy

In this section we outline possible objectives of a Sida urban environment program in India, and discuss various issues which will be relevant to the development and final agreement of that program.

2.1 Objectives of cooperation

In the context of Sida's overarching objective of alleviating poverty, we suggest that the overall goal for the urban environment program could be:

"To improve access of the urban poor in India to environmental planning and services".

The indicators by which the success of the overall program might be measured could include:

– Reduced incidence of environmentally-related disease among the urban poor;

– Improved access of the poor to sanitation and solid waste management services;

– Improvement in other urban environmental quality indicators, to be selected as relevant for the specific strategies developed within the program;

- Increased public awareness of benefits associated with improved environmental conditions and services;
- Municipalities allocate budgets for environmental services which are targeted at the needs of the poor;
- Increased opportunities for private sector and NGO involvement in delivering urban environmental services or contributing to improvement of urban environmental conditions;
- Federal and State governments allocate budgets to line ministries for environmental services targeted at the needs of the poor.

The elements of the future cooperation program developed will, in logical framework terms, become the activities through which the overall program is carried forward. The bulk of this issues paper is concerned with identifying potential areas for the urban environment program; the rest of this section considers strategic issues which should be taken into account by Sida.

In developing the specific activities within the program, other internal ('subordinated') objectives which Sida should consider are as follows.

- The program should support activities that would not, or could not, normally be financed by India.
- The program should have a high probability of a positive outcome; where there could be significant levels of risk these should be clearly identified and positive steps taken to manage them.
- To ensure sustainability and to maximise the impact of the program, it should have significant participation of Indian resources from the public and/or private sectors.
- The program should be an identifiably Swedish program, and should seek to include activities where Swedish expertise and technology could be used.
- Opportunities for future cooperation between Swedish and Indian companies should be identified and maximised.

2.2 Approaches and Methods of Cooperation

In this section we consider various important criteria that are likely to be important to the achievement of Sida's objectives. This drawn on the approaches and methods of other donor agencies in India, some of which are described in this section and later in the issues paper (see *Table 2.1* for examples of some ongoing major development cooperation projects in India). The criteria covered are the identification of high and unmet needs, the need to achieve focus and scale while avoiding excessive risk, the role of an enabling environment, the need for positive local participation, and partnering with other donors.

2.2.1 Identifying high and unmet needs

Poverty alleviation is the overarching goal of Sida development cooperation, and so it is logical that a new urban environment program should focus on areas or sectors where the poor will benefit significantly from the actions which are undertaken. needs are great and where they are not currently being met. The contemporary literature on poverty recognises that it has many dimensions. For example, the World Bank (2001) links poverty to vulnerability to risks such as loss of income or health or threats to security; and the UK DFID's aid program draws upon the sustainable livelihoods approach to differentiate between different groups of the poor, with different needs and different vulnerabilities.

Vulnerability itself has several dimensions: for example economic, housing, social, and personal. Economic vulnerability includes irregular or casual employment, lack of access to credit, low paid work, lack of access to formal safety net programs, low ownership of productive assets, legal constraints on self–employment. Housing vulnerability includes poor quality shelter without ownership rights or even tenure rights, and lack of access to water and sanitation. Social vulnerability may involve low social capital or caste status, exclusion from local institutions, lack of skills, low education, or inadequate access to food security programs. Personal vulnerability includes proneness to violence or intimidation, being female, a child or elderly, disabled and destitute, lack of access to information, and lack of access to justice.

The scale of urban poverty in India is so extensive and multidimensional that there little would be gained by attempting to rank poverty problems in different urban areas as a basis for deciding on a focus for Sida's development cooperation program. There are numerous situations all around India where Sida aid can provide significant benefits to poor communities. The challenge is not how to rank poor communities in terms of their poverty but to determine where Sida aid can provide the greatest value–added contribution to improving environmental services to poor communities.[1]

Given both the commitment of other donors to large cities and the scale of Sida's proposed aid, there would arguably be benefits from focusing on small to medium sized towns rather than on large cities. The World Bank (and other large-scale donors to varying degrees) have tended to focus on large cities and continue to do so. Sida may have a more decisive and clear impact in small to medium–sized towns. This is a main aid strategy of a comparable sized donor, AusAid, although AusAid complemented this strategy with involvement in one large city, namely Bangalore (see *Box 2.1*).

2.2.2 Focus, Scale and Risk Avoidance

In order to achieve the maximum impact with a cooperation program with least costs of implementation, it should concentrate on certain themes or areas. A large number of small and loosely connected projects are likely to have less impact than a more focused program and be administratively expensive.

In order to achieve an appropriate level of focus, most aid programs in India have concentrated on certain states, rather than across the national level. For example, the UK (DFID) program focuses primarily on the States of Orissa, West Bengal, Madhya Pradesh and Andhra Pradesh, although there are also national programs in education and HIV/AIDS. DFID has several programs in Andhra Pradesh, where as well as Urban Services Project which addresses urban governance and environmental management (see *Section 3.2*), it has a district primary education program (£42 million), a rural livelihoods program (£45 million), energy efficiency program (£45 million). It is also supporting World Bank initiatives in power sector reform, and providing budgetary support (via a structural adjustment loan) for the restructuring program. Some major donor-funded urban programs, and their state focus, are listed in *Table 2.2*.

Secondly, in our meetings with donors, many officials stressed that programs must be taken to scale and that donors must be willing to commit over a lengthy period. Given Sida's planned resource commitment, this may again be achieved more easily in small to medium–sized towns. Officials from DIFD observed that in their experience the demonstration project effects which were achieved in, for example, the slum improvement projects of the early to mid-1990s rarely led to effective scaling up of the positive impacts.

However, it would be risky to focus on only a few projects or to put all Sida's inputs into one geographical area. We have heard various comments concerning unsuccessful or unproductive aid programs; it is, however, difficult to get accurate or definitive information on any of these that might indicate potential 'killing factors'. Our recommendation, therefore, is that the Sida strategy should combine a focused approach with a balance that does not commit an unduly high proportion of the aid program to one project.

Box 2.1 AusAid's strategy in India

In the size of its aid program, AusAid is a relatively small donor like Sweden. About three years ago, AusAid set out to re–develop its aid strategy. It established the following criteria for the strategy:

– Achieve an identifiable program and profile.

– Focus on small states where it is easier to gain access to government.

– Focus mostly on small or medium sized towns.

– Select poor states.

– Select states that have received little aid.

– Select states that are progressive and have absorptive capacity.

– Develop a coherent sector program

– Develop a program that draws on Australian experience and expertise.

To achieve these objectives, AusAid decided to focus on water and sanitation projects in the North–East region, Himachel Pradesh and Madhya Pradesh. The first two areas are hilly states, with a large tribal component and high dependency on the Central Government. Currently, AusAid's main projects are in Gantok, Shillong and Bangalore, where it provides mainly technical assistance, training and capacity building. Gantok and Shillong are small towns with a population of around 100,000. However, the projects will require access to other funds. Projects in Himachel Pradesh have not progressed because they did not make the priority list after evaluation. AusAid also sought to create an identity with a water sector project in Bangalore. However, other donors have moved into Bangalore in the last two years and AusAid is considering reducing its input there.

2.2.3 Working in an Enabling Environment

Nearly all donors stress the importance of working in an enabling environment, that is a governance environment that will actively support the program and be committed to its implementation. Officials of the INDO–US Financial Institutions Reform and Expansion (FIRE) project pointed out that an enabling environment is especially important for smaller donors who require strong government support to be effective.

The necessary conditions for an enabling environment are appropriate political will and a progressive bureaucracy at the state level as well as the municipality (state governments remain the key factor in the culture of municipal governments in India). Other important conditions usually include strong community participation and the presence of strong and committed NGOs. An enabling environment is usually characterised by some acceptance and implementation of decentralised government. In general, the states where all or most of the above conditions exist are known as the 'reforming states'

In theory, therefore, there could be strong reasons why a donor would wish to concentrate its activities in reforming states. However, there tends to be an inverse relationship between an enabling environment and the need for new aid programs for two main reasons:

– First, other aid donors have often established a strong presence in these reforming states;

– Second, these states are likely to have achieved higher economic growth and to have less dire poverty than other less reformed states.

We also heard the view expressed that some states, including some reforming states, are 'able to do it on their own' by taking the lead on addressing urban issues and mobilising funds for urban management programs: directly from their own budgets; in partnership with NGOs and the private sector; and through access to the capital markets. In our meeting with CIDA, the fact that Maharashtra should be able to operate in this manner was the reason quoted for a proposed urban environment program to Maharashtra state being re-directed towards Madhya Pradesh in 2000.

It was also suggested to us that the GoI is coming under considerable pressure from the states which do not feel that they are receiving their fair share of donor assistance, and that as a result it would be very difficult for any donor to negotiate an aid cooperation program focusing on the reforming states.

A possible way forward for Sida would be to work in a 'potentially enabling environment': a cooperation program may be able to achieve more value added in a state that has not adopted significant reforms but is perceived to be willing to do so. We discuss potential candidate states later in the issues paper.

However, there are conflicting views about the extent to which reform states are really a significant factor. It was suggested, for instance, that Andhra Pradesh's reputation as a reform state is built largely on the drive and personality of the Chief Minister, and that without his presence the reforms would not be sustained. Sida could profitably discuss this further with other donors. These considerations notwithstanding, we recommend that Sida bears in mind if a state has not exhibited a noticeable inclination to adopt change, proposed cooperation becomes a higher risk venture. We would consider it unwise to develop a cooperation program in a state which has shown little inclination to accept policy changes and where the enabling environment appears weak: it would be inappropriate to initiate a major physical investment in a non–sustainable environment. Additionally, given the scale of Sida's likely assistance, it would be unrealistic to expect that the cooperation program would itself be a major agent of change. Working in an unreforming state would be a high risk strategy and could be ineffective unless the work were strongly partnered with another donor intervention (most likely a large-scale multilateral one).

2.2.4 Working with local partners; ensuring positive local participation

Working with a local partner is essential to program success. DFID (1999) reports on the importance of building long–term relationships with Indian partners at the national, state and local level. Also, concentrating efforts in a few partner states creates opportunities to increase the impact through synergies between aid programs.

In selecting its partners, the main DFID criteria were primarily poverty-focused:

– High concentration of poor people;

– A commitment to reducing poverty;

– A desire to improve standards of governance;

– An interest in a partnership with the UK.

In its urban program, the Asian Development Bank (ADB) is working with several states. It is also funding urban infrastructure development through organisations such as HUDCO, ICICI Limited and Infractructure Development Finance Company Ltd. The rationale is that urban development is inherently complex and that these agencies have the appropriate management skills to ensure that the funds are spent and managed effectively. Some of the funds are to provide capacity building for microfinance institutions and part to fund infrastructure through the microfinance institutions.

Importantly, the recipient government department or agency should be 'self–selecting'. This means that the recipient party should be actively interested in the cooperation program and prepared to meet certain commitments to ensure its success. This does not mean that the recipient agency will necessarily have formulated the program precisely and that Sida's role is simply reactive. In all likelihood, Sida will have a proactive role in developing the cooperation policy. This is usually required for more complex projects. A combined capacity building and investment project usually requires a proactive strategy. However, support for the program must exist at state and municipality level and at the political level and in the bureaucracy.

It is also an important general principle of aid programs that financing of investment projects should normally have some local financial participation.

The local participation may emanate from the private sector rather than the public. The USAID FIRE project has worked successfully with the Indian Certified Accountants Association in developing modern accounting methods for state and local governments.

Another very important element of local involvement will be the NGO sector. As discussed below, local NGOs do not usually provide a large amount of financial capital towards projects. However, they are often important facilitators of projects for poor urban households, helping to raise awareness, disseminate, and foster a sense of 'ownership' amongst the communities. NGOs can also pay an important role in mobilising contributions 'in kind' by urban communities as part of a project. In general, however, it is our understanding that – in comparison with rural areas – NGOs in cities and towns tend to be smaller-scale, more fragmented and more tightly focused in their activities. They are therefore, by their nature, more administratively more burdensome as potential partners. There are few major NGOs such as SPARC, described later in this issues paper, which operate even on a state or regional scale; CSE, which does operate nationally and already receives Sida support, operates as a lobbying and advocacy organisation in carefully selcted topic areas, which is not very conducive to a partner role for many types of urban environmental management project.

2.2.5 Partnering with other donors

The multilteral agencies, notably the World Bank and the ADB, positively seek to work with bilateral aid donors. As described in a later section, the Water Sewerage and Sanitation program is led by the World Bank and supported by 20 donors. The Cities Alliance Program is funded mainly by the World Bank, but supported by the DFID and the USAID–funded FIRE project, which contribute $8.5 million each year for five years. DFID collaborates with the World Bank in a range of sectors in Andhra Pradesh and Orissa, and with the Asian Development Bank in Calcutta. CIDA has committed to partnering with ADB for an urban environment project in Madhya Pradesh.

Given the scale of urban poverty, environmental pollution, and governance issues in India on the other hand, the benefits of the Swedish aid program may be enhanced if Sweden were to cooperate with other governments or agencies in the delivery of its program to India. The cooperating agencies could be multilateral or bilateral donors, NGOs, or private sector funding or industrial agencies. One such opportunity of working with a multilateral donor could be to work on the city improvement program in Rajasthan alongside the ADB (see *Box 2.2*).

Sida's choice of partner (if any) will depend in the first instance on compatibility of strategies and projects. Because most donors have similar views on cooperation strategies, this issue is unlikely to be decisive as between donors. Greater policy, practical or administrative differences may arise between an aid donor and an NGO or a private agency.

2.3 Levels of Ambition and Possible areas of Cooperation

As described above, the scale of poverty is so large and Sida's contribution small – relative both to the size of the issues and to the contributions of the multilateral agencies and some bilaterals, particularly DFID. Inevitably, the level of ambition must be relatively modest. We have suggested that one appropriate way for Sida to maximise the ambition within the scope of the funds available might be to focus on small or medium sized towns.

In Bangalore, AusAid's assistance to the water sector has a clearly-defined focus and level of ambition (see *Box 2.3*).

Box 2.2 Asian Development Aid to Six Cities in Rajasthan

The ADB is providing a loan of $250 million to improve the six largest cities in Rajasthan. It is expected that nearly 60 per cent of the funds will be allocated to water supply and waste water treatment and 15 per cent to roads.

The project also contains a governance component. Jaipur has introduced double–entry book keeping recently. But generally urban governance is not advanced in the state. The ADB loan covenants contain a strong commitment to improved governance. The project management consultant plans to introduce governance models that it developed in ADB projects over several years in Karnataka. However, the State may have to employ more qualified persons and resources to implement the institutional strengthening programs.

The project started in January 2000. However, progress has been slow. The Project Manager and other technical consultants have only recently mobilised in Jaipur (the capital city in the state). The slow start is partly due to the conditions attached to the loans. Grant–aid projects tend to start more quickly.

The project is administered by the State Ministry for Urban Development and managed by a Project Office, which reports to the Ministry. In order to develop programs, consultants will have to obtain agreements from the municipalities, the Project Office and the relevant State Ministry. In one of the project cities, Adjmer, the town administration is divided between the municipal body which manages existing urban facilities within the city boundaries and the Urban Improvement Trust which is responsible for developing new urban land. This adds another layer of administration.

There are 222 towns in Rajasthan, including another 14 cities with a population of over 100,000. No other donor is providing funds of any substance to the cities and towns in Rajasthan.

Sida will also have to consider whether to work on small ring–fenced projects or to work as part of a team on larger more complex urban projects. The latter would probably require Sida to work more closely with other multilateral or bilateral aid partners who share a similar agenda. The trade-off for working with other donors is the potential dilution of the identifiably Swedish element of the cooperation.

Box 2.3 Clear definition of levels of ambition: AusAid in Bangalore

In Bangalore AusAid is assisting the Bangalore Water Supply and Sewerage Board (BWSSB) to improve its capacity to deliver water, sewerage and environmental sanitaion services to the city. Special efforts are made to improve services for the urban poor and vulnerable. The project aims to develop the capacity of the BWSSB to plan for better delivery focusing on the Master Plan, to strengthen its management structures, to experiment with different technological options and to enhance the board to work with poor communities. The board has to date neglected the poor, and has had the perception that they do not pay for services. The idea of the project is that as services improve the poor will also be willing to pay. There are three initiatives in the slums for improving services. The idea of the pilot projects in poor localities is to understand how the board can work with the poor, how the poor can be involved, if they can help to maintain the service, what they can pay etc. This work is through NGOs. Consultants working on the project met feel that they are in a process to develop the capacity of the board. As a result, the water board may be in a position to attract larger funding from ADB and the World Bank who are already showing an interest to collaborate with the board on a larger project. The project tries to induce the board to induce the board to take ownership of the project. The consultants work with local counterparts. Capacity building of staff is a main part. The technical assistance is to the organisation as such rather than just the corporate level. The consultants are clear that they cannot change government procedures. AusAid is clear on the ambition level of this – which is focused on improved planning functions. Experiments are going on in a few areas with bringing in private sector for management. The government is interested in raising water tariffs, but this is a politically sensitive issue. It may be more feasible if the level of the service improves.

Support to an institute such as a water board will have widespread effect if successful. It will be poverty inclusive – if the water board incorporates slums and poor areas in their planning. The impact on the poor and their livelihoods will, however, take a long time to realise.

2.4 Institutional and Financial Mechanisms of Cooperation

Foreign contributions are now managed in India under the *Foreign Exchange Management Act*. Formerly they were regulated under the *Foreign Contribution and Regulation Act*.

Most donor funds must be chanelled through the Department of Economic Affairs (DEA), Delhi. The DEA then provides the funds to the state government, which in turn provides the funds to the recipient agency. The DEA usually provides 70 per cent of the funds to the states as a loan and 30 per cent as a grant, regardless of how the funds have been provided by the donor.

In exceptional cases, when donors provide grants clearly for poverty or disaster relief, the DEA may pass the money on to the recipient agency as a grant. For example, the DEA passed large amounts of money provided by the World Bank and the Asian Development Bank directly to the Gujerat State Disaster Management Authority. However, DFID wishes to give a grant to the MRC Human Resources Development Institute for work in public administration and governance, but DEA has not approved this because it is not 'poverty related'.

Following a visit by the UK Secretary of State for International Development, DFID has been trying to move towards direct remittance of funds to partner states on a 100% grant level. Except in the circumstances noted above, GoI has been resistant to this.

Donors can provide funds directly to a NGO or institute that is registered under the *Societies Registration Act* if the funds are for social or economic welfare or culture. The NGO or institute must obtain prior clearance to receive such funds and report on receipts and expenditures each 12 months.

When donor funds are distributed to the ultimate recipient through a chain process via the DEA and a state government, the donor does not deal with the recipient agency. In such cases, a complex set of covenants between all participating parties is required to ensure that the recipient agency will take full responsibility for use of the funds and for the sustainability of any works that are developed. This clearly increases the levels of administrative complexity for interventions which would be targeted at small and medium towns.

3 Improving urban livelihoods

3.1 Introduction

There are two main strategic approaches towards improving urban livelihoods. One strategy is based on the view that urban poverty is a function of the general level of economic development and the general process of government (Lindahl and Karlstrom, 1999). According to this view, the main policy imperatives are to raise the general rate of economic growth, including development of the rural areas, and the efficacy of government in the country. This may be termed a 'poverty inclusive strategy'.

The second strategy takes the macro economic policy and governance settings as given and focuses on policies that may directly alleviate poverty (a 'poverty directed strategy'). These two strategies are not mutually exclusive. However, they tend to provide a primary policy emphasis.

The policy emphasis in India tended traditionally towards a poverty directed strategy. Within this strategy, Several major policy strands can be identified

– Policies that aim to raise the incomes and employment of the poor;

– Improvements in public services for the poor, especially slum improvements;

– Microfinance;

– Social protection policies.

In this section we discuss these sets of policies and the role that donors may play in promoting these policies. All could be included as elements of an urban environment program, as discussed below.

Recently, governments in India have moved away from poverty directed projects toward developing improved processes, community and municipal involvement, and capacity building. Some major donors are also stressing the need for economic reform, the use of markets, and governance reform as necessary conditions for the sustainability of all programs, including poverty directed programs. These more poverty inclusive approaches are discussed in later parts of the issues paper.

3.2 Raising income and employment of the urban poor

Raising employment and income of the urban poor can be done in many ways. The methods discussed below include (i) improving human capital resources through education or training, (ii) increasing the capital that workers can work with, (iii) increasing local investment and the demand for labour, (iv) improving access to labour markets, and (v) providing additional public sector employment, usually via public works.

It is widely recognised that 'education is the single most important investment that can help in improving the quality of life of the poor by developing skills for better paid, regular, secure employment in the formal sector' (Tewari, 2001, p.36). UNICEF supports several education programs. For example, it has supported a Primary Education Enhancement Programme initiative in Delhi, with a strong commitment to reach all the urban poor children with formal primary education by building partnerships with local communities.

Many NGOs also promote education. For example, PRATHAM (an NGO agency based in Mumbai) promotes education in urban areas especially in the West. This is a private sector initiative supported by UNICEF and ICICI, a financing agency. In Calcutta, there are large number of NGOs working in primary education area.

Vocational skill training for adults is another major instrument in employment and income generation for the poor as long as the training is market driven and the skills learned are in demand. The Reddy Foundation in Hyderabad (an NGO) has achieved significant successes in developing useful employment skills.

However, training programs may not be successful. Arvind Mills, a large textile company in Ahmedabad, tried to encourage unskilled and poor workers to learn garment stitching and car driving. Within a few weeks, many returned to their old jobs, such as vegetable vending, apparently preferring that lifestyle. There may also be problems in identifying who is to receive training.

The second income strategy (increasing the capital that workers can work with) is premised on the view that poor people require access to equipment and finance to assist them with their work or to open up business opportunities. Microfinance organisations are seen as an important means for assisting investment in business opportunities. This is one reason why DFID is providing technical assistance to microfinance institutions.

Another strategy is to encourage investment. DFID is developing a program in Calcutta to identify how to attract investment to the poor areas of the city and thus increase to demand for labour. (Again this needs to be checked).

The fourth income strategy is opening up and improving the efficiency of labour markets. Access to employment opportunities often depends on the capacity of individuals to mobilise support from local 'mustangs' or dadaas' who control entry to different markets. Labour market programs may include development of labour standards to provide adequate worker protection without creating barriers to labour mobility, the development of labour exchanges to match workers to jobs, and anti–discrimination policies.

Fifth, employment support in the form of public works is widely used as a means to combine the construction of infrastructure with a minimal wage for the poor. This may create useful assets. However, it is often not very efficient either at creating assets or at generating additional employment. Labour costs are only 30 to 60 per cent of the total cost of works and many persons employed in this way would have alternative employment.

The major Indian employment program, the SJSRY program, aims to generate employment and income by establishing and supporting Neighbourhood Groups (NHGs) and Community Development Societies (CDSs). The CDSs prioritise projects and identify beneficiaries. The SJSRY program itself consists of two main programs: the urban self–employment program (USEP) and the Urban Wage Employment Program (UWEP). USEP encourages self–employment ventures or provision of wage employment by capacity building and credit assistance for micro enterprises. UWEP provides wage employment in public works for those living below the poverty line.

Commentators have found several weaknesses with the SJSRY program. DFID (2000) considers that the budgetary allocations are inadequate and heavily oriented to rural areas. On the other hand, Tewari (2001) states that the use of SJSRY funds is low: urban local bodies have not been able to absorb the funds which are available, and limited loan recovery has made banks, a major channel for credit assistance, reluctant participants. NGOs have limited involvement in the program. The World Bank (1998) notes that the criteria for identifying target groups under the programs has been open to abuse and many benefits have been captured by the non–poor.

In Rajasthan, officials argued that the conditions for SJSRY funds are too tight, that there is insufficient focus on women's needs, and that the program supports traditional skills such as tailoring and beauty parlour skills that have low financial returns. It was suggested that vocational training and financial support should focus on better paid work, such as nursing and computing skills. Recently, more innovative initiatives (eg in Hyderabad, where an NGO – Dr Reddy's Foundation – is partner to the municipal corporation) have used on a more demand-driven approach to vocational training. On the basis of a market survey, training has focused on skills such as home caring and computing. Early indications are encouraging, with 70% of the first 500 people trained being placed in jobs using their new skills.

Overall, the issues paper recommends that donors should consider supporting schemes that may promote employment and income for the poor because private poverty is the root cause of individual poverty. Sustainable improvements in living conditions depend on individuals generating more income to meet their needs. Of the employment strategies discussed above, the one most suited to donor support would appear to be support for vocational training required by the market.

3.2.1 Improving Urban Infrastructure and Services for the Poor

As we have seen, about one–third of the population of urban areas, some 100 million people, are living in slums or slum–like conditions.

The standard policy response to this is an urban infrastructure program. This typically includes roads and drainage, street lighting, water and sanitation services, community or private latrines, and community halls. It may also include improved access to loans for housing.

The GoI initiated the National Slum Development Program in 1996. Like the SJSRY program, this is generally implemented through neighbourhood committees and CDCs. The amount available nationally is about Rs.150 crore per annum, which is a small compared to needs. Allowing that the cost of slum improvement is about Rs.15000 per household, the program could improve conditions for about 100,000 households (or half a million people) in a year.

In practice, the slum development program funds are not fully used because of the requirements for some matching funds from the States. The program has also been criticised for an excessive emphasis on hard infrastructure and a lack of cost–recovery mechanisms.

HUDCO supports slum improvements by providing low interest loans mainly to poor persons to develop their housing. However, these funds are underutilised because potential borrowers lack collateral and tenure and cannot afford the repayments.

Shelter for All is a new national policy agenda for improving housing. The government is here moving from the role of provider of housing to facilitator. Typically a state government or municipality provides the land and the private sector provides the housing and local infrastructure (Tewari, 2001). Housing finance is provided under the SJSRY program and via NGOs.

Most States and ULBs also implement slum improvement projects. However, they generally lack adequate funds, or an adequate tax base, to pay for the capital and operating costs of slum improvements for more than a few slums. Again, security of tenure is a crucial issue. Governments are wary of legitimising illegal land tenure because this could encourage further squatting and rural–urban migration.

Despite these national and local improvement programs, the number and size of slums or slum–like living appears to have increased in recent years.

Since the late 1980s, donors have also been involved in trying to improve slums. DIFD has been a major contributor to these programs in two major phases: first in major slum improvement programs in five states from the late 1980s to the mid–1990s and second in some broader town improvement programs including slum improvements currently in Andhra Pradesh. These experiences are discussed below.

3.2.2 DFID slum improvement programs: late 1980s to mid–1990s

During the late 1980s and early mid–1990s, DFID spent £120 million on slum improvement programs (SIPs) in Indore, Vijayawada, Visakhapatnam, Hydrabad and Calcutta. The programs covered an urban slum population of 5 million people, or about 1 million households, and were based on a participatory planning process. The programs were of considerable size and included all the major infrastructure elements noted above as well as primary health care services, vocational training courses, and improved access to loans for housing. The schemes achieved a satisfactory scale.

There have been several evaluations of the SIPs, including a major review by the University of Birmingham (1997). The main findings that emerged are as follows.

Starting with some clear benefits, slum households greatly appreciated the infrastructure elements of the SIPs. The programs improved the quality of life, improved access in and out of the slums, enabled women to walk around at night, reduced flooding, and lengthened the working day. The roads linked slums better into the wider urban community.

Also the health of persons in the slums improved. The primary health care programs increased general health awareness and immunisation, use of oral rehydration solution, family planning and antenatal care. Unsurprisingly, the improvements did not eliminate all chronic problems, such as TB and typhoid.

The level of incomes and use of consumer durables, such as TVs and fans, in the slums rose significantly during these years, although this was attributable partly to general economic changes. Also there were mixed results for the economic support programs. Abelson (1996) found that some vocational courses in Visakapatnam were successful and that overall the vocational training courses were valuable. However, the University of Birmingham (1997) reported that some vocational programs in Vijayawada did not work well, partly because they focussed too much on traditional courses such as sewing.

The benefits of access to the public infrastructure elements were widely shared. However, access to some benefits, for example adult literacy programs, vocational training, savings and credit schemes and neighbourhood groups tended to favour members of the slums with higher incomes and assets. Abelson (1996) found that the more established persons in the community had better access to newly created property rights in Visakhapatnam

More generally, a significant proportion of slum dwellers, probably about a third, has incomes well above the poverty level. On the other hand, nearly a half of all poor persons in an urban area live outside registered slums (Barratt and Beardmore, 2001). Thus area specific projects do not target very well on poor households.

However, the major concern about the SIPs is the lack of sustainability, especially of the works. A high proportion of drains and sewers in the slums are blocked. The roads are deteriorating. The maintenance of the public latrines is a problem.

The reasons are several. The funding of the SIPs wholly by grant funds encouraged an attitude of dependency. There was a lack of clarity about maintenance responsibilities Several local municipalities declined to own the works for the purpose of maintenance. Moreover, there was no cost recovery from the beneficiaries.

The main lessons to emerge from the SIPs are:

– To be successful, a slum improvement program must be comprehensive and 'taken to scale' as the DFID programs were.

– However, SIPs are expensive schemes and difficult to replicate on a large scale. Scaling up from 5 million beneficiaries to all urban poor would cost an estimated £3 billion. There is a need to consider more cost–effective solutions.

– In–slum services should not be separated from city–wide planning, for example planning for access roads, city wide drainage and solid waste management systems.

– Sustainability requires that the local community be involved in planning, designing and financing of the slum improvements.

– There must be a long–term plan for sustainability. DFID (2000) concludes that programs are more sustainable if they are implemented by the organisation that is responsible for continued provision of the service rather than by setting up an autonomous project management unit.

More generally, there is a realisation that to defeat the growth in slums, new methods of urban governance, taxation and pricing policy, and community participation are required.

Responding to these lessons, DFID focus has moved towards whole city services planning with pro–poor orientation. It is moving away from ring–fenced projects towards larger and more complex urban projects and engaging more directly in state level reform agendas. This also requires DFID to work more closely with other partners who share a similar agenda. A major such program is its program in Andhra Pradesh.

Andhra Pradesh Urban Services for the Poor Program (APUSP)
DFID has commenced a seven–year urban improvement program for 32 Class 1 towns with a population between 100,000 and 1.0 million people in Andhra Pradesh. DFID will provide a grant of £94 million, of which £66 million is financial aid for infrastructure and the balance is technical assistance. The planning is citywide with a focus on poor areas. The project has a strong emphasis on governance processes and capacity building and a commitment to community participation. Assistance to towns is conditional on commitment to change and financial responsibility.

APUSP has three components

C1 Municipal reform – developing capacity of municipalities

C2 Hardware infrastructure

C3 Participatory Poverty Assessment

The program is being implemented by development of Municipal Action Plans (MAPs) for Poverty Reduction. A MAP consists of two related strategies: one is to improve municipal performance and the other to improve the environment for the poor.

The MAP analyses municipal performance using SWOT (strengths, weaknesses, opportunities and threats) analysis. It also locates poor people and households with deficient infrastructure and plans for these. A MAP is made through local participation, which develops priorities.

The focus of a MAP is on slums. It is intended that at least half of the beneficiaries will be poor persons. Following SJSRY Guidelines, poverty is based on notified slums. On slum sites, the project will provide water supply, stormwater drainage, street lighting, roads, solid waste and sanitation systems, and sewerage. Off site the project will provide roads and drains and water mains. Typically reticulation may be required for 20–30,000 households. However, this may require augmentation of mains supply and capacity of the whole system.

To–date, the program has produced three pilot MAPs for Quthbullagur, Rajamundry and Chittoor. MAPs are being prepared for another 10 towns.

The program is based on incentives. Preparation of a MAP releases certain funds to the town. More performance releases more funds. However, the required performance standards appear to be not very precise.

The Director of the GHKI Consortium managing ASUSP in Hyderabad considers that ASUSP provides a model for sustainable development for both works and governance. The process has been well received in the towns to–date partly because of its transparency. The program has the strong support of senior members of Municipal Corporation of Hyderabad.

However, there are concerns about slow rate of progress. The project appears to have developed the C2 component of the program more than the C1 and C3 components, although when project was designed, it was intended that municipal reforms would come first. The program is also running up against capacity constraint in terms of local engineering design capacity to draw up designs and contract documents.

This problem is compounded by two factors. One is the dearth of basic data. There are poor base maps, poor data on properties, the precise location and condition of all water pipes are not known, and so on. The other is that the State of Hyderabad is the employer of the main administrative and professional staff in each municipality and there is continual movement of staff.

The view of this report is that the ASUSP may be too ambitious and that the program may be spread too thinly. The program may not be able to deliver the full range of improved governance, city wide planning and slum improvements, and community–based participation in more than a few cities.

3.3 Microfinance

The poor need ongoing short–term access to money. They also need credit for housing, business, migration and lifecycle needs.

India has a rich diversity of financial services including about 150 microfinance institutions (MFIs). Indeed a wide range of financial services for the poor can be found in the slums of India's cities. These services include many informal methods, self–help groups, ROSCAs, deposit takers, to develop savings (Rutherford and Arora, 1997). However, the cost of credit is very high.

The most important role of thrift societies and MFIs is to provide a medium for saving. 'For the poor the first task of financial services is to transform into usefully large sums whatever cash can be saved from income after essential consumption needs are met.' Rutherford and Arora (1997).

Most MFIs rely on member deposits as their main source of funding. They are often supported by NGOs. However, many MFIs do not have effective financial structures and their underlying viability is uncertain.

On the other hand, during the 1990s many NGOs focused increasingly on financial activities and less on other activities and became more fully commercial. The most advanced of them differ from commercial operations only in name, ownership and mission statements (Rutherford and Arora, 1997).

MFIs play an important role in providing competitive loans to poor households. However, they currently have low exposure to infrastructure financing. Only one–third of MFIs disburse loans to low income groups for shelter and infrastructure improvements (ADB estimate). Moreover, this form of lending is usually a small part of their loan portfolio.

The Central Government subsidises individual loans by 15 per cent. i.e. it provides a grant equal to 15 per cent of capital. It makes loans through commercial banks. However, transaction costs are high for potential borrowers for whom there is a low probability of obtaining a loan.

MFIs have a potential role for assisting poor households to contribute to infrastructure. They are well–informed about customer reliability and usually achieve high repayment rates. Larger commercial banks are reluctant lenders City authorities should not directly provide financial services to slum dwellers. They lack the staff, resources and expertise and suffer from conflicting objectives, including political objectives.

Consequently, donors such as the ADB and DFID have programs to help MFIs. DFID is providing £16.6 million in (TA) grant funds to Small Industries Development Bank of India. This bank lends to small scale industry and to microfinance institutions. There will be Indian ownership of loans. All on–lending money is raised by the bank. DFID aimed to avoid government intermediary and direct lending to microfinance institutions. In DFID's view, it is difficult and administratively costly to be involved in transactions with small institutions.

Box 3.1 Microfinance through SEWA Bank (Self-employed Women's Association)

The SEWA Bank operates principally in and around Ahmedabad. It runs through hand holders and bank sathis. A hand holder is an employee of the bank who deals with the bank sathis. A bank sathi works on a commission and deals with the bank customers (members). A sathi receives 1 per cent for deposits paid into SEWA Bank and 3 per cent for recovery of a loan. Customers usually deal with bank sathis, not directly with the bank. In effect, the bank goes to each household. There are no formal branch offices. In rural areas, the bank deals with self–help groups.

Most of the SEWA Bank's funds are derived from members. HUDCO has provided a small amount of funds through SEWA for housing finance.

SEWA Bank has 250,000 customers. Only about 4000 of these have loans from the bank. Thus, most customers use the bank for saving rather than for borrowing purposes. Loans vary from Rs.5000 to Rs.25000. Two–thirds of loans are for income generation purposes. One–third of loans is for housing.

SEWA is a business, not a charity. It is based on the work ethic and relationships. Loans are currently made at 12 per cent to self–help groups and at 17 per cent to individuals. The bank pays 4.5 per cent on deposits. Loan requests are scrutinised very carefully. There are strict rules for loans. A bank sathi assesses the worth of a prospective borrower. Loans are made only to women. They require two guarantors, one being a government servant. Loan recovery is over 95 per cent. The bank invests its own funds in GoI and in nationalised banks for security.

SEWA is involved in slum improvements. It has assisted with loans to households in eight slums. Its grass root connections are important to implementing slum improvements because it facilitates household involvement and contributions, The bank does not itself contribute capital to the slum improvements.

Although there are many microfinance institutions in India, the SEWA Bank appears to have achieved exceptional viability and sustainability. It is a disciplined organisation. It is embedded in a Gujerati culture that has evolved a reliable and enterprising environment over a long period. The women are strong and numerate.

3.4 Social Finance

Social protection has various meanings. Following Norton et al. (2000),

> Social protection refers to the public (governmental and non–governmental) actions taken in response to levels of vulnerability, risk and deprivation which are deemed socially unacceptable within a given polity or society.

In its broadest sense, social protection includes policies taken before vulnerability occurs, in order to reduce the risk of it occurring, as well as policies to help the vulnerable. The World Bank distinguishes between risk minimisation, risk mitigation and risk coping strategies (Jorgensen and Holzmann, 2000). Risk minimisation is usually undertaken in order to reduce the risk of vulnerability and poverty before it occurs. Risk mitigation and risk coping are strategies to deal vulnerability and poverty after it has occurred.

The Asian Development Bank also identifies five social protection strategies (Ortiz, 2000):

- Policies to promote efficient labour markets and labour adjustments
- Agricultural insurance to cushion volatility in rural incomes
- Social insurance programs to cushion risks of unemployment, disability, work injury, old age
- National social assistance (welfare) programs as a safety net to support the poor
- Community–based programs to support the local poor

In this report, proactive strategies to enhance income and employment opportunities of the poor are discussed in Section 3.2.

In this section we focus on the common but narrower definition of social protection that is based on two concepts: social assistance and social insurance. *Social assistance* includes all actions designed to transfer resources to individuals or households who are considered deprived in one or other way. *Social insurance* is social security that is based on the insurance principle. Insurance protects an individual against uncertain losses combining with others who are similarly at risk.

Poor individuals in developing countries rely heavily on social assistance from various sources, including relations, community, religious bodies and other NGOs. They generally receive little financial assistance from state organisations, although they may receive food or housing support.

The state may subsidise services for the poor. However, these subsidies can become expensive (as they often support the non–poor as well) and tend to undermine the competitiveness of the economy.

The poor generally benefit little from social insurance policies. Both government and private sector find it hard to provide insurance cover for workers in the informal sector. Typical social protection services (e.g. pensions and unemployment benefits) do not match the priorities of poor households (assistance with funeral and survivor costs, unexpected health care expenditures, smoothing expenditures associated with maternity, childcare expenditures).

Health insurance is potentially an important benefit, but the poor cannot afford the insurance costs associated with meeting high frequency primary care expenditures or less frequent high cost secondary health care expenditures.

Microfinance services may provide some protection enabling the poor to save against a buffer of shocks. There is often a rich network of informal groups providing social assistance, especially in India. These include microfinance groups, private savings clubs, funeral clubs and so on. But again the capacity of the poor to protect themselves is limited, even if the microfinance institutions are sound.

In India, the major social protection scheme is the Public Distribution System. This scheme distributes essential food and non–food products through a network of Fair Price Shops. Under a targeted program introduced in 1997, the scheme also issues 10 kg of food grains per month to every family below the poverty line at subsidised rates. However, the program has been criticised for poor targeting, with many non–poor receiving benefits, and inefficient management (Tewari, 2001).

What are the implications of this discussion for an aid strategy? Protection policy should be based on the concept of social assistance. Social insurance should not be ignored, especially through microfinance agencies, but the scope for it is limited for most poor individuals.

Most social protection schemes are the responsibility of the national government. They are not suited to applications of donor aid.

If donors wish to assist social protection schemes, they should work with NGOs who in turn work closely with the individuals most in need. Such NGOs are better equipped to recognise need and to respond to it. The role of the donor is to support the NGO.

4 Urban Environmental Management

4.1 Introduction

The subject of urban environmental management is very large, and the discussion here is selective and practical, mirroring the main needs and donor programs in India. The main topics discussed are water supply and sanitation and solid waste disposal along with hazardous wastes. There is also a brief discussion of air quality issues, mainly with reference to urban transport.

4.2 Water Supply, Sanitation Services and Wastewater

At aggregate level, access to safe drinking water is available to 84 per cent of the urban population in India. However, it is often available for only 2–8 hours a day, and percentage of the population served by piped water supply varies mostly between 60% to 80%(India Infrastructure Report 2001). Many poor households lack access to safe drinking water / piped water supply.

The figures of per capita supply of water differs significantly – 142 lpcd (NIUA, 1989) and 57 lpcd (Ministry of Urban Development and Poverty Alleviation, undated) – against the national target of 140 lpcd. A recent survey conducted by the NIPFP (2000) reveals that only 21.7% of the sample municipalities supply over 100 lpcd while 28% supply less than 50 lpcd.

Only 70 per cent of the urban population have access to adequate excreta disposal systems, but less than half of this is linked to sewerage systems (Tewari, 2001). This is a major economic and health problem for the poorest groups in India, who are most deprived of adequate sanitation.

Transmission and distribution water networks are chronically poor quality with water losses due to leakages and other factors of 25–50 per cent. Only one–third of users are metered compared with an average of over 80 per cent in other Asian countries. Staffing at 24 persons per 1000 connections is double the average for Asia. (World Bank, 2000).

Virtually all water supply authorities are public bodies. The general financial position of these bodies is extremely weak. The average tariff at Rs 4.00 (US$0.09) per m^3 is only a quarter of the average tariff in other Asian countries. Even at these tariffs, revenue collection is low, with about 40 per cent of water supplied generating no revenue. Less than Rs 20.00 (US$ 0.44) is being spent on the operation and maintenance of water supply systems in sampled municipal bodies, in a municipal expenditure survey carried out by NIUA in 1986–87.

An efficient tariff structure is essential to effective water supply use. Water utilities have two main sources of revenue: the water tax based on property values and water charges based on water consumption. The water tax can be levied only on registered properties, leaving at least half the properties receiving water outside the tax net. Less than half of Indian cities use water charges.

The World Bank (May 2000) attributes these operational deficiencies to institutional weaknesses in management and organisation: inadequate autonomy, poor information systems, poor incentives, over–reliance on public sector methods.

The Bank estimates that the UWSS requires US$65 billion over the next 10 years, but that only one–tenth of this will be available from planned GoI sources. The national program, the Integrated Low Cost Sanitation Program, is a prescriptive, top–down, approach that does not work very well. Hence, new sources of finance as well as of management are required.

As described in *Box 4.1*, the World Bank has responded to these financial and management deficiencies by developing a major new water supply and sanitation program along with some 20 other donors. Core features of this strategy are ring fencing utilities so that they are free of political interference and private sector management can be introduced, implementing separate accounts, unbundling activities where possible so that activities can be clearly identified and performed, and making private firms bear some management risk. This kind of approach has been applied in Chennai.

Box 4.1 World Bank urban water supply and sanitation stratgey for India

Between 1973 and 1998, the World Bank funded 14 large urban water supply and sanitation (UWSS) projects in large Indian cities. However the Bank judged that performance of several schemes was unsatisfactory or unsustainable. Moreover, major problems of water supply and sanitation remain across the country. The World Bank (May 2000) reassessed its strategy for urban water supply and sanitation (UWSS) for India

The 1973–98 WSSP projects tended to focus on expensive technologies. They did not prevent mismanagement – the bucket continued to leak. Accordingly, the Bank now seeks lower cost intervention, a focus on institutions, public – private partnerships and community participation. The Bank's strategy now:

– Requires private sector participation as a central part of UWSS provision.
– Supports the design of necessary legal and regulatory frameworks.
– Promotes low cost technologies and innovative solutions to service the poor.
– Lends only to states and utilities that are demonstrably committed to reform of tariffs, incentives and management.
– Ends loans to utilities with persistent problems of underperformance.
– Facilitates private sector participation through loan guarantees.

In order to implement this strategy, the Bank is committed to three strands of work. First, building public awareness of the benefits of reform. Second, funding the provision of technical, legal and financial advisory services for the design of PSP transactions. Third, the provision of large scale funds only to governments that have demonstrated commitment to meaningful reform. This includes a public announcement of this commitment, the introduction of PSP, targeting the poor, an adequate tariff policy, and steps to establish an independent regulatory body.

The Bank plans to impose high levels of conditionality on funds for the WSP. Basic requirement is private sector management of assets. So far no project has got far. No private finance yet provided to WSP.

WB will not give funds to ULBs unless private sector has a risk stake in the project, not just a management contract.

There are two risks with this approach. One is that it is too demanding politically. Water is a politically sensitive issue in India as in many other countries. There is therefore a risk that few authorities will sign on with World Bank conditions.

As described in *Box 4.2*, an attempt to focus on the Private Sector Participation was made in 1997–98 for the Pune Water Supply and Sewerage Project, which intended to extend water supply and sewerage services to its total population, increase efficiency and lower costs for the next quarter century. The project was developed in a commercially viable and bankable format, invitation of bids were invited and eventually shelved mainly because of weakness in process management, private sector capacity and risk management.

Box 4.2 Pune Water Supply and Sewerage Project

The Pune Municipal Corporation (PMC) had planned to move steadily towards a 24-hour water supply and full treatment for all sewage generated, based on city's long term strategic planning to the year 2025, covering 100% of the population. The Rs 7.4 billion (US$ 165 million) project, at that point of time, was a major breakthrough in developing an urban environmental infrastructure project in a commercially viable and bankable format.

For its part, the PMC had pledged that upto one third of the funding will come from its internal resources and grants funds from the state of Maharashtra. For the remaining two thirds, in-principle commitments had been arranged by PMC from HUDCO (through Indo-US FIRE(D) project and HUDCO), ICICI (syndication loans form FIs and commercial banks). HDFC and Bank of Maharashtra were also under appraisal as potential debt sources. In structuring the remaining two-thirds (Rs 4.9 billion), the contractor could choose any of the several sources, whose commitment put together was Rs 6.25 billion. PMC had also received a credit rating of AA for a Rs 2 billion municipal bond issue.

The PMC was looking for a partnership with the private sector for the project, which was to be implemented through three different contracts – Construction; Operation and Maintenance; and Management of Billing and Collections – that had to be awarded jointly to one contractor. In addition, the contractor had to prepare a Plan of Finance and participate with the PMC in structuring a best-cost financing package for construction of the facilities. After shortlisting six consortia, invitation to bid were sent in April 1998 and shortly thereafter the project was shelved.

A review of the Pune experience in project development reveals a number of issues. Main amongst them are weakness in process management, loss of political support at local and state level, lack of private sector capacity and inadequate assessment of risk. The need for a "Champion" to guide the process (or transfer of the officer in charge of project development half way through the process) and inadequate institutional arrangements were also cited as the reasons for the failure of project take-off. These include:

- lack of required efforts in evolving project documentation, developing institutional arrangements for project structures, securing approvals and clearances from stakeholders, financial structuring, selecting contractor, operator or concessionaire and ensuring overall financial closure (which obviously is different than that of conventional projects);
- lack of necessary human resources to carry out these tasks and lack of process management support;
- lack of consistent coordination amongst the wide range of actors involved;
- lack of strong regulatory framework, especially during the project development stage;
- limited availability of firms having experience n perations side of water and sewerage systems (mainly because there has never been a demand);
- lack of commercial orientation among authorities charged with service provision; and
- political interventions in day-to-day functioning.

Based on discussions and Indo-US FIRE (D) Project Notes.

In any case, significant preparation is required. As described in *Box 4.3*, Hyderabad Metropolitan Water Supply and Sewerage Board has experienced the usual kind of management, but us willing to introduce the necessary reforms. However, in the first instance, there needs to be a transactions analysis study to design the basic commercial structures, a pro–poor design study, a study of peoples' willingness to pay for water, a baseline survey, a technical analysis of system, and a review of regulation and legislation. All these studies require funding.

The second risk is that in such a wholistic and reforming approach to the supply of water and wastewater services, the focus on poverty is lost. However, this need not occur.

Box 4.3 Hyderabad Metropolitan Water Supply and Sewerage Board

The Hyderabad Metropolitan Water Supply and Sewerage Board (HMWSSB) provides water and sanitation services to Hyderabad and 10 adjacent municipalities. The HMWSSB estimates that the demand for tap water is 230 million gallons a day. It can supply only 170 million gallons a day, including 25 million gallons from groundwater.

HUDCO will provide 150 crores, which will increase capacity by 14 million gallons a day. The HMWSSB estimates that an extra $137 million will be required to meet water demand and another $60 million will be required for sewerage treatment. Sewerage treatment is currently described as quite inadequate, so it is not clear that $60 million will be sufficient to meet healthy municipal standards.

The HMWSSB faces major operational and financial problems. It is losing 30–35 per cent of its water in one or other way. It is also losing Rs 50 million a year on operations and maintenance. It is not clear what costs are included in this estimate, but clearly the losses are substantial. An estimated 40,000 households receive water without paying for it.

The HMWSSB is working on a number of reforms, including tariff reform, performance standards for divisions, a citizens charter and dispute resolution mechanisms. The Board is in discussion with officials of the UNDP / World Bank Water Supply and Sanitation Program about the steps required to achieve improved capacity and performance. The management understands that private sector funding will almost certainly be required to fund the necessary improvements in capacity. It is committed to improving its operating finances and its balance sheet, which is a prerequisite to private sector involvement.

4.3 Solid Waste Disposal

The collection and disposal of solid waste is a pervasive and major problem in nearly all urban areas in India. Ministry of Urban Development and Poverty Alleviation (undated) reports that of the total 100,000 metric tonnes of municipal solid waste generated per day in urban centres, the collection efficiency ranges from 50 per cent to 90 per cent (40% to 60% as per NIUA, 1997). Only 7 per cent is treated.

There have been few significant improvements in solid waste management in Indian cities over the last 20 years (Cointreau, 2001). There is little regulation of wastes. On the spot fines for littering are rarely used. There is no sanitary landfill in India – only crude dumps with some controls. No knowledge of sanitary landfill technology.

Use of private sector participation in solid waste disposal has been cost–effective. For sanitation contractors who sweep roads and footpaths and transfer waste to street containers. For transport collection from containers to disposal sites. In Navi Mumbai, Surat, Rajkot, Hyderabad. (FIRE, 1999). Private contractor (Onex?) has contract for transportation and primary treatment in Chennai at Rs 648/tonne/day compared with Rs 1250 for public sector cost.

As described in *Box 4.4*, Surat, which experienced an outbreak of the bubonic plague in 1994, served to focus attention on public health and, in particular, the management of solid waste in the city. As a result of immediate improvement in management of solid waste, it became the model to which other cities look for direction. However, it is now facing a serious deficiency in its disposal capacity and is moving forward with plans to construct its fifth disposal facility through private sector participation.

Box 4.4 Solid Waste Management in Surat

The Surat Municipal Corporation (SMC), after the outbreak of bubonic plague that resulted in severe financial losses to the city, undertook a number of steps to improve the urban environmental services, making it one of the cleanest cities in India.

Reforms undertaken by SMC included an accelerated campaign to clean sewage lines and septic tanks; major road widening; demolition of unauthorised construction; cleaning of high density roads during day and night. The administrative structure was also decentralised to the charge of 6 deputy health officers and 52 sanitary inspectors, and additional staff and vehicles were provided for solid waste management.

SMC's experiences with private sector participation have been extremely encouraging. Private contractors have been engaged in road sweeping, garbage collection and transportation under a variety of arrangements. Sweeping is paid on the basis of square meter coverage and the entire road surface must be swept. Garbage collection and transport is compensated on the basis of tonnage delivered to disposal sites, and a maximum of 4 tons per load has been imposed to prevent artificial weighting of trucks with brickbats and other heavy items. Vehicles are provided by contractors and payments made per vehicle, but SMC staffs are utilised for loading and unloading of garbage refuse.

SMC is planning to continue with private sector participation for construction and operation of waste treatment and disposal facility on a Build-Operate-Own (BOO) basis. While SMC will ensure a regular supply of specified quantity of garbage, the contractor must pay aprice for the garbage as well as annual rent for the site. The concession will run for a period of 25 years.

Source: Indo-US FIRE (D) Project Notes, Note No.15, February 1999.

There is considerable opportunity for donor assistance in solid waste management. Under recent legislation and regulations, GoI has introduced stringent new requirements for states, municipalities and citizens to follow with regard to solid waste disposal. (See Cointreau, 2001).

Solid waste activities can be unbundled into doorstep collection, street sweeping, community bins for commercial areas, collections, transfer stations, larger vehicles, treatment, disposal. Requires a variety of vehicles.

Asnani estimates that US$300,000 is required for capital investment in solid waste for town of 100,000 persons. There is much scope for TA in solid waste management, especially in treatment and disposal.

Inorganic wastes should be treated and made inert and harmless so that they can go into landfill. Organic wastes should be converted into compost or an energy source such as pellets.

In Mirzapur, improvement in solid waste collection has proved to be the greatest visible success of the project. The deployment of over 100 specially designed rickshaw trolleys serving 10 solid waste collection deposits led to daily solid waste removal and visibly cleaner streets. Solution was also low cost.

FIRE (1999) considers that there may be opportunities for build own and operate disposal sites, with options including pelletisation, biomass energy production, and composting of organic wastes.

However, some caution is necessary. Tipping fees are not employed. So landfills have no earning fees. Difficult to develop build, own and operate systems on a financially viable basis.

Garbage generally not an efficient source of power because of low calorific value of Indian waste. Lucknow (UP) and Nagpur (Maharastra) are developing plants for energy conversion.

Delhi's first experiment with treating of municipal garbage has not taken off. There are no buyers for the end product of treated garbage – compost. The compost is priced higher than chemical fertilisers.

4.4 Disposal of hazardous wastes

An important problem of municipal waste is the mixing of hospital and industrial toxic waste with other wastes. Although regulations require hospitals and industries to dispose of their wastes in certain ways, for example some wastes to be incinerated, the procedures are often not followed.

There are numerous large industrial estates in India with hazardous waste problems. On four estates in Ahmadabad, there are some 4000 industries, many discharging hazardous wastes.

4.5 Air Pollution

4.5.1 Urban transport

Mobility, being one of the critical aspects for economic activities, makes urban transport an important component for urban development.

The mass transportation in most of the cities, except for Mumbai, Kolkatta and Chennai, is primarily by roads, and the public transport system leaves a lot to be desired. The inter-city public transport is normally with the State Road Transport Corporation, Municipal Authorities and/or Private sector. Often there is a lack of professionalism in deciding the fares and routes, which gets influenced by the political parties. The losses have been mounting and captive market reducing. There is a lack of specialised services like express service, separate bus service for women commuters / students, etc.

The per capita road length is low, and varies from 0.16 to 1.50 in selected Class I towns. Mumbai and Bangalore have a per capita road length of 0.16 and 0.68, respectively, implying severe traffic congestion (India Infrastructure Report).

The low ratio of area of road to area of city coupled with the growth of road-based mass transportation system has led to high level of air pollution, noise pollution and severe traffic congestion in most cities. The average speeds are extremely low, especially in the peak hours, because of encroachment by the informal sector / hawkers, unavailability of parking facility and usage of wide range of transportation modes.

There are numerous institutions dealing with traffic and transportation related issues such as the National Highway Authority of India (NHAI), Central Public Works Department (CPWD), State Public Works Department (PWD), State Government, Traffic Police, State Road Transport Corporations, Regional Transport Authority, Municipal Corporation and Urban Development Authorities. There is an obvious lack of co-ordination between the urban road authorities and departments like sewerage boards, telecom and electricity. Issue of vehicular pollution comes under the Regional Transport Authority, who are ill equipped to handle it, and the Pollution Control Boards do not show any interest in the issue.

Although, there have been interventions in improvement of urban raods and state/national highways from donor agencies virtually no assistance has come to urban transport. There are opportunities for Sida in the urban transport sector. These can be:

- improvement of public transport;
- urban road improvement and provision of bicycle pathways;
- institutional arrangements; and
- capacity building.

Sida has provided Volvo double–decker buses to run along designated bus lanes in Dhaka.

There has been a considerable improvement in the air quality of the capital city of Delhi after phasing out of old commercial vehicles and introduction of Compressed Natural Gas (CNG) for public transport. It is also reported that CNG is available at certain ports (eg. Hazira and Dahej in Gujarat), which can be supplied to major towns of Ahmedabad, Baroda and Surat (which put together have over 100,000 Three Wheeler Scooter Ricksaws), for which talks between Government of India and Government of Gujarat is in progress. These Three Wheeler Scooter Ricksaws are responsible for 30% of the total air pollution load in these cities and their conversion into a CNG based vehicle would considerably lower the same.

Urban road improvement and provision of bicycle pathways would undoubtedly be very visible, but not cost effective for Sida.

Institutional arrangements and capacity building for integrating transportation with the city planning, land use, routes, fare / tariff, etc. can be issues that Sida can consider, especially in face of the numerous institutions involved, mounting losses and reduction in captive market.

5 Urban governance

5.1 Introduction

Following the experience of the last 20 years, many people in our meetings in India expressed the view that poverty reduction and environmental management in urban areas must be integrated into macro urban operation strategies and good governance. Governance reform – creating incentives, transparency, financial management and bankability – is the basis of successful programs and thus and effective aid.

The relief of poverty in urban areas requires a process–based approach. It requires the building of databases, designing projects with principle stakeholders, preparation of investment plans, strengthening of institutions, promotion of municipal reforms, target setting, and establishment of management and monitoring systems. Projects are not sustainable without an efficient process of government.

Following Tewari (2001), the lessons learned from poverty reduction effort of national and state governments and international agencies are the need to:

- Create pro–poor city planning and management systems
- Develop clear policies with regard to land tenure
- Build capacity of municipalities to reform and create enabling environments
- Improve absorption capacity of municipal government for use of Central Government funds
- Develop instruments for monitoring poverty reduction
- Improve the urban poor's access to formal credit based on micro financing institutions
- Involve communities in the formulation of sector projects
- Develop convergence among city level agencies and departments addressing sectoral needs
- Develop synergy in efforts of international agencies

In the following section we review some key governance issues. *Section 5.3* discusses the provision of finance for urban infrastructure. The urban infrastructure gap is large. It cannot be filled from public sources. Other investment funds will be required. This is possible only if municipal finances are solidly based and if tariff structures allow cost recovery. *Section 5.4* discusses the availability and applications of microfinance, including its use to finance infrastructure.

5.2 Reforming Urban Governance

The following are some elements of an efficient and reformed government.

Labour is the source of government services and the main cost of government. Government must therefore manage labour efficiently. There must be an effective performance management system. Employees should have incentives for efficient work and be promoted on merit. Services should be provided cost–effectively, including by contracting out where this is cost–effective. Many municipalities in India, especially smaller ones, are poorly staffed with officers with few qualifications or modern training.

The structure of government should create clear responsibilities. Policy development, regulation, and the supply of services should be separated. Cost centres should be established.

Although the *Local Government Municipal Act (1992)* led to elected bodies, power remains to a large extent with the State Commissioner. There is a strong tradition of Central and State Government controls. In many States, functions have not been effectively reallocated and defined. Municipalities require state agreement to most plans. The state government employs most of the professional and senior administrative staff who work in municipal government.

Government must have a solid financial base. Taxes and tariffs must be raised as required to pay for essential services. Government should have a strong balance sheet. Most ULBs use simple single cash accounting that does not show the financial status of municipal bodies. However, accounting systems are moving towards accrual based, double–entry, accounting and the development of balance sheets in some states, for example in Gujarat, Tamil Nadu and Karnataka.

Effective management information systems are required. The use of information technology is essential for accurate, reliable and complete information at reasonable cost. The personnel, taxation and billing systems must be computerised. Most local governments have poor databases and information systems.

Government should encourage market operations. Many problems of slums and high cost housing are created by an ineffective land market and by rent controls on the private housing sector.

Some state governments are actively engaged in governance reform. However, even in reforming states, the record of reform has generally been patchy. Andhra Pradesh is generally regarded as a reforming state, but even much remains to be done (*Box 5.1*).

Recognising these challenges, the Ministry of Urban Development and Poverty Alleviation is establishing a City Challenge Fund of Rs.150 billion as a catalyst for city level economic reform. Access to the Fund will be competitive based on the ability of cities to meet various laid–down criteria for implementing city–wide governance reforms.

There is a major role for donors in supporting governance reform. Successful examples include:

– The USAID supported Indo–US Financial Institutions Reform and Expansion Project. This has worked, for example, with the Institute of Chartered Accountants in developing a technical guide for municipal accounting based on a double entry accrual system.

– The US support for the National Institute for Urban Affairs based in Delhi.

– The Dutch aid to Mirzapur which transformed the management information systems and the tax base of the municipality (see *Box 5.2*). The Dutch are developing a similar system for Kanpur, which before the assistance also had poor administrative capacity, high absenteeism, and poor records (See Ganga ICDP, 2001).

Box 5.1 Urban Governance in Hyderabad

Several donors in Delhi cited Hyderabad as an example of a reforming and enabling city. In our meetings with senior officials in the city, the officials strongly endorsed the basic principles of a reforming government (see text) and expressed enthusiasm for working with donors in reforming government. Mohanty (2000) describes the city's objectives, plans and reforms.

Hyderabad is India's fifth largest city with a population of about 5 million people. The City has carried out several planning studies covering the major urban sectors. There has been extensive community participation. There are many NGOs in the city. The DFID slum improvement program produced substantial benefits for slum dwellers. The Hyderabad Municipal Corporation has adopted accrual accounting, performance management indicators and modern management information systems. In the 1990s, municipal revenue from property taxes increased fourfold from 25 crore to 96 crore. The city is preparing to raise a municipal bond. The city has developed partnerships with the private sector in the energy sector.

Specific reforms include: contracting out 60 per cent of the garbage sweeping and lifting services to numerous contractors; commissioning a private company to generate fuel pellets from a garbage processing plant; subsidising community collection of garbage; a Clean Slum Initiative designed to transform several slums into mini municipalities with responsibility for collecting property taxes, maintaining assets and discharging a range of services to local households; improving cost recovery in sanitation; and mobilising NGOs for health service deleivry.

Notwithstanding this enabling government, the city faces numerous problems. Any casual visitor cannot but be aware of traffic congestion, flooding and drainage problems, and high levels of air pollution. An ADB study has identified widespread health disabilities. In the words of the Commissioner of the Municipal Corporation,' In a third world city, everything is a problem'. This does not appear to be an exaggeration.

These successes can be replicated and need to be. There is scope for effective donor programs in developing accounting systems, management information systems, training for administration, the development of regulatory systems, and the preparation of projects in most ULBs in India. These are all examples of direct governance improvement strategies.

However, improved governance should be an element of most aid strategies. For example, in any works project there should be provision for some local contribution to the capital costs and for ongoing local funding of maintenance of the assets.

This may not be easy to ensure when aid funds flow through an extended chain of agencies (see *Box 5.3*). To ensure accountability, there has to be a series of agreements between each party in the chain: between Sida and the Department of Economic Affairs (DEA), between DEA and the State government, and between the State government and the municipality or other aid recipient. Dealing with a NGO may reduce the length of the chain, but methods of ensuring accountability for the funds are still required.

Box 5.2 The Experience of Mirzapur with Dutch Assistance

Between 1987 and 1995, the Netherlands provided approximately US$7.5 million on a new sewer system and wastewater treatment works in Mirzapur. This restored the drinking quality of the ground water ad reduce pollutant discharge from the city into the Ganges.

However, when the works were to be handed over to the city, the municipality was bankrupt and could not pay its own employees. The state government had superceded the city council. Cost recovery of the new facilities from local users could not be achieved. There was a lack of ownership of the project by the local population who expected others to maintain the facilities.

The Netherlands then initiated the Institutional and Community Development Project (ICDP) along with the Ganga Action Plan Support Program, jointly with the GoI. While the Ganga Action Plan focuses on improving infrastructure, the ICDP is concerned with developing the organisational and financial basis for effective municipal services.

Gibbons and Relan (2001) report that the ICDP has been very successful. At the outset, the information system was in disarray. Property records were inaccurate, out of date, difficult to manage and often not available. ICDP introduced the first Geographical Information System (GIS) into India, increased properties listed for the municipal tax by 44 per cent, made the first systematic property valuations for 35 years, computerised the municipal tax records, tripled tax collections, linked water connection records to the GIS, and introduced complete asset management.

Above all, the program changed the overall civic culture of a municipality that had almost stopped functioning.

Box 5.3 Ensuring Sustainability with Works in a Small Urban Body

How can small municipalities be made financially responsible for the maintenance of works created by donor programs?

During its field visit to Rajasthan, the mission held a meeting with the Mayor and Chief Executive of Shahpura, a small town with a population of 28,000 people. Like many small towns in India, Shapura depends heavily on external funds. It raises some revenue when land is converted from one use to another, but it does not levy a regular property tax. In the discussion the local officials were initially pessimistic about improving any services by levying a property tax or substantial revenue from any source because of local resistance to such imposts.

When we asked what facility would the people of Shahpura most want, the answer was local roads. Given the state of the water and sanitation system and the solid waste in the streets this was a surprising answer. However, significantly, the local officials insisted that they would be able to persuade the local people to pay a significant capital contribution for improved local roads and to fully maintain the roads.

How could such a commitment be guaranteed? The State government would have to guarantee the funds. There would have to be a series of agreements between Sida and DEA, between DEA and the Rajasthan State Government, and between the Rajasthan Government and Shahpura.

5.3 Financing Infrastructure

Given the scale of infrastructure needs, the Central and State Governments cannot fund all these needs. The main additional funding options are municipal or private sector funding. A special purpose vehicle may combine municipal and private funding, along with contributions from microfinance agencies (see *Section 3.4)*. These funding methods are discussed below.

Municipal finance and municipal bonds

Few municipalities are financially self–sufficient (Mathur, 2001). Indeed many medium and small municipalities raise less than half their own purpose funds. Obtaining financial self–sufficiency is an important first step towards raising funds for capital investment.

Experience has shown that municipalities can raise their local income substantially given the political will and adminstrative efficiency. The examples of Hyderabad and Mirzapur were cited above. The recent history of Ahmedabad is reported in Box 8.

However, in order to raise investment funds, municipalities also need to be able to borrow, preferably on their own account rather than with a state–based guarantee. Municipalities have long been able to borrow from the banking system with state government guarantees. Municipal bonds are a first step towards a market–based system of local government finance. They must be based on sound municipal finances, financial management, tariffs and cost recovery, and viable projects.

A wide range of local governments are permitted to issue 'Tax Free Municipal Bonds' (HSMI, 2001). The funds from these bonds must be used only for capital investments in urban infrastructure in specified sectors. These include potable water supply, sewerage or sanitation, drainage, solid waste management, roads, bridges and flyovers, and urban transport. The projects must be financially viable.

The maximum amount of municipal bonds is 33.3 per cent of total project costs or Rs.50 crore, whichever is lower. Municipal authorities must contribute at least 20 per cent of project costs from internal sources or grants.

The issuer of a bond has to provide a debt covenant (a debt service coverage ratio, DSCR, of at least 1.25). The DSCR is the ratio of net income after meeting all liabilities except debt obligations to long term debt servicing obligations. Net income can be net enterprise income, not just project income. The bond must have a minimum maturity of five years. The income from the bond by way of interest rate up to 10.50 per cent is exempt from income tax. A bond issuer must obtain an investment grade rating from a RBI approved credit rating agency.

Municipal bonds are approved on a case by case basis by Ministry of Urban Development and Poverty Alleviation. The Department of Economic Affairs determines the quantum of tax free municipal bonds to be issued in any financial year.

Municipal bonds have been raised in Ahmedabad (see *Box 5.4*), Calcutta, Nagpur and several other cities. For example, the Bangalore Municipal Corporation raised Rs.1250 million through a private placement bond issue to finance construction of roads and street lighting.

Box 5.4 Municipal finance in Ahmedabad

Ahmedabad is an unusual city in that over half of its revenues still come from okroi (a duty on goods imported into the city). There is also a property tax, but this does not apply to slum properties. There is also a water and conservancy tax on properties receiving piped water.

Total revenues more than doubled between 1994/94 and 1998/99. Revenues from the property tax have increased by over 150 per cent since 1994 when appeals to the courts were made less attractive. Recovery rates for water have improved after the AMC disconnected households that were defaulting. AMC has also moved from single–entry cash–based accounting to computerised double–entry accounting.

The municipality has raised funds through bonds for some time, mainly statutory liquidity ratio (SLR) bonds that were guaranteed by the state government. The municipality has also raised funds through non–SLR bonds subscribed by financial institutions since the early 1970s. HUDCO is another source of funds.

In early 1998 AMC issued the first municipal bond for Rs.1000 million with a 14 per cent coupon rate, without a state guarantee (although it had to obtain state government approval). It is linked to specific water and sewerage projects costing an estimated Rs.4393 million. The municipality has AA rating from the Credit Rating Information Services of India and Standard and Poor rating agencies. For further information on the municipal bond, see Vaidya and Johnson (2001).

The municipal corporation has taken some privatisation initiatives. These include the funding of the main city street CG Road city by private firms in return for advertising rights and parking revenues, development of the circular road, privatising some maintenance services at the municipal zoo, and a land swap for development of a recreational water resort.

The use of private finance for public infrastructure
There is a wide range of possible public/private partnerships (PPPs). These range from contracting out certain defined services to private management of a business to full scale privatisation (private ownership of assets).

Mehta (1999) suggests that there have been at least 25 PPP projects in water and waste water and more than 45 PPP projects for solid waste disposal as well as projects for sewerage and sewage treatment operations. Initiatives are concentrated in such states as Tamilnadu, Karnataka, Maharastra, Andhra Pradesh and Gujerat.

Mathur (2001) reports that private sector participation in water supply and sanitation projects has provided cost savings for most public agencies that have used such arrangements. However, most contracts have been for simple service contracts and some have not taken off.

The main drivers of PPPs have been a desire to attract private capital and to curb public sector employment. There has been over emphasis on system expansion. On the other hand, There has been little recognition of efficiency gains – operational efficiency and consumer orientation.

Difficulties have been inappropriate risk management, poor project development, and unstructured procurement processes. Many projects have foundered because of inadequate local understanding and support.

Commentators such as Mehta (1999) suggest that there needs to be clearer focus on objectives and an improved regulatory framework. There is a need for considerably more project development process support from concept initiation to technical studies, contractural framework, procurement process, stakeholder consultation, arranging for permissions, approvals etc. There is also a need for improved accounting standards to reflect true costs of operations. Processes must be fair and transparent. Clearly there is a role for donors in assisting the development of frameworks for PPPs.

However, such work is conditional on the existence of local political will. This must include a will to reform inappropriate tariff structures.

Special Purpose Vehicles for management and Fund Raising
An alternative approach that is under discussion in various places is the development of special purpose vehicles (SPVs) to undertake the improvement of an area, such as a slum. SPVs can take various forms depending on the range of responsibilities and partners involved.

In a relatively simple SPV, the municipality would provide land to a private developer with wide ranging responsibilities for land and housing development on the site(s) provided. The municipality would continue to be responsible for the provision of utilities to the site(s). This model has been used effectively in Haryana State.

Alternatively the municipality can retain major responsibility for land development but establish a special public authority to implement the development. This model has been adopted in Adjmer municipality in Rajasthan.

In a more complex version, the SPV could include representatives from all major interested parties including government, community-based organisations, local residents, NGOs and the private sector. The Ahmedabad Municipal Corporation is preparing such a SPV in the form of the 'Ahmedabad Upgrading Company' for comprehensive slum development in over 2000 locations in Ahmedabad (see *Box 5.5*). In order for such a SPV to be successful, it will have to provide all key partners with effective representation, would have to have clearly delegated powers and authority to carry out key functions including the financial means to maintain assets, act transparently, and have a clearly planned exit strategy.

Box 5.5Special purpose governance vehicle for slum improvement in Ahmedabad

In 1994 the Ahmedabad Municipal Corporation (AMC) adopted the policy of working in partnership with community based organisations, NGOs and the private sector to upgrade slums. Over the last seven years, the partners have completed nine successful upgrading projects at a cost of Rs.116.24 lacs. with another 16 projects valued at 931.3 lacs under construction or preparation (DeGroot, 2001)

The work to–date has established that the cost of upgrading slums is about Rs.14,500 per household. This includes Rs.6000 per family for internal physical infrastructure, Rs.3000 per family for external linkages, Rs.1000 for community development and Rs.4500 for individual toilets per family.

In the current financing scheme, households contribute Rs.2000 (often through SEWA), the private sector Rs.2000, NGOs Rs.300, and AMC is responsible for the balance of Rs.10,200.

AMC now wishes to scale up the program and is planning to develop a special purpose vehicle, the 'Ahmedabad Upgrading Company' for comprehensive slum development in over 2000 locations in Ahmedabad. Of these slums, most are on private lands. About two–thirds are chawls (semi slums on private land). Only about 300 of the slums are on public land. Some slums are on riverbanks or pavements and cannot be regularised; they will not be included.

The SPV would also maintain the facilities. The community is not capable of maintaining the facilities, for example patching potholes or leaking drains, they may make thing worse.

In order for a SPV to be successful, it must provide all key partners with effective representation, have clearly delegated powers and authority to carry out key functions including the financial means to maintain assets, act transparently, and have a clearly planned exit strategy.

This is not easy to achieve. Some members of the private sector have withdrawn cooperation with the AMC after disagreements about the management process for improving slums.

Although the financial deal is good for slum families, who often pay at least Rs.2000 a year in medical fees for gastroenteritis, jaundice and typhoid, as well as in loss of wages, some refuse to take part for various reasons. They may get tenure for only 10 years; they do not trust that they will not get evicted; they do not want government involved in their slum.

The World Bank has reportedly shown an interest in the project but is said to consider that the contribution per family is too low.

6 Developing urban environment aid strategies for Sida

6.1 Approach to the Aid Strategy

In *Section 2* we have defined a suitable objective of Sida's proposed urban environment development co-operation in India as:

"To improve access of the urban poor in India to environmental planning and services".

We have also suggested a range of criteria which could be developed within the logical framework context during detailed design of components of the programme, and which could be also be used as indicators to monitor and evaluate the effectiveness of the development assistance which Sida provides (see *Box 6.1)*.

From our discussions with stakeholders during the mission to Delhi, there are many types of interventions which are, in theory, possible strategies for Swedish-Indian development aid co-operation. Following the review in *Sections 3–5*, we have selected fourteen potential strategies which have been matched against the criteria described in *Box 6.1* (see *Table 6.1*). The fourteen strategies can be grouped into four types, which are outlined briefly in *Section 6.2*:

- General, broad-based urban strategies (*Group 1*) consisting of the appropriate mix of individual interventions of the various types listed in Groups 2–4;
- Strategies to improve urban livelihoods (*Group 2*), which aim to improve the economic well-being of the urban poor and reduce their vulnerability;
- Sector strategies (*Group 3*) focused on specific urban environmental issues; and
- Urban governance strategies (*Group 4*) to increase the capacity of the those involved in urban governance (state and municipal governments, Urban Local Bodies, CBOs and NGOs) to work efficiently, fairly and transparently, and to develop the processes which facilitate and support good urban governance.

Those of the fourteen which are ranked, according to our judgement, as offering the most potential for Sida are discussed further in the remainder of *Section 6*, where we work through the rationale for selection of the two highest-ranking strategies to demonstrate how the criteria might be applied (*Sections 6.3.2* and *6.3.3)*. The strategies are not mutually exclusive: depending on the size of the overall urban environment programme and of individual projects, we would expect that Sida would move ahead with two or more of these strategies.

The section concludes with a discussion of issues which should be taken into account in determining the geographical focus for Sida's proposed urban environment programme *(Section 6.4)*.

Box 6.1 Criteria for assessing Sida development aid strategies

A number of potential strategies for an Indo-Swedish development cooperation programme can be identified (see below). They can be considered with reference the following criteria, which reflect the objectives for a development aid cooperation programme in India:

Need – Need exists wherever significant numbers of people are subject to high economic, health, social or political vulnerability.

Poverty focus – A poor focus may be poverty inclusive, where the poor are targeted but others also benefit, or poverty focused where the poor are targeted exclusively. In the latter case, to achieve sustainability, underlying economic and governance issues must also be addressed.

Effectiveness – This criterion attempts to capture a number of attributes of the 'success' of a strategy: cost-effectiveness, relative impact/value added, the tangibility and measurability of the impacts, and the potential for replication and dissemination.

Sustainability – This addresses the question: will the intervention continue to have the same, or greater, positive benefits beyond the period of active donor support?

Enabling environment/ political will – This relates to the potential level of public/government support for a strategy. It encompasses aspects such as fit with policies and the current and upcoming national five year plans, key legislation such as the 74th Amendment to the Constitution, reliance on a 'reform state' outlook, institutional and administrative complexities, and whether key beneficiaries/partners are likely to have the interest or capacity to be actively involved in the strategy.

Local partners – Are the strategies likely to find strong local partners outside government? (for example, from NGOs, CBOs, or private financial organisations). This is related to sustainability, since good, strong partners will improve the potential for longer-term sustainability.

Likelihood of *success (risk)* – This criterion, which reflects elements of other criteria, concerns the overall potential for a successful outcome which meets the strategy's objectives and the overall goals of a Swedish urban environment programme in India. It is also concerned with the scale of potential risks and 'killing factors'.

Swedish *additionality* – Does the strategy demonstrate a clear Swedish contribution (or additionality) in addressing urban environmental issues in India? Can Swedish involvement be clearly distinguished (eg where in partnership with another donor)? Are the approaches innovative (or more of the same approach already used by another donor)?

Swedish *involvement* – Does the strategy offer potential for Swedish expertise and technology to be used? Might it facilitate future cooperation opportunities between Swedish and Indian companies, universities, professional associations, or others?

Table6.1 Criteria for evaluating possible Sida development co-operation strategies

Strategy	Need	Poverty focus	Effectiveness	Sustainability	Enabling env./ political will	Involvement of partners (eg NGOs,private)	Likelihood of success (risk)	Swedish additionality	Swedish involvement	Rank
1. General, broad-based urban strategies										
1.a 'Slum improvement' in 1-2 medium-large cities	nnn	nn	nn	n	nn	nnn	nn	n	n	**4**
1.b Focus on several smaller (<250k) cities	nnn	nn	nn	nn	nnn	nn	nn	nn	n	**2**
1.c District approach: address urban issues within the district	nnn	nn	nn	nn	nn	nn	nn	nnn	n	**3**
2. Strategies to improve livelihoods										
2.a Income & employment generation, vocational training	nnn	nnn	nn	nn	nn	nnn	nn	nn	n	**2**
2.b Microfinance	nn	nn	nn	nn	nn	nnn	nn	nn	nn	**3**
2.c Social protection	nnn	nnn	nn	nn	nn	nn	nnn	nn	n	**2**
3. Sector strategies										
3.a Solid waste management/investment in several towns	nnn	nn	nnn	nn	nnn	nnn	nnn	nn	nn	**1**
3.b Industrial/hazardous waste management	nnn	nn	nn	nn	nn	nn	nn	nn	nn	**3**
3.c Water utilities management/ investment in several towns	nnn	n	nn	nn	nnn	nn	nn	nn	n	**3**
3.d Air quality management	nnn	nn	nn	nn	nn	nn	nn	nn	nn	**2**
4. Urban governance strategies										
4.a Strengthening governance processes under 74th Amendment(public admin, ULBs)	nnn	nn	nn	nn	nnn	nn	nn	nnn	nn	**2**
4.b Development of revenue base through improved mgmt & accounting systems	nnn	nn	nnn	nnn	nnn	nn	nn	nnn	nn	**1**
4.c Strengthening regulatory development, project preparation	nnn	nn	nn	nn	nn	nn	nn	nnn	nn	**2**
4.d Strengthening civil society organisations	nnn	nn	nn	nn	nn	nnn	nn	nnn	nn	**2**

6.2 Summary of Fourteen Potential Strategies for Urban Environment

6.2.1 Group 1: General urban strategies – works, governance and community participation

1.a 'Slum improvement' in 1–2 medium/large cities
The aim of this strategy would be to upgrade the infrastructure (roads, lighting, water supply, sanitation, etc) of a significant number of slums in one or two cities, based on the DFID model of work in five cities in the early 1990s. This poverty-directed urban environment strategy improves the livelihoods of all the poor in the locality where slum improvement activities are carried out: the need for slum improvement is undoubtedly very great. However, donor experience has shown that this approach is costly, absorbs high amounts of scarce resources, and that it has limited potential to scale up; it does not in itself develop the capacity of project partners (municipalities, NGOs, etc), and so an approach which also addresses urban governance issues could have more impact and sustainability.

1.b A focus on broader-based assistance to several smaller towns of less than 250,000 population
Under this strategy Sida would work with two or three smaller towns in a state to develop their overall utility needs, with a focus on slums and other areas with high densities of the urban poor. Governance issues, and activities focused on enhancing and securing the livelihoods of the poor, should be part of the package: the DFID Andhra Pradesh Urban Services for the Poor Programme (APUSP) is an example of this approach. The assistance would, if focused on somewhat smaller towns, facilitate a more holistic approach to urban issues throughout municipalities. This strategy could be poverty-directed, by helping partner organisations to understand the causes of poverty and to identify actions to address them.

An approach of working with smaller towns has the potential for wider impact on institutions involved in urban governance and environmental management, and for providing good models for replication. A state focus would be required, as this would facilitate the working relationship which would bring about effective replication and scaling up. Clearly, the choice of state and project partners would be very important, and the exact nature of the technical assistance to support the approach should take account of the conditions in the state and the existing capabilities of partners. This strategy was supported by a broad range of the stakeholders met during the mission to India. Government staff at state and municipality level expressed interest, and potential donor agency partners such as the Asian Development Bank (which has several large municipal infrastructure loans ongoing or planned) welcomed the possibility of co-operation with a donor partner who could focus on building capacity for urban environmental management and governance. This is an important consideration, since a link to a donor providing a loan for capital investment is likely to enhance sustainability and impact of any Sida involvement.

1.c A district approach – several small towns in one district
This approach was suggested by Secretary for Planning Aid in Rajasthan, and could aim to improve a whole district with several towns, most if not all below 100,000 population. In terms of administration, the district constitutes a formal unit for urban planning, through the District Planning Committee; the approach would build capacity for good urban management practice at a basic level which has not been addressed by other donors.

Essentially, the approach would entail a similar strategy to the focus on smaller towns (see *1.b* above), avoiding city–centric aid and offering considerable Swedish additionality. The risks would be greater, however, and Sida might be required to finance small-scale capital contributions alongside technical assistance (as far as we understand there are currently no donors working in urban environment in

India at the district level). Strong local ownership would be vital, and local governance might not be strong enough: these are both possible 'killing factors' for a district approach. Careful choice of district would be critical, to ensure sufficient poverty focus. Some districts will be sufficiently far from the mainstream of economic development that they do not attract in-migrants from surrounding rural areas – and so may not have slums or poor areas in the same way as more economically-developed towns.

6.2.2 Group 2: Strategies to improve livelihoods

These strategies are directly intended to reduce poverty (see *Section 3*), but which can also enable more urban dwellers to participate in and manage urban services, and to pay for them. This will improve the access of the urban poor to these services. Participatory poverty analysis is now regarded as an important tool in developing these strategies: to identify and define needs, detailed approaches, and partnerships.

Support to build the capabilities of service providers (rather than direct service provision) is likely to provide the best opportunities for replication and adding value, and this is addressed in the Group 4 strategies described below. The providers of urban services are likely to be drawn from public and private sectors, and from amongst NGOs and CBOs which are likely to be important elements in ensuring sustainability.

2.a Support for income and employment generation, vocational training

Sida could support initiatives to identify markets and employment opportunities for poor people, and vocational training to improve income and employment prospects. There is a high need for this, especially among women and in small towns, and relatively little direct donor involvement (although UNICEF provides some assistance in this area). Sida is supporting private sector development in a large number of countries, and there may be models from amongst these which can be used in the Indian context.

As we have described in *Section 3*, there are proven approaches emerging which emphasise a demand-driven approach to this type of support, and can with careful design have a substantial impact on poverty. The impacts may not be very tangible or easily evaluated, however, as it is difficult to track the subsequent employment of those trained. The project partners which would appear to offer the most potential are NGOs such as Dr Reddy's Foundation, which are already involved in this type of work in partnership with municipalities, although working with NGOs could result in relatively high administrative costs for Sida.

2.b Support for microfinance institutions

Under this strategy, Sida could provide technical assistance or finance directly or indirectly to microfinance institutions. Microfinance initiatives would increase the availability for capital for on–lending, and would build on the extensive experience already built up in India and Sida's contribution to development of best practice microfinance methods elsewhere; Sida is contributing to development of best practice microfinance methods in other developing countries, for example in Bolivia, Zimbabwe, Tanzania, Nicaragua, Mozambique, and Bangladesh. However, there is already considerable activity in this area so the potential for significant Swedish value-added may be reduced. One way that this could be enhanced would be through technical assistance which would help to foster microfinance initiatives focused on the poorest, who have the least access to finance: they are excluded from self-help groups and are unable to save regularly. Careful design can also have a positive impact on gender relations, as it has the potential to enhance women's financial control and related decision-making – again, however, careful targeting is important.

2.c Social protection

Social protection efforts are concerned with reducing vulnerability and risk and strengthening livelihoods. Broadly speaking, social protection measures involve actions that enhance poor people's abilities to cope. Support to social protection measures may be carried out through NGOs as a part of a wider livelihood strategy. Strategies at the micro-level should be designed with inputs from the poor themselves (eg through participatory project design).

Sida may want to consider an approach that would involve some of the following social protection strategies;

- ensuring entitlements to state support (eg widow, old age, and disability benefits, health care);
- enhancing social insurance schemes (eg health, pension) through NGOs or the private sector;
- enhancing tenure security;
- enhancing access to legal aid;
- enhanced community-based support services;
- provide emergency shelter for the most vulnerable;
- addressing other factors that the poor feel make them vulnerable (eg access to identification cards, which can provide an entry to a range of official benefits – see *Box 6.2*).

Box 6.2 provides some further details of potential social protection measures.

Box 6.2 Examples of policy- and micro-level social protection measures

- Many urban NGOs are continuously involved in attempts to secure land tenure in slum areas. Lack of tenure is viewed as a main impediment to livelihood improvement as people live in constant fear of eviction. This inhibits investments in housing and economic development of households.
- The government has several provisions for the poor. Examples are housing benefits, widow pension, old age pension, disability benefits, health care. There need to be more efforts to ensure that the poorest can access these benefits. Lack of awareness about benefits as well as how to access them is often a problem. For 'better off poor' private insurance systems have a potential. SEWA in Ahmedabad is developing an insurance system for employed women.
- Access to legal aid is often limited for the poorest. There are NGOs that provide such services, which could be suitable project partners for within Sida projects.
- Many vulnerable urban poor lack shelter. Some NGOs met by the team raised the idea that the private sector can be mobilised into providing such support as it raises the social profile of companies.
- More can be done at community level itself to protect the vulnerable by enhancing community-based support systems for money, shelter and food. Informal and self-evolved services are in place in some areas. Small savings towards a community fund for expenses incurred during marriage and death are common. In some places, NGOs have promoted various initiatives.
- Further consultations with the poor in and outside slums will provide a better picture of factors that mitigate vulnerability (in participatory poverty assessment carried out in Andhra Pradesh the poor mentioned simple factors such as lack of identification cards).
- Improvement of the public distribution system. Supplies of staple foods (eg grain) are often insufficient, of low quality and prices almost the same as on the open market.

6.2.3 Environmental management sector strategies

3.a Solid waste management and investment in several towns
Interventions in this sector, which are widely recognised as being a very high need in India, could take a wide variety of forms, including *inter alia*:

– waste management planning and design;

– demonstration projects for innovative/appropriate approaches and technologies;

– assistance with privatisation of waste collection and disposal, and facilitation of processes to enable access to private sector finance;

– involvement of poor communities in localised waste collection activities;

– addressing specific socio-economic issues, such as the 'rag-pickers' who derive an income from waste dumps.

The wide variety of activities within the solid waste strategy provides a range of potential opportunities for Sida, and we have therefore ranked it as one of the first choice strategies for further consideration by Sida (see *Section 6.3* for more detail).

3.b Management of industrial and hazardous wastes
Activities could include:

– industrial, hazardous and biomedical waste management planning;

– industrial waste management/clean technology demonstration projects and training in specific industrial sectors, working with industry associations or institutes as partners;

– projects focused on the SME sector, for which industries will tend to be situated in residential, usually poor, areas;

– capacity building for a State Pollution Control Board;

– investment in storage or disposal facilities for hazardous or biomedial waste.

Other donors (such as the Asian Development Bank and German KfW) are already active in this area, engaged in both technical and capacity building/policy formulation activities. We understand that prior to the suspension of Indo-Swedish development co-operation, Sida was evaluating the potential for establishment of a fund to finance environmentally sustainable industrial development. Further consideration of this activity would still be appropriate. Sida could also consider further building on the existing training training program for staff at the Environmental Protection Training and Research Institute (EPTRI) dealing with such questions as how to manage, store and destroy hazardous waste.

3.c Water facilities management and investment in a few towns
Major inefficiencies in the management of urban water utilities play a significant role in the low availability of water in urban areas, particularly for the poor. It is therefore a high priority need to address the management inefficiencies and to reduce the water losses which can be as much as 50%. Water conservation helps poor households.

Interventions could take the form of:

– technical assistance/investment aimed at reducing the high level of water loss;

– improved management 'systems' (practices, procedures, equipment);

– small-scale investment, working in partnership with municipalities and with community involvement in design and implementation (eg condominial sanitation schemes in slum areas);

– activities such as water conservation, which could be either municipality-wide or focused on poor households.

However, there are already many donors active in this area, providing significant investment. In contrast to the situation for waste management, the enabling environment to date appears very weak – even in the most reforming of states – and the potential for Swedish additionality could be rather low. Other donors did not feel that it was an area that offered significant potential for Sida involvement.

3.d Air quality management
This strategy could address:

– industrial air pollution;

– urban transport;

– indoor air pollution;

– or a combination of these.

The need appears to be high in all areas and relatively few donors are active (except in the context of broader environmentally sustainable industrial development; see above).

Reductions in emissions from industry require either changes in general management practices (often as part of environmentally sustainable technology initiatives, which have been mentioned above) or capital investments in new technology (which may absorb too high a proportion of the financial resources available within the Sida urban environment programme).

Urban transport is a sector in which Sida has considerable experience, including in the Indian subcontinent, and these may be areas which could be developed further.

Indoor air pollution has been highlighted in recent years as an area of growing concern, and one which impacts considerably upon the poor (although it is not specifically an urban issue). Little appears to have been done in India to address this issue to date, and during preparation of the issues paper we have not been able to gather information which would enable us to comment further.

6.2.4 Urban governance strategies

4.a Strengthening governance processes under the 74th Amendment
This could consist of general technical assistance/training/human resource development for public administration, including public administration systems, accounting systems, management information systems, and project evaluation and development. Working through ULBs could aim to make them more inclusive, effective and responsive to poor people's needs, with the aim of changing organisational culture. The training could also include NGO managers.

Work on urban governance might offer good opportunities for the involvement of Swedish partners. For instance, the political science departments at the Universties of Lund and Uppsala have conducted extensive research on governance and democracy in developing countries; research partnerships with suitable Indian institutes (eg for management, or public administration) could produce applied research on governance strategies which Sida could support. The critical element would be to ensure a good institutional links, and a close and clear relationship to development interventions: this would prevent the research being too 'academic'. One issue of which Sida would need to be aware, however, is that the results might not be very tangible.

4.b Development of municipal revenue base through improved management and accounting systems

This would include development of revenue bases, GIS systems, property mapping, computer data bases and billing systems and could significantly increase municipal revenues (as in the Dutch-funded project in Mirzapur – see *Box 5.2*). For more details on this strategy see *Section 6.4*.

4.c Strengthening regulatory development and project preparation

This strategy would provide high level technical assistance in the implementation of the 74th Amendment by developing new governance and regulatory structures for government. It would identify and implement new structures for utilities and the participation of private finance. It could also offer much-needed assistance in project preparation.

A proposed Indian government initiative which offers potential for Sida support is the *Cities Challenge Fund.* This is being proposed by the Department of Urban Development as a source of funds for which municipalities can apply, on a competitive basis, for finance for urban improvements. The eligibility criteria upon which applications will be judged will consist of a range of performance indicators relating to good governance, administrative efficiency etc. Core funds are being solicited from Federal Government, donors and the private sector, and whilst it was recognised by the DUD that Sida was unlikely to be able to contribute a significant amount to the Fund, other areas could offer opportunities for significant additionality, such as *inter alia*:

– technical assistance for preparation of specific applications to the Fund;

– support to municipalities to achieve better standards of governance and more transparency;

– improved administrative efficiency (eg through the types of measures covered by strategy 4.b).

4.d Strengthening civil society organisations

Civil society plays an important role in advancing the 74th amendment and enhancing local governance more broadly. Civil society can question authorities and thus make them more accountable to the public. In India, NGOs are increasingly beginning to perceive their role not just for service delivery, but as mediators between the state and communities. Sida could facilitate this process through support which involves:

– building and strengthening of CBOs in and across towns and cities;

– increasing awareness, transparency, and accountability initiatives;

– strengthening, enabling and drawing on research and training institutions working on governance issues.

Sida already supports a very successful NGO which plays a significant role in urban environment: the Centre for Science and Environment. Adopting a similar approach to support other civil society organisations could form part of a broad-based governance strategy. Working with a civil society organisation within the framework of a broader governance project is likely to be more effective (and administratively simpler) than support to a number of such organisations working in various parts of the country.

6.3 Towards a Choice of Strategies

6.3.1 Rationale

These criteria have been applied to a range of potential co-operation strategies which have been identified in the preceding sections, to assess them using qualitative, non-numerical indicators and to present a ranking classification of fourteen possible strategies on a scale of 1 (most promising) to 4 (least promising) – see *Table 6.1*.

This section provides a template against which the criteria have been applied for one of the highest-ranked strategies. We stress that this is an illustrative exercise to show how the criteria can be applied. Sida may, either now or at a later juncture, wish to adjust the way in which criteria have been applied. There is no 'weighting' of the criteria, although *likelihood of success* must be regarded as one of the most significant under any scenario.

The manner in which the criteria can be applied to strategies is very generic and to a great extent indicative when compared to the way that they could be applied to individual projects and programs. Project and program design will clearly be crucial – the details of the type of activity, the chosen partners, and other factors will affect the scoring against these or any other criteria.

We would recommend that Sida considers strategies ranked as having the highest potential (1) and/or those in the second category (2). Categories are not mutually exclusive, and could potentially be supportive: we would anticipate Sida's development co-operation containing several of these.

6.3.2 Waste Management

Need

All stakeholders were in agreement that improved management of solid

waste is a very high priority in India. Systems for collection and disposal of municipal waste are inadequate in most if not all urban areas. Where waste strategies have been developed (either separately or as part of broader urban management programme) they have tended to focus on the larger cities, such as Chennai, where ERM prepared a municipal waste management strategy for the municipal development corporation.

Cointreau (2001) recommends that USAID and the World Bank, along with other donors, make a concerted effort to develop and implement a solid waste aid program on a country–wide basis. Technical assistance is required for numerous steps in the solid waste program.

Poverty focus

Individual interventions in the waste sector can be defined to be either poverty-inclusive or poverty-directed (some of the possible directions are listed in *Section 6.2.3*). Waste is a particular problem in poor areas, which are very unlikely to be covered by any existing formal systems, with consequent impacts on health and quality of life.

There are certainly opportunities for activities which directly involve, and benefit poor communities. An example is community-based waste collection in slum areas, where target groups – such as poor women – can be organised for neighbourhood waste collection in slum areas with appropriate fees being levied on residents. Broader-based strategies should also include a poverty-focused component.

Effectiveness
For waste management initiatives in India, whilst the design and choice of partners for individual projects are obviously crucial, the effectiveness is likely to be high. The potential for cost-effectiveness, value added, the tangibility and measurability of the impacts, and replication and dissemination are all considerable for most types of waste management intervention.

Most types of waste project could be designed to fit relatively easily within the scale of resources which Sida could make available. Some interventions could be relatively small (eg community involvement in solid waste collection in poor areas), but they might be administratively complex and time-consuming: 'packaging' them into larger scale, or linked, activities could yield administrative economies of scale.

Sustainability
Waste management project have good potential to be sustainable in the longer-term. Some, such as the development of strategies, have long-term sustainability through capacity-building as a major objective. Measures to access private sector finance will also directly address sustainability (and financial viability). Poverty-focused actions can – and should – focus on building sustainable livelihoods for the target group(s), such as waste collection collectives, or 'rag-pickers'.

Enabling environment/political will
The enabling environment for waste management programs appears very good. There is widespread agreement that it is a high priority, institutional responsibilities clearly rest with the municipalities, and the modalities for involving a range of players – eg CBOs, private sector – are generally accepted (unlike, for example, the water sector).

Local partners
There is every reason to suppose that it would be possible to identify strong local partners outside government (NGOs, CBOs, private sector), which will enhance the potential for longer-term sustainability.

Likelihood of success (risk)
Consideration of all the above criteria indicates that, in general terms, a strategy that would develop waste management projects would have relatively low risk, and that any potential killing factors could be clearly identified, and contained or eliminated.

Swedish additionality
There are other donor players active in waste management, but given the high degree of need there are niches where Sida could play a distinctive need. The Group 1 strategies which link a cluster of small-medium towns, or a district, offer opportunities where a clear Swedish contribution would be evident. Within the various strands of waste management activities that Sida could develop, there are opportunities to develop innovative approaches in areas such as:

- innovative/appropriate management approaches and technologies;
- privatisation and mobilisation of private sector finance;
- involvement of poor communities in localised waste collection activities.

Interventions in waste management can make a clear and visible difference.

Swedish involvement
Swedish expertise could become involved in waste management planning, through direct technical assistance. It may also be possible to involve Swedish manufacturers of appropriate or innovative technologies, via demonstration projects within technical assistance components, or through concessional loans or export credits.

Geographical focus
The need for improved waste management in India is very widespread; there is no clear geographical segregation which would support a strong focus. In developing specific projects, therefore, Sida should take due account of other important considerations such as the enabling environment and the relationship developed with individual state governments.

6.4 Considerations for Selection of a Geographical Focus

As noted above, most donors in India regard a geographical focus as an essential part of their strategies, given the size of the country and the scale and diversity of the problems (see *Table 6.2)*. As we have discussed in preceding sections, there has been a strong tendency for donors to focus on the so-called 'reform states', since these offer the best enabling environment and hence the least risk to successful completion of projects' objectives. The Government of India is showing increasing concern over the concentration of significant portions of the development aid budget on a relatively small number of states, and therefore a lesser proportion of India's total population.

Table 6.2 Focus states for major donors in India

Donor	Focus States
World Bank	Andhra Pradesh, Karnataka, Uttar Pradesh, Orissa
Asian Development Bank	Gujarat, Madhya Pradesh, Rajasthan, West Bengal
Australia	Himachal Pradesh, Madhya Pradesh, North-east states
Denmark	Karnataka, Madhya Pradesh, Orissa
Germany	Karnataka, Madhya Pradesh, Maharashtra, Orissa, Rajasthan, West Bengal
Netherlands	Andhra Pradesh, Gujarat, Kerala
Norway	Karnataka, Orissa, Rajasthan
Switzerland	Andhra Pradesh, Karnataka, Kerala, Rajasthan,
UK	Andhra Pradesh, Madhya Pradesh, Orissa, West Bengal

Note: includes urban and other programs

Given the proposed size of Sweden's urban environment program, we propose that Sida should also focus on a state or small number of states. Whilst it is clearly important to work with partner state governments which offer a potentially good enabling environment, the choice of states will be made more complex by GoI's concerns with the donor concentration on the reform states. Comments on potential focus areas/states are provided in *Table 6.3* in relation to the fourteen strategies identified earlier in this section.

Table 6.3 Possible geographical focus for Sida strategies

Strategy	Possible locations*	Comments
1. General, broad-based urban strategies		
1.a 'Slum improvement' in 1-2 medium-large cities	Rajasthan, Madya Pradesh, Uttar Pradesh	Avoid other donors' focus states.
1.b Focus on several smaller (<250k) cities	Hill states, new states (eg Uttarranchal), north-east states	Possible ADB partnership in Rajasthan, maybe in north-east from 2003/4
1.c District approach: address urban issues within the district	Rajasthan	Look for relatively 'backward' district in a state that has shown positive reform outlook.
2. Strategies to improve livelihoods		
2.a Income & employment generation, vocational training	Most areas would have potential	May need to avoid other donors' focus states - needs to be somewhere can get attention of suitable NGOs (so few distractions from other donor activities better).
2.b Microfinance	Most areas would have potential	Key criterion is robust financial institution partners.
2.c Social protection	All areas potentially suitable	
3. Sector strategies		
3.a Solid waste management/investment in several towns	All states	Hill states have particular, relatively small-scale problems that may suit Sida. Probably not Andhra Pradesh, where DFID active state-wide.
3.b Industrial/hazardous waste management	Maharashtra, Gujarat	Board) important.
3.c Water utilities management/ investment in several towns	Rajasthan, Uttar Pradesh, north-east states	Best done in parallel with other donors' hardware-oriented lending.
3.d Air quality management	All states	Depends on choice of cities: transport congestion and/or industry will be key factors.
4. Urban governance strategies		
4.a Strengthening governance processes under 74th Amendment(public admin, ULBs)	States with enabling governments	Best to avoid DFID focus states and Mahashhtra (FIRE programme)?
4.b Development of revenue base through improved administrative systems	Most states with enabling governments	Highest chances of success in reform states, as enabling environment favourable.
4.c Strengthening regulatory development, project preparation	Most states with enabling governments	
4.d Strengthening civil society organisations	All states	Depends on choice of partners in individual locations.

*Note: locations indicated are not intended to constitute an exhaustive list.

It is important to stress that many of the strategies *could* be implemented in a large number of states, and where states are indicated this does not mean that other states would not necessarily be appropriate. Overall, we believe that a sound approach would be to identify and work with 'incipient reform states', ie states which show some evidence of offering a good enabling environment, but which have not yet been recognised as fully-fledged reform states. The following would be good candidates for moving forward on the higher-ranking strategies:

- Rajasthan;
- Uttar Pradesh;
- Uttaranchal;
- (and possibly the hill states, including the north-east, although these would have a higher risk factor attached).

We outline our appreciation of the factors for and against the above states in *Table 6.4*, and would suggest that Sida only moves forward in a sub-set of these to avoid 'spreading itself too thinly'. It should be noted that many of the factors 'for'and 'against' are the opposite sides of the same argument. The balance between the two sides will only emarge as Sida engages in dialogue with potential state government partners as preparation of the urban environment program proceeds.

Table 6.4 Some factors in Sida's choice of focus states

State	For	Against
Rajasthan	– Existing Sida project partner – Expressed interest in smaller towns/district approach – Synergies with ADB project? – 'Incipient reform state'?	– Reform record poor: weak enabling environment? – Government very hierarchical: local level poorly developed?
Uttar Pradesh	– Synergies with World Bank? – Signs of shedding old 'non-reform' image?	– Old 'non-reform' practices may still persist? – Sheer size of UP may make it difficult partner for smaller donor
Uttaranchal	– Newly-created state: 'clean slate' – State government adopting 'reform' posture – Little donor activity so far – Relatively small-scale problems suit Sida budgets	– Little work done to define problems/issues – so significant preparation/development – 'Unknown quantity' – no track record
Hill states (incl. north-east)	– Very few donors active – Relatively small-scale problems suit Sida budgets	– Security situation not good – Dependence on central government – Lower density and size of urban areas – Swedish contribution not so visible?

Ultimately, any choice of geographical focus will be determined by Sida's discussions with the Indian authorities during development of the country strategy and urban environment program. It may depend in part of factors which are outside the scope of this issues paper to identify or predict.

Appendix A: Terms of Reference

1 Overview: Urban management and Poverty Issues in India

1.1 The scale of urban poverty

Currently some 300 million people live in Indian cities and towns. In the 1991 Census, there were 23 cities with a population of over 1.0 million people, 65 cities with more than 0.5 million people, and 300 cities or towns with more than 100,000 people.

The scale of the problem of the urban poor in India is huge by any count. Drawing on the Official Poverty Line of Rs 454 per capita per month estimated by Planning Commission, Tewari (2001) reports that the poor population in urban areas totaled 67 million in 1999–2000. This represented nearly one–quarter of the urban population. DFID (2000) estimates that 100 million people live in slum settlements in urban areas in India. Although seventy per cent of the Indian population still lives in rural areas (with, according to the World Bank, 37 per cent below the poverty line), if the urban population rises to 40 per cent of the population in the next 25 years, as is expected with the growth in rural–urban migration, the urban poor could double to 200 million people or more.

There is general agreement that the *average level of income* is lower in most Northern and Eastern States than in the Western and Southern States. However, there is less agreement about the *distribution of poverty*, especially the extent and distribution of poverty in urban areas, which is the subject of ongoing research. The National Sample Survey Organisation estimates levels of consumption and expenditure required for basic minimum standards of living in the states, but does not provide urban level detail. The national poverty program (Swarna Jayanti Shahari Rojgar Yojana – SJSRY) uses indicators of poverty based on income, housing quality and availability of services, but in practice relies mainly on income and slum indicators (Tewari, 2001).

Some analysts consider that the proportion of poverty is greater is small towns than in large ones. For example, Dubey *et al.* (2000) estimate that the proportion of people below the poverty line is 43 per cent in towns with fewer than 50,000 people, and contend that the basic infrastructure and shelter in these towns cannot cope with the rapid growth of population.

However, inter–urban comparisons of poverty are fraught with problems. If people were significantly worse off at the margin in small towns, many would move to larger towns. It is estimated that in Mumbai, India's most affluent city, half of the population live in slums and that 40 per cent of the city's population lives in 3.5 per cent of the area (UNDP–World Bank, undated). This phenomenon is consistent with an estimated 48 per cent of people in rural Maharastra living below the poverty line (World Bank, 1997). Given the scale of urban poverty in India and the ability of people to move between urban areas, there are extensive and severe problems of poverty in all Indian cities and towns, regardless of their average level of economic development or location.

1.2 Federal Indian government responsibilities

The GoI ministry with responsibility for urban issues is the Ministry of Urban Development and Poverty Alleviation. The Ministry has two main departments:

– the Department of Urban Development deals with urban policy, land, water supply, sanitation, transport and local self–government; and

– the Department of Urban Employment and Poverty Alleviation, which deals with housing, employment and poverty alleviation.

GoI policy on urban poverty is based on four strategies;

– Enhancement of productive employment and income for the poor;

– Improvement in infrastructure and public services for the poor;

– Improvement in general health and welfare;

– Creating an environment for community participation.

The major national poverty program is the Swarna Jayanti Shahari Rojgar Yojana (SJSRY), which integrates these strategies. It aims to generate employment by encouraging self–employment ventures or provision of wage employment by capacity building and credit assistance for micro enterprises, employment in municipal works, and intermediation in household savings.

Other national schemes include the National Slum Development Program for community infrastructure, Housing and Sanitation programs, and the Integrated Development of Small and Medium Towns. The National Slum Development Program focuses on physical improvements with a budget of about Rs.150 crore per annum[1]. The Housing and Urban Development Corporation (HUDCO), a wholly GoI–owned company, also funds urban infrastructure and provides poor households with access to housing and housing finance.

A major welfare program is the Public Distribution System, which offers food security to the poor in possession of ration cards. First introduced in the 1960s, it distributes essential food and non–food products through a network of Fair Price Shops. Under the more targeted program introduced in 1997, 10 kg of food grains are issued per month to every family below the poverty line at subsidised rates.

1.3 State Government responsibilities

State governments have primary responsibility for planning and initiating programs for the urban sector and have been requested to prepare state based urban development strategies. However, few have been produced to–date.

The 74th Constitutional Amendment, passed in 1992, gives constitutional recognition to local government institutions and obliges State Governments to constitute Municipal Corporations, Municipal Councils and Nagar Panchayats as per the criteria provided by the Amendment. The Act also provides that the States devolve responsibilities and powers to Urban Local Bodies (ULBs). The Twelfth Schedule of the Constitution provides a list of 18 functions that may be devolved to municipalities. These include preparation of plans for economic development and social justice and responsibility for urban poverty alleviation, and slum improvements (Tewari, 2001). Also the management of utilities, such as water supply, are now intended to be a municipal responsibility rather than a state responsibility. However, states have differed in the obligatory and discretionary functions that they have devolved to municipalities. Mathur (2001) states that no state government has made substantial changes in the role of municipal governments vis-à-vis the functions of parastatal agencies like Public Health Engineering Departments.

1.4 International and non-governmental agencies

Many international agencies work on urban issues in partnership with the GoI and civil society. These include the World Bank, Asian Development Bank, UNDP, USAID, Canadian CIDA, AusAid, and

[1] Approximately US$XXX

most West European countries. Many international non–governmental organisations (NGOs), including Action Aid, CARE and Oxfam have urban programs. In addition, literally thousands of local NGOs are involved in urban initiatives. Most are very localised in both their focus and location of operations. Amongst the best known are:

– the Self Employed Women's Association (SEWA), based in Ahmedabad; and

– the Society for Promotion of Area Resource Centres (SPARC) based in Mumbai.

Both of these NGOs are prominent proponents of micro–credit and savings groups. The National Slum Dwellers Federation is the largest representative group of the urban poor in India.

1.5 Understanding Poverty

The issue of defining the poor is further complicated by the increasing recognition that poverty is a complex and multi-dimensional issue which cannot effectively be addressed by simple solutions (see *Box 1.1*). As poverty alleviation is the overarching goal of Sida's planned support to the urban sector in India, it will be important for Sida interventions to incorporate and be based on a comprehensive understanding of poverty and the poor in order to create relevant solutions at micro as well as macro levels, and provide a sound basis for evaluation of the impacts of the interventions.

Box 1.1 Understanding poverty to create effective poverty reduction strategies

Income or consumption is the most common used indicator of poverty. The Indian official definition of poverty is based on the income required by a household to meet a minimum calorie consumption intake. Households unable to acquire the basic level of calories are classified as BPL (Below the Poverty Line) households, which determines basic eligibility to many government programmes. However, this official definition of poverty is increasingly recognised as limited in terms of understanding and reducing poverty. Research on the perceptions and definitions of poverty used by the poor highlights that poverty can not be defined solely in terms of low income and a monetary value, but contains a broader concept of deprivation and insecurity.

Thus, to create effective poverty reduction strategies at policy and project level policy makers and development practitioners need to understand more about who the poor are, why they are poor, and how the poor themselves perceive and experience poverty. While poor people have many things in common, the priorities and needs of the poor are also location-specific pointing to the need for participatory poverty analysis. An evaluation study of DFID's Slum Improvement Projects illustrated that poverty, as viewed by the poor, stems from such diverse factors as lack of assets, ill-health, lack of social networks and alcohol abuse (Birmingham University, 1997). In a participatory World Bank study the poor defined well-being as being related to livelihood security, food security, ownership characteristics and respect in society (Praxis, 2000). Other examples of poverty indicators identified by the poor themselves have a basis in gender, education, residential location, ethnic background, domestic violence, social networks, and empowerment.

The idea of poor people's perceptions of poverty as a key tool for poverty reduction projects has been incorporated into the DFID-supported Andhra Pradesh Urban Services for the Poor programme, where ActionAid has carried out participatory poverty assessments in collaboration with municipal officials, politicians, and local people, as a precursor to design of poverty reduction strategies. Some of the poorest groups were identified as single women (deserted, sex workers), scavengers (caste-based poverty); disabled, children who live on the streets, migrant workers (for whom there are no social security measures), homeless. Issues identified include, for example, tenure, livelihood insecurity, health and gender harassment.

There have also been attempts to categorise the poor at a more generic level, to understand what different types of interventions may be required for different groups of the poor. A recent study (Tewari, 2001) categorised the Indian urban poor on the basis of needs and aspirations: thus dividing the poor into core poor, intermediate poor and transitional poor. The core poor are often invisible in planning and constitute the most deprived and vulnerable. The intermediate poor need financial and institutional assistance to improve their livelihoods. The transitional poor have assets and productive means, but may 'move' in and out of poverty depending on circumstances and need assistance in the form of safety nets. Other recent work, eg Loughhead *et al.* (2000), Birmingham University (1997) has also attempted to disaggregate the poor as a basis for establishing the different forms of social development and social protection measures necessary to reduce poverty for different groups. Analyses of poverty are no longer commonly defined just in terms of direct or indirect impact on the poor, or poverty inclusive strategies: the urban poor represent a diverse group with different needs and levels of vulnerability, and the problems that face them cannot be generalised. However, these emerging concepts are yet to be put into practise at a project or programme level.

The implication of the above is that any donor that considers to extend support to poverty reduction strategies must make use of the understanding that is already available on poverty as well as further develop this in the context of planned interventions. Unless and until this is done, there is a risk that the causes of poverty are not reduced and that impact on poverty can not be measured or understood at the end of the interventions. As poverty alleviation is an overarching goal of Sida's development cooperation, poverty reduction should be addressed in a focused way. Any proactive intervention by Sida needs to incorporate – and be based on – a comprehensive understanding of poverty and the poor in order to create relevant solutions at the micro as well as macro level.

Appendix B: Consulted Persons and Agencies

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Mr Robert D Berlin, Team Leader, Project Management Consultants, Rajasthan Urban Infrastructure Development Project, Jaipur.

Mr. Christophe Bosch, Water and Sanitation Economist, World Bank, Delhi.

Dr.Sunita Chakravarty, Senior Program Officer, Embassy of Sweden, Delhi.

K.V.Dinesh, Engineering Specialist, Asian Development Bank, Gujarat.

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Ms. Tejal Isaac, Shri Mahila SEWA Sakhari Bank Ltd., Ahmadabad.

Alex Jorgensen, Senior Project Implementation Officer, Social Sector, Asian Development Bank

Mr Vinod Kapur, Project Director, Rajasthan Urban Infrastructure Development Project and Ex.Officio Special Secretary to Government of Rajasthan, Jaipur.

Mr. Simon Kenny, Department for International Development, India.

Ms. Susan Koshy, Senior Programme Office, Australian High Commission, Delhi.

D.B.Makwana, Deputy Municipal Commissioner, Ahmedabad Municipal Corporation, Ahmedabad.

Robert Maurer, Head of Urban Section, World Bank, Delhi.

Dr.P.K.Mohanty, Commissioner, Hyderabad Municipal Corporation.

Mr. Sudipto Mukerjee, Department for International Development, India.

Mr Parmanand Palsania, Chairman, Municipality, Shahpura.

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Appendix C: References

Barrett, A.J. and R.M. Beardmore, 2001, 'India's Poverty Agenda: Understanding the Poor in Cities and Formulating Appropriate Anti–Poverty Actions', discussion paper for South Asia Urban and City Management Course, Goa, India.

Burton, J, 2000, *The Development Challenge: Poverty and the Environment*, Note on Urban Poverty prepared for DFID, India.

Cointreau, S., 2001, *Solid Waste Identification Mission*, sponsored by USAID and the WSP/World Bank, Delhi.

DeGroot, D., 2001, *Ahmedabad: Options to Up–scale Upgrading and Water and Sanitation Services at Community Level*, prepared for the World Bank's Water and Sanitation Program, World Bank, Delhi.

DFID, 1999, *India Country Strategy Report*, UK Department for International Development, Delhi.

DIFD, 2000, *DFID India's Urban Poverty Reduction Strategy*, UK Department for International Development, Delhi.

Dubey, A., Gandopadhyay, S. and W.Wadhwa, 2000, 'Occupational structure and incidence of poverty in Indian towns of different sizes', *Review of Development Economics*, India.

FIRE, 1999, *Innovative Approaches to Solid Waste Management in India*, Project Note, No, 15, Indo–US Financial Institutions Reform and Expansion Project.

Ganga ICDP, 2001, *A Computerised Database and Billing System for Water and Sewerage Tax: A Manual*, Manuals on Municipal Reform: Tools Developed in Kanpur and Mirzapur, No. 4, Ganga Institutional and Community Development Project Phase 2, Arcadis BMB, Arnhem Netherlands.

Gibbons, S. and S.K.Relan, 2001, *Improving Urban Services amd Municipal Finance: The Mirzapur Model*, Ganga Institutional and Community Development Project Phase 2, Technical Report 36, Arcadis BMB, Arnhem Netherlands.

HMSI, 2000, *HMSI News,* Vol.IV, No. 1, January–March.

Jorgensen, S., and R.Holzmann, 2000, 'Emerging Directions for a Social Protection Sector Strategy in the World Bank from Safety Net to Spring Board', Chapter 2 in *Social Protection: New Directions of Donor Agencies*, Social Development Department, DFID.

Kumar, S., Team Leader, Praxis Study Team, 1999, *Consultations with the Poor, India 1999*, commissioned by Poverty Reduction and Economic Management Network of the World Bank.

Lindahl, C. and B.Karlstrom, 1999, *Poverty, Economic Growth and Aid*, a discussion paper prepared for Sida/INEC, Stockholm.

Loughhead, S., Mittal O., Wood, G., 2000, *Urban Poverty and Vulnerability in India: DFID's Experiences from a Social Policy Perspective.*

Mathur, P., 2001, 'Finances and Functioning of Urban Local Bodies: A Situation Report', pp. 236–255 in *India Infrastructure Report 2001*, ed: S.Morris, 3i Network, Oxford University Press.

Mehta, M., 1999, *Water and Environmental Sanitation Sector: A Review of Public-Private Partnerships in India*, prepared for the Department for International Development, India.

Ministry of Urban Development and Poverty Alleviation, undated, *City Challenge Fundamentals: A Proposal for Introducing an Economic Incentive Programme for Supporting Citywide Reforms*,

Ministry of Urban Development and Poverty Alleviation, Delhi.

Mohanty, P.K., 2000, *City Development Strategy and Comprehensive Municipal Reforms: The Apporach of Hyerabad City in India*, paper presented to Asian City Development Strategies, Fukuoka Conference, Fukuoka, Japan.

Norton, A., Conway, T., and M.Foster, 2000. 'Social protection concepts and approaches: implications for policy and practice in international development', an Issues Paper for DFID, Chapter 1 in *Social Protection: New Directions of Donor Agencies*, Social Development Department, DFID.

Ortiz, I., 2000, 'ADB's Social Protection Network', Chapter 4 in *Social Protection: New Directions of Donor Agencies*, Social Development Department, DFID.

PRAXIS, 1999, *Consultations with the Poor*, India 1999. A Study Commissioned by Poverty Reduction and Management Network of the World Bank to inform World Development Report 2000-2001.

Rutherford, S. and S.S.Arora, 1997, *City Savers*, Urban Poverty office, DFID, Delhi,

Sida, 1995, *Towards an Urban World, Urbanisation and Development Assistance*, Sida, Stockholm.

Tewari, V., 2001, *Reducing Poverty in Urban India*, commissioned by the Asian Development Bank.

UNDP – World Bank, undated, *Credit Connections, Mahila Milan*, World Bank / DFID, Delhi.

University of Birmingham, 1997*, Final Report, Impact Assessment Study Slum Improvement Project*, prepared by the School of Public Policy Development Administration Group, for the Department of International Development, UK.

Vaidya, C. and B.Johnson, 2001, 'Ahmedabad Municipal Bond, Lessons and Pointers', *Economic and Political Weekly*, July 28.

World Bank, 1997, *India, Achievements and Challenges in Reducing Poverty*, World Bank, Washington.

World Bank, 1998, *Reducing Poverty in India: Options for more Effective Public Services*, World Bank, Washington.

World Bank, May 2000, *India Urban Water Supply and Sanitation, World Bank Group Strategy*, prepared by India Country Team, Infrastructure Sector Unit, World Bank.

World Bank, 2001, *World Development Report 2001: Attacking Poverty*, Oxford University Press, New York.

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