

## CASE STUDY 1

### THE ALLIANCE IN INDIA



By Ruth McLeod, August 2000

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## ACKNOWLEDGEMENTS

Thanks and respect are due to the following individuals who gave up valuable time to share their thinking and understanding with me as this case study was developed.

**From SPARC :** Sheela Patel, Celine D'Cruz, Sundar Burra, Panchalli Rakshit, Aseena Viccajee. Murthy, Vivek Ramkumar, Vijay Agrawal.

**From the National Slum Dwellers Federation:** A.Jockin, Sakir, Padma, Prabhu, Muthu, Mr Shanmugan.

**From the Maharashtra Slum Rehabilitation Authority:** Guatam Chatterji

**From Citibank:** T.S. Anil, Anita Gupta, Anjali Mohanti, Nanoo Pamnani.

**From the National Reserve Bank of India:** Madhukar R. Sardar, C.R. Gopalasundaram

**From ICRA Ltd:** Arun Agrawal, Nilesh Kothari

**From Chicago University:** Arjun Appadurai



Photo 2 – Transit Housing for the MUTP II project at Kanjurmarg

## EXECUTIVE SUMMARY

The case study examines the project portfolio of the Alliance, a group of Indian organisations that works collaboratively to address urban poverty. The Alliance portfolio is composed of precedent setting projects that, if they prove successful, are then scaled up, normally at city-level.

The risks associated with the current portfolio are analysed and options for risk mitigation and management are explored. In particular the risks associated with projects implemented under the auspices of the Maharashtra Slum Rehabilitation Act are considered.

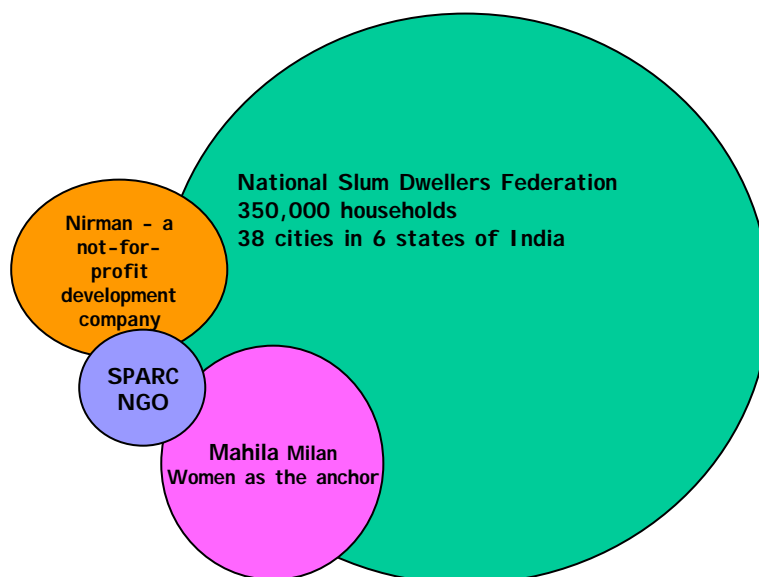
The size of the Alliance's project portfolio is increasing rapidly as they develop successful initiatives with a range of Municipalities. Historical sources and forms of financing are insufficient to meet the development capital requirements of this expansion. Existing financial products and sources and forms of funding are analysed, as are options for new forms of financing.

Finally conclusions are drawn that suggest that the Alliance's most valuable resource lies in the knowledge creation process that it has developed within low income, informal settlements. Systematisation of this knowledge, which constitutes valuable intellectual capital, is not only an effective means of mitigating risk across the portfolio of work undertaken by the Alliance. It is also potentially an asset that should be considered as valuable collateral in the negotiation of infrastructure and housing loans from state and commercial financial institutions.

*“The most recent government data (1999) reveals that one third of the country’s population, that is 71 million people, live in India’s metropolitan cities (million plus) of which there were 23 in 1991 and which are projected to go up to 40 by 2001. While India’s population has increased two and a half times since Independence, its urban population has grown five times. An estimated 305 million people, or 30 per cent of the country’s population, live in urban India, the second largest urban population, after China, in the world.” Sharma, (2000).*

## 1. BACKGROUND

This case study, developed during visits to India in April and August 2000 as part of the Bridging the Finance Gap in Infrastructure and Housing project<sup>1</sup>, focuses on the work carried out in India by an Alliance of organisations. The Alliance is made up of the Society for the Promotion of Area Resource Centres (SPARC), the National Slum Dwellers Federation (NSDF) and Mahila Milan (MM).



**THE SOCIETY FOR THE PROMOTION OF AREA RESOURCE CENTRES (SPARC)** is an Indian NGO, based in Mumbai. SPARC works in 38 cities in six states and one union territory, to provide professional support to the National Slum Dwellers Federation and Mahila Milan. SPARC is a registered voluntary organisation established in 1984 and with extensive experience in the management of community-driven housing and infrastructure projects implemented in urban informal settlements. SPARC has recently formed a Section 25<sup>2</sup> Company called Nirman which, it is anticipated, will take over the specialist role of construction development and marketing in the future.

**THE NATIONAL SLUM DWELLERS FEDERATION (NSDF)** is a national organisation of leaders of informal settlements in cities in India, established in 1974. NSDF began working collaboratively with SPARC in 1986. The organisation initially concentrated on lobbying for changes in housing policy. However when it entered into partnership with SPARC it changed its focus to emphasise proactive demonstration of the ways in which communities could become effective managers of

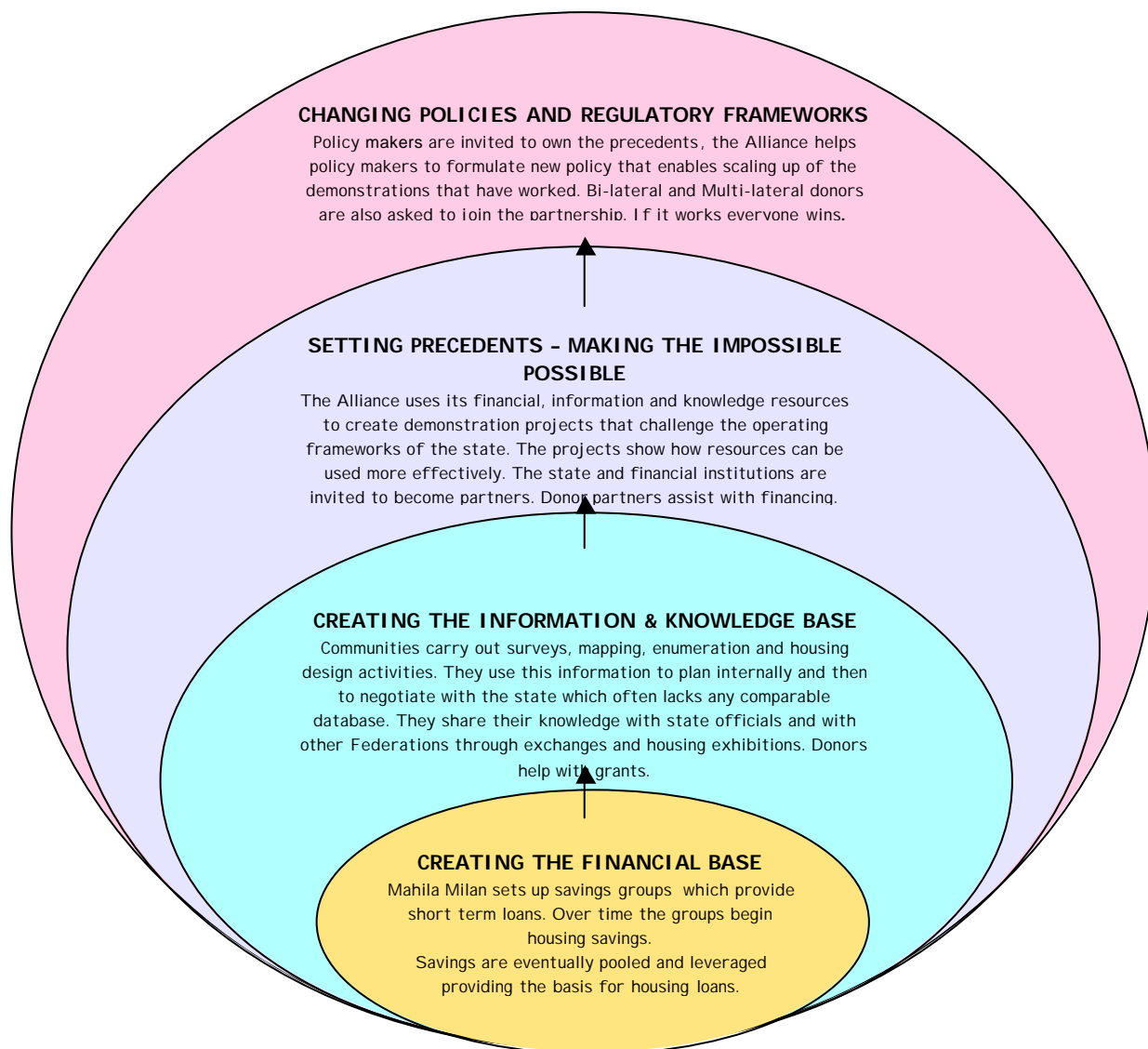
<sup>1</sup> For a previous in-depth study of the Alliances work and the regulatory environment in which it takes place see McLeod (1999)

<sup>2</sup> This is a not-for-profit company limited by Guarantee. SPARC, as a charitable Society, is restricted in the tax free investments it can make in property development. Nirman has been established to enable expansion of the Alliance’s work in this area.

urban development processes. Over the last fifteen years NSDF has successfully helped local Federations of Slum Dwellers to form effective partnerships with Municipalities.

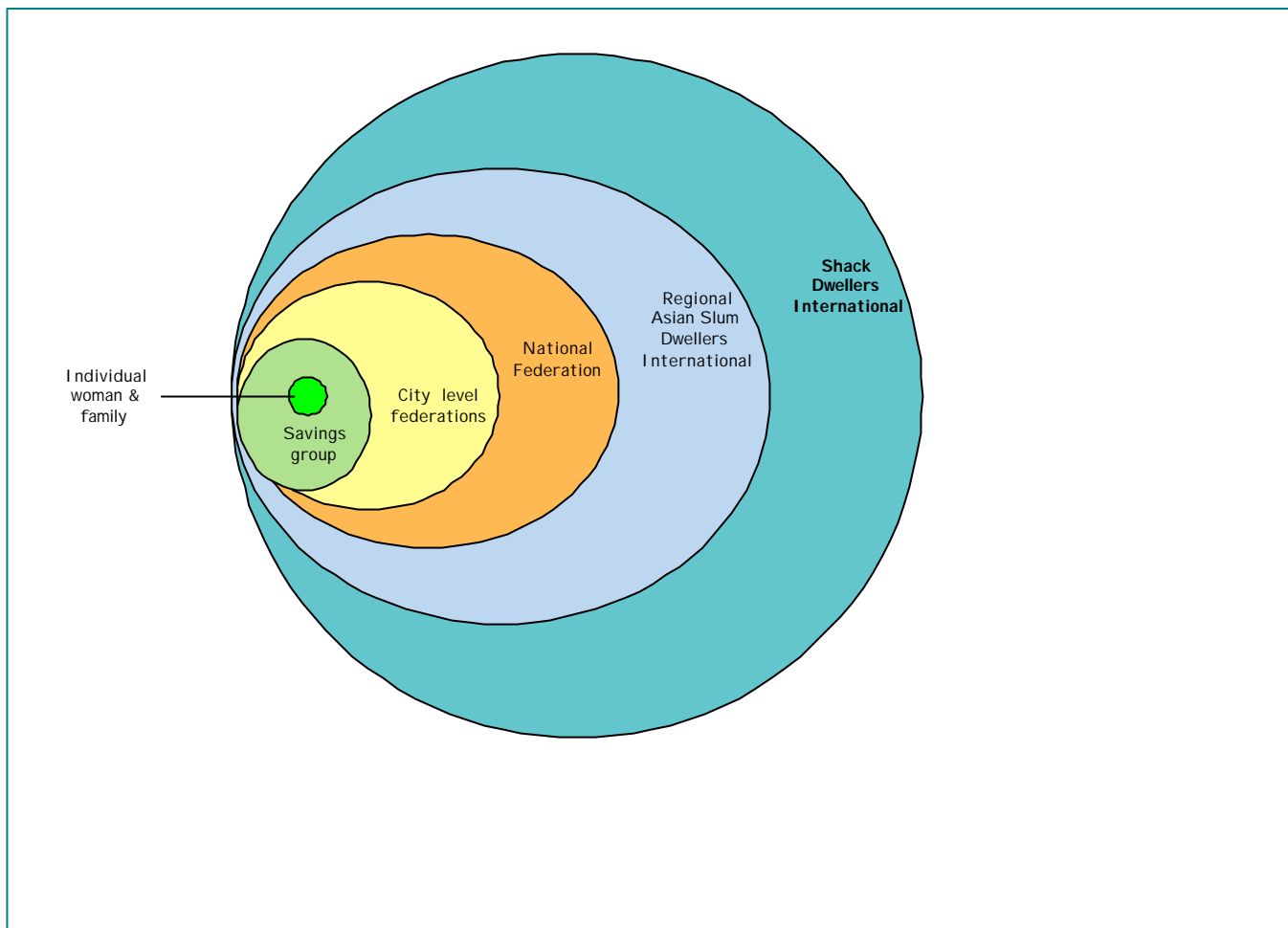
**MAHILA MILAN (MM)** meaning “women together” - is composed of collectives of women from the slums where NSDF has membership. They build skills for community leadership among women as a collective and initiate and manage community savings and loan systems.

The Alliance has a well-developed process of building capacity at community level, investing in pilot demonstration projects and then using these demonstrations to work in partnership with the state, usually at city-level, to scale up solutions. The process is summarised graphically in Figure 1.



**Figure 1 – An Overview of the Alliance Process**

As the Alliance capacity-building process takes place a large number of people become organised at city-level, forming a critical mass with the potential to negotiate rehabilitation and resettlement schemes that can benefit large numbers of people. At the same time, as the numbers of people involved grow a safety net structure is built up through linkages between different levels of the Alliance’s operations. The Alliance is a founder member of the Asian Coalition for Housing Rights, founded in 1987, which includes Federations of Slum Dwellers who effectively form a Regional Federation of Slum Dwellers in Asia. It is also a founder member of Shack Dwellers International (SDI) an international network of shack and slum dweller federations which was formed in 1996. The safety net structure that links local organisations to city, state, regional and international level institutions is represented diagrammatically in Figure 2 below.



**Figure 2 - Safety Net Formation and Linkage by the Alliance**

The safety net structure provides a framework for sharing experience and learning. The structure also provides a level of financial security, linking pooled community savings at local level into financial resources that are mobilised at different levels in the structure. Together this system of mutual solidarity and financial support provides a basis for long term investment in strengthening the asset base of the poor and the NGOs that work with them.

The investments made within the context of the Alliance's network are diverse, resulting in a range of resources or asset bases. A brain-storming map (see Appendix 3) evolved during discussions about the range and form of the resources and assets that are significant within the Alliance's work. The map also includes key areas of vulnerability for the Alliance, in other words areas where there is a risk of damage to the strategic asset base that the Alliance is building up. Areas where the Alliance can have direct influence as a change agent, resulting in reductions in vulnerability of the urban poor, are outlined in red.

## 2. HISTORICAL AND CURRENT USE OF DONOR AND LOCAL FUNDING

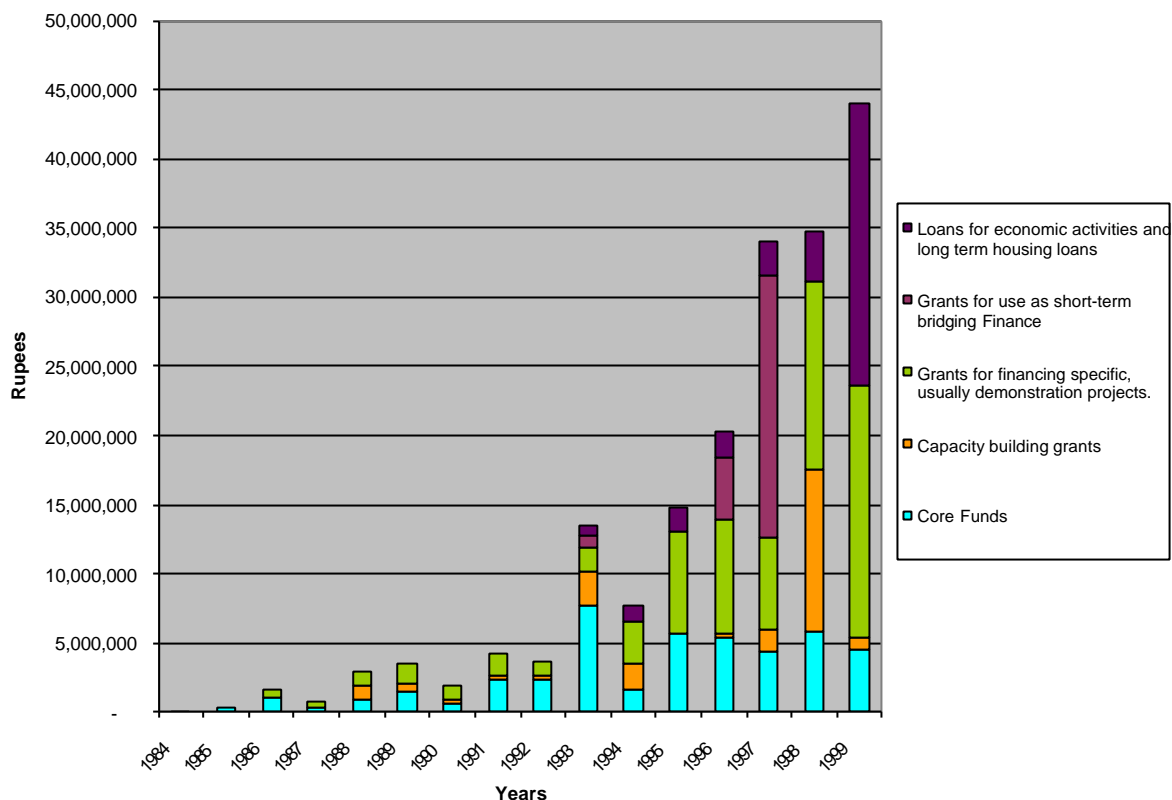
Historically, the Alliance has used donor funding, together with local funding and community savings to finance different aspects of its work. A summarised overview of the way in which funds have been used since 1984 is provided in Table 1.

|   |   |
|---|---|
| <b>THE BASIC BUILDING PROCESS</b>   | <b>GRANTS</b>   |
| Building the core capacity of the Federations<br>Setting precedents by implementing pilot demonstration projects.<br>Documenting the process<br>Understanding and sharing the process   | Non specific (core) grants  |
|   | Development grants (project specific)   |
|   | Grants for Revolving Loan Funds   |
|   | General Bridge Financing Grants   |
|   | Research grants   |
| <b>SCALING UP IMPACT</b>  | <b>PROJECT INCOME</b>   |
| Working at scale to deliver housing and infrastructure solutions to large numbers of settlements in cities and states with state linked financing<br>Working with agencies to share information and provide assistance under technical assistance agreements. | NGO Grants  |
|   | Contract fees from Municipalities for installation of community infrastructure such as toilets. |
|   | Contract fees for state authorities for the construction of Transit housing                     |
|   | Contract fees for Consultancy services provided to donors and other agencies.                   |
|   | <b>LOANS</b>  |
|   | Organisational loans  |
|   | ◆ for income generation   |
| ◆ for housing   |   |
| Project specific bridging loans   |   |
| ◆ for infrastructure  |   |
| ◆ for housing   |   |
| <b>SECURITY AND LEVERAGE</b>  | <b>SECURITIES</b>   |
| Sharing the risk of pilot projects and scaling up successful approaches.  | Guarantee Deposits  |
|   | Community savings Deposits  |
| Keeping the organisation secure   | <b>RESERVES (CORPUS FUNDS)</b>  |

**Table 1 Use of Foreign Donor Funds since 1984 to support the Alliance Development Strategy**

As the work of the Alliance has developed, the form of finance provided by external donors and local Indian financial institutions has changed. In recent years grants for capitalisation of loans have become increasingly important, as have direct loans for income-generation and for pump-priming construction projects. Figure 3 gives an overview of the change in form of donor funding since 1984.





**Figure 3 Range of Alliance funds received from International donors and Indian finance institutions 1984-1999**

The Alliance has increasingly refined the way in which it uses different kinds of funds for specific purposes. An overview of the ways in which available funds are currently used is provided in Table 2.

The current project portfolio of the Alliance is composed of four kinds of projects:

#### **TRANSIT ACCOMMODATION**

Constructed as temporary “holding” accommodation for households, organised within co-operatives, who are participating in resettlement schemes such as that associated with the Mumbai Urban Transport Project (MUTP 11 – see Appendix 4). The housing is officially financed by the project funders – the Municipality using financing from the World Bank. However in practice a significant up-front investment is required by the Alliance as the cost of the transit housing is reimbursed at a relatively late stage of the project.

#### **MAHILA MILAN HOUSING**

A relatively simple house, designed by the Mahila Milan members which was successfully piloted in the ‘90’s and which is now being constructed at standard cost in various places in Mumbai and other cities.

### SRA HOUSING

High rise rehabilitation housing constructed under the terms and conditions of the Maharashtra Slum Rehabilitation Act (SRA). The schemes incorporate a commercial component including residential and commercial space sold on the open market as well as the sale of Transferable Development Rights (TDR). For detail on how the SRA scheme works see page 13.

### INFRASTRUCTURE

Communal toilet blocks built by, and for, communities in collaboration with Municipal Authorities. The toilets are pre-financed by the Alliance with the Municipality providing reimbursement<sup>3</sup>.



Photo 3 - Mahila Milan Housing



Photo 4 – Community Toilet Block

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<sup>3</sup> A major scheme in Mumbai which has been developed since the research was completed illustrates the scale of financing required. Under the Mumbai scheme the Alliance is expected to provide a 5% security deposit as well as a 10% bond amounting to a total of 600 million rupees (US\$1.3 million equivalent).

| PRODUCT   | CHARACTERISTICS   |
|---|---|
| Community savings (currently Rps 44 million – US\$951.000 equivalent)                                 | Form the internal revolving fund to pre-finance income generation and other short term loans  |
| Short term loans for economic activities.   | Presently obtained from RMK <sup>4</sup> at 8% and on-lent to community savings groups at 12% with compulsory savings of 12%  |
| Grants for use as short term Bridging Finance and recycled on a Revolving Loan Fund basis (1-3 years) | Funds have been provided by Cordaid <sup>5</sup> and Miserior <sup>6</sup> for use in financing projects until alternative sources of loan finance can be negotiated. They are lent out to specific projects at the same interest rate as the loan finance that is being negotiated – e.g. 10%- 12% if the final loan will be from HUDCO <sup>7</sup> , 14% if the loan will be from Citibank etc. Citibank has provided grant funding to capitalise a loan fund for on-lending for income generation purposes. |
| Short term project bridging loans (1 – 3 years)   | Used for specific projects. Citibank has provided a 14% loan for the Rajiv Indira – Suryodaya project.  |
| Long term Housing Loans (10 – 15 years)   | HUDCO has given loans at 12 % for Mahila Milan and Transit housing  |
| Foreign currency Guarantees (1-3 years)   | Most Indian organisations hesitate to give loans to NGOs so forex guarantees have been used to overcome their concerns. SELAVIP <sup>8</sup> provided a guarantee to secure a HUDCO loan. Homeless International has provided a guarantee for a Citibank Loan.  |
| State subsidies   | Available from city and state authorities for particular purposes – e.g. post-cyclone reconstruction, sanitation provision etc. Nearly always payable as reimbursements with a consequent need to use bridge financing, in the short-term, for pre-financing.   |
| State contracts   | For work carried out on state sponsored projects, usually related to resettlement and to large survey work. E.g. MUTP II <sup>9</sup> Railway resettlement and related transit accommodation in Kanjurmarg, Pune toilet programme.  |

**Table 2 Financial Products currently used by the Alliance**

### 3. RISK WITHIN THE CURRENT AND PLANNED PROJECT PORTFOLIO

The overall project portfolio can be referred to in Appendix 2<sup>10</sup>. The portfolio includes precedent-setting housing and infrastructure projects as well as work focused on scaling-up approaches that have been tried and tested, such as the Mahila Milan housing model. Based on August 2000 estimates the maximum bridge financing required over the next two years for housing and toilet projects is US\$6,753,054<sup>11</sup>. The maximum requirement for Guarantee funding is estimated at US\$1,558,695.

As the Alliance has scaled up its activities, the risks that they face when engaging with agencies of the state and formal financial institutions, have become more apparent. These risks vary from one project to another and can probably best be understood within the context of a number of specific projects which the Alliance is currently implementing.

When the research began the Alliance was involved in several major projects in Mumbai. The first, the Mumbai Urban Transport Project (MUTPII) is a World Bank financed project which will eventually incorporate resettlement of 32,000 households, half of whom live along the rail tracks. The second involves the development of community sanitation facilities in slum communities, again with World Bank financing channelled through the Municipality. Following an initial pilot this is expected to entail a large contract for the Alliance with the Mumbai Municipality. The third project is the Rajiv Indira Suryodaya project, the first community-led rehabilitation initiative to be implemented under the auspices of the Maharashtra State Government's Slum Rehabilitation Authority<sup>12</sup>. Rajiv Indira Suryodaya is an initiative taking place in a slum called Dharavi.

<sup>4</sup> Rastriya Mahila Kosh – a government agency offering specialist credit for income generation to women's self help groups.

<sup>5</sup> A Dutch funding NGO based in the Catholic Church in the Netherlands

<sup>6</sup> A German funding NGO based in the Catholic Church in Germany.

<sup>7</sup> Housing and Urban Development Corporation – an Indian Public Sector Financial Institution.

<sup>8</sup> A Belgian NGO.

<sup>9</sup> The Mumbai Urban Transport Project – a World Bank backed project to improve transportation and involving the resettlement of approximately 32,000 slum dwellers currently living along the rail tracks. Approximately half of these slum dwellers are members of NSDF through their local Federation the Railway Slum Dwellers Federation.

<sup>10</sup> See also the Indian PEST analysis attached as Appendix 1.

<sup>11</sup> Current exchange rate is Rs46 to US\$1.

<sup>12</sup> See Slum Rehabilitation Authority 1997

All three of the projects taking place in Mumbai involve a significant investment in real estate development that cannot be carried out by single households alone. Large numbers of people are involved. The financing for each scheme represents a challenge. How can a Federation of Railway Slum Dwellers take a lead role in organising their own relocation if, in order to do so, they have to meet the procurement requirements of the World Bank? How can slum dwellers, planning a high rise development in a real estate market that is extremely volatile, raise the necessary development capital? How can toilet blocks built by communities themselves in a way never before envisaged, be financed in a context where inherent assumptions about contractors abilities to pre-finance had been built into the Municipal contracting procedures?

The main risks associated with these projects can be summarised as:

### FINANCIAL RISK

Insufficient funding to cover **the learning costs** that are involved when organisations of the urban poor take on the responsibility of developing and managing construction projects. This can jeopardise the viability of precedent-setting projects. Project financing from lenders tends not to include provision for the investment that is necessary for the urban poor to develop the skills involved in managing complex projects – skills that have to be developed through practice, rather than theoretical learning. Learning inevitably means that mistakes are made which frequently result in delays. If provision for **delays and cost escalation** associated with this learning, and other external factors, is not made within project planning and loan contracts, the consequences can be serious.

Where loans are involved **interest rate risk** can be significant if the rate is variable. In the case of foreign exchange loans **exchange rate risk** will be of major concern.

### POLITICAL RISK

Slum rehabilitation **policy is subject to change when political administrations change**. Some administrations are more supportive of community-driven development than others. Legislation impacting on planning and building standards and approvals is particularly important in this regard. For example, the recent introduction of the National Coastal Zone Restriction Act may have a dramatic impact on the design of the Rajiv Indira-Suryodaya project described below. One of the problems is that the State itself has to develop mechanisms for implementing new policies but this takes time. Projects can be stuck for months before decisions are made by officials regarding exactly how standards are to be applied. In addition new state policies can be challenged in the courts. One of the unanticipated events of the MUTP II project has been a legal case, taken to the High Court by a middle class environmental group, demanding that railway slum dwellers be evicted from the slums that they occupy with no entitlement to compensation or to organised resettlement<sup>13</sup>. The case has consumed significant Alliance resources, an expense and resource drain that was totally unanticipated and that few donors will cover.

### CORRUPTION AND BRIBERY

It is not uncommon for high levels of bureaucracy to result in **high levels of bribery and corruption associated with obtaining planning and building approvals**. The Alliance has taken a clear stand on this issue and will not pay bribes to speed up the approval process. As a result it has been able to reduce the fees paid to contractors who no longer need to provide the “incentives” to public officials in order to implement projects. However the non-payment of bribes also entails delays. Groups of slum dwellers may have to visit officials repeatedly in order to obtain the necessary permissions and this in turn consumes valuable time and other resources. It does however mean that an increasing number of slum dwellers are becoming familiar with how the system is meant to work, how it actually works, and the ways in which it needs to change if it is to benefit the poor.

### ORGANISATIONAL RISK

The complexity of managing multiple construction projects presents significant challenges in the area of **internal management**. This is particularly true of financial systems but also important in the whole area of data management particularly where extensive socio-economic data collection and analysis is required for mass resettlement schemes such as that in the MUTP II project. If adequate

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<sup>13</sup> See Appendix 4 for associated media coverage

provision is not made for strengthening internal management systems, the organisation's reputation can be damaged as a result of mismanagement of projects.

### CREDIBILITY RISK

The strength of the Alliance lies in its credibility, particularly in the strength of its ability to help communities to organise to become pro-active as urban developers. Much of this **credibility is based on trust**, built up over many years. The Alliance must be seen to maintain this trust in the event of external pressures such as the sudden and illegal demolition of railway slum dwellings by the Railway Authorities in February 2000. In turn this trust is based on the strength of the strategic alliances that have been built up with champions of the Alliance process within the state bureaucracy. These alliances are difficult to maintain because of the practice of moving members of the Indian Administrative Service every three years.

## 4. THE SLUM REHABILITATION ACT

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The Alliance's most capital intensive projects are those being implemented within the framework of the Slum Rehabilitation Act (SRA) of the Maharashtra government. It is within these projects that the risks facing the Alliance are most concentrated.

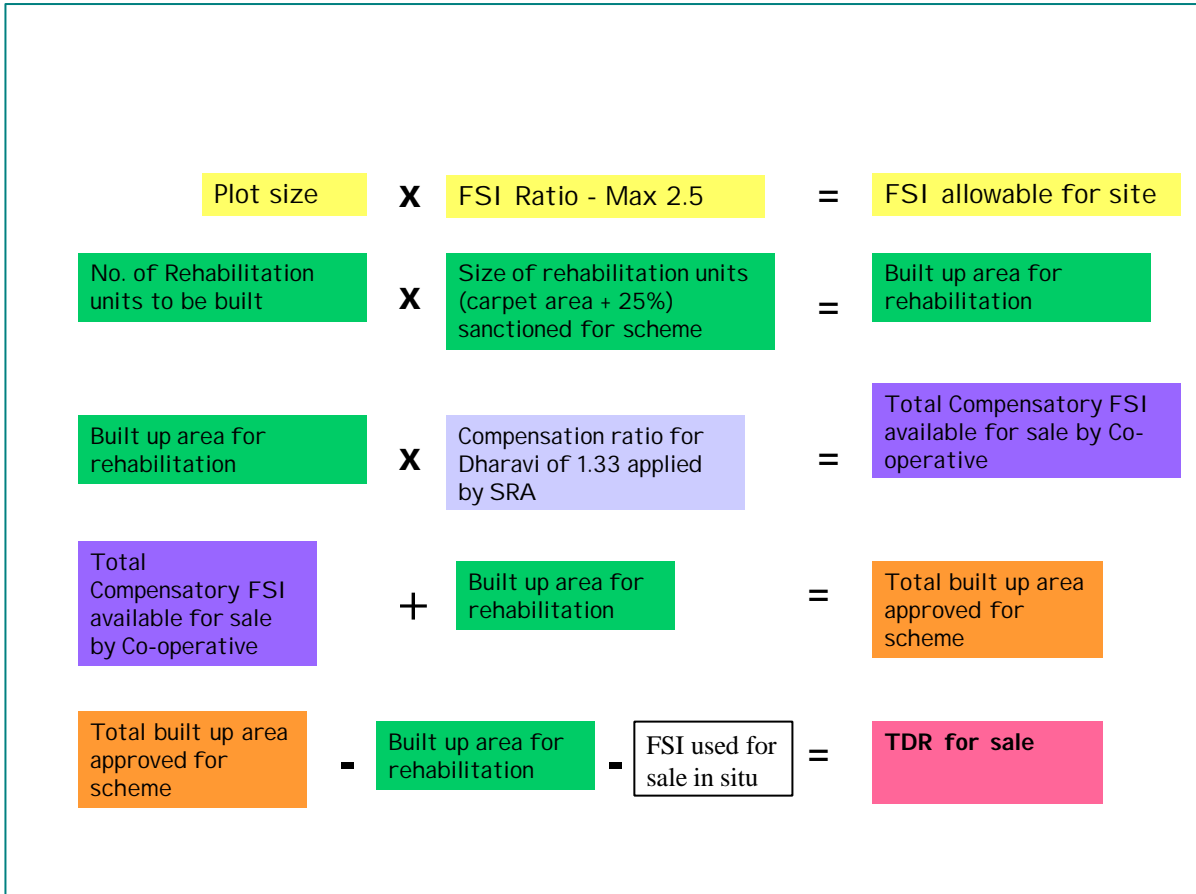
### HOW THE SRA POLICY WORKS

The owner of the slum land or the co-operative society of slum dwellers or an NGO or any real estate developer having individual agreements with at least 70% of eligible slum dwellers is entitled to become a developer.

Each eligible family is entitled to develop 225 sq. feet of carpet area and the SRA estimates that about 80% of eligible families will obtain permanent housing in situ rather than resettling in other areas. The policy stipulates that the developers who implement SRA projects with or on behalf of slum dwellers, should provide self-contained rehabilitation tenements of 225 sq. feet of carpet area absolutely free of cost to slum dwellers. A land development incentive is made available to developers based on the use of a Floor-Space Index ratio (FSI). The FSI determines the permissible ratio of built floor space to size of building plot and varies in different parts of Mumbai, with lower ratios being applied in areas where the real estate prices are very high and the State has an interest in minimising development density. For this purpose Mumbai has been divided into three geographical areas namely, Mumbai Island City, the Suburbs and Dharavi.

The FSI used on any land development cannot exceed 2.5 times the area of the available land. However when the FSI generated on the basis of peoples eligibility within a scheme exceeds 2.5 the balance can be utilised by other projects under conditions stipulated within the Act. This additional FSI can, in other words, be transferred, and it is referred to as TDR (Transferable Development Rights). TDR is a commodity that can be purchased and sold and there is now an established TDR market within Mumbai which determines the going price for TDR at any particular point in time.

Calculating TDR is complicated. The method for doing so is shown in Figure 4.



**Figure 4 – Method for calculating TDR available for sale**

SRA-type projects currently planned by the Alliance have a total projected cost of US\$16.6 million accounting for 62% of the total portfolio cost of US\$26.7 million and 69% of the housing portfolio which amounts to US\$23.9 million. Estimates of bridging requirements for the SRA projects amount to US\$1.2 million in the first year and a peak of US\$4.2 million in 2001/2. Estimates for SRA guarantee requirements peak at US\$1.4 million in 2001/2<sup>14</sup>.

Given the risk burden associated with the SRA projects, and the fact that in the short term they will benefit a relatively small number of NSDF members, the rationale behind the Alliance’s decision to invest so heavily in them requires an explanation which is provided in the following section.

<sup>14</sup> The estimates for bridging and guarantee requirements are based on conservative assumptions namely:

- ◆ 40% of total project expenditure will occur in first the first 6 months with the balance spread evenly over the remaining project time.
- ◆ No up front contractor investment or credit from building material suppliers
- ◆ Profits from sale of residential and commercial space not assumed before 2002/3
- ◆ Income from sale of TDR not assumed until 2002/3
- ◆ Hard currency guarantees required for 20% of rupee project cost.

## 5. RISKS ASSOCIATED WITH SRA PROJECTS

The main risks associated with the SRA schemes occur in financial, credit, foreign exchange, market, construction, organisational and political areas. They are summarised in Table 3, together with basic management and mitigation options.

| NATURE OF RISK  | RISK MANAGEMENT AND MITIGATION OPTIONS   |
|---|--|
| <b>FINANCIAL</b>  |  |
| Lack of adequate and affordable capital creating cash flow problems with consequent delay expenses.<br>Inability to repay external loans due to non-viability of schemes.<br>Variable interest rates may lead to unanticipated financing costs.   | Negotiate with state to pre-finance state led initiative instead of working on reimbursement basis.<br>Provision of bridge financing.<br>Design projects to ensure early sale of units and TDR.<br>Provision of external guarantees to secure local capital.<br>Accessing "soft loans" from development banks or external donors <sup>15</sup> .<br>Provision of 10% deposits by participating co-operatives.<br>Negotiate fixed interest loans.                   |
| <b>CREDIT</b>   |  |
| Financial Institutions perceive the risks of lending to be too high for a loan to be agreed. Often this is based on the absence of an intangible "comfort" factor – the institution may feel uneasy about lending because of a total lack of understanding about how community-driven development processes work.   | Invest in exposing potential financiers to the process of community-driven development. Help them to build up their knowledge of the people involved, the ways in which they work and the "informal" systems that are used in the development process. It is only through such exposure that the trust that lies behind the "comfort" factor can be developed.   |
| <b>FOREIGN EXCHANGE RATE (if external loans are used)</b>   |  |
| Changes in the rupee exchange rate against the US\$ and Sterling making loan repayment onerous or impossible <sup>16</sup> .  | Local hedging <sup>17</sup> ,<br>Negotiate with donors to assume foreign exchange risk.  |
| <b>MARKET</b>   |  |
| Drops in real estate prices reducing the returns on "for sale" components of the SRA schemes.<br>Reduction in TDR <sup>18</sup> price impacting on overall financial viability <sup>19</sup> of schemes and medium term cash flow <sup>20</sup> .   | Ensure a competitive product in terms of quality and location.<br>Invest in focused marketing.   |
| <b>POLITICAL</b>  |  |
| Changes in the SRA policy or its abandonment removing the financial logic of the projects.<br>Changes in planning and building regulations making the schemes, as planned, illegal and/or unviable <sup>21</sup> .  | Maintain and develop capacity to influence policy as a key player.   |
| <b>ORGANISATIONAL</b>   |  |
| Failure of an SRA scheme leading to damaged credibility of the Alliance among key stake holders<br>Failure to comply with the Foreign Contributions Registration Act, with the Societies Act and with the Income Tax Act leading to loss of permissions to receive external funds.<br>Failure to pass on the lessons learnt on one scheme to others implementing new schemes. | Internal systems for ensuring compliance with legal requirements.<br>Use Nirman Company to separate project investment and management from other organisational activities.<br>Co-opt external Directors with relevant skills and reputation to the Nirman Board.<br>Create special vehicles for projects with high risk levels in order to ring fence risk.<br>Ensure community-to-community exchange to ensure that learning is maximised across the Federation. |
| <b>CONSTRUCTION</b>   |  |
| Sequencing of construction resulting in sales income only being received towards the end of construction.<br>Project cost escalation due to poor management.<br>Poor quality leading to lack of demand and future damage claims.<br>Delays caused by factors external to the Alliance's control.  | Design construction process to facilitate sales at earlier stages of the project. Ensure experienced project managers from previous projects are available to support new managers.<br>Ensure on-going support from experienced construction professionals and document the lessons learned so that the management becomes increasingly systematised.<br>Allow margin for delays in project design.  |

**Table 3 – SRA-related Risks and Options for Risk Management and Mitigation**

<sup>15</sup> Currently restricted to formal financial institutions such as the Housing and Urban Development Corporation (HUDCO) and the Housing Development Finance Corporation (HDFC).

<sup>16</sup> Exchange rate data showing the Rupee against US\$ and Sterling can be found in Appendix 7

<sup>17</sup> Currently available for 12 months at 5%.

<sup>18</sup> Calculation of TDR for sale in the Rajiv Indira Suryodaya scheme is shown in Appendix 8.

<sup>19</sup> The instrument developed to assess the viability of the SRA schemes is provided in Appendix 8.

<sup>20</sup> The price of TDR has dropped from Rs 800 per sq foot to Rs 450 per sq foot over the last year. This is almost certainly because of restrictions on the proportion of FSI that can be covered by TDR on any one site which has restricted demand from developers.

<sup>21</sup> The viability analysis of the Rajiv Indira Suryodaya project (see Appendix 8) demonstrates that the scheme will not be financially viable if the CRZ restrictions are applied. If the restrictions are not applied the scheme should realise a surplus as additional "for sale" units can be constructed.

## 6. WHY TAKE THE SRA-RELATED RISKS ?

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The slum settlements of Mumbai provide homes to approximately 50% of the city's 12 million population. More than 50% of the slums are on privately owned lands, and all the slums combined occupy only 8% of the total land area of Mumbai<sup>22</sup>, illustrating the extremely dense nature of these settlements. In order to address the challenge of slum rehabilitation within this context the SRA policy was developed and adopted by the State of Maharashtra in 1996. The policy incorporates provision for resettlement where necessary but assumes that 80% of rehabilitation will have to take place in situ. Resettlement will be largely restricted to households living on non-residential land – i.e. on the pavements or along side rail tracks.

The starting point of the SRA approach is the recognition within the policy<sup>23</sup> of the right of slum dwellers and pavement dwellers who can prove residence in the city on January 1 1995, to “avail of a permanent house”. Its key innovation is that it provides a framework in which land development rights can be capitalised to finance slum rehabilitation.

The decision as to whether or not the Alliance should take the risks involved in demonstrating how slum dwellers can take the lead in developing rehabilitation projects under the SRA is heavily influenced by the projection that 80% of the anticipated rehabilitation will have to take place in situ. This precludes the less risky Mahila Milan type approach<sup>24</sup> because of the size of plots that would be needed to accommodate one-floor constructions. High-rise, high-density development is really the only available option within settlements such as Dharavi.

If the Alliance is to stay true to its principle of developing solutions that work for the poorest of the poor, there is no option but to engage with the SRA policy because it is the only way, at the moment, that the rehabilitation needs of the majority of slum dwellers within Mumbai can be addressed. At the same time, as the state has no investment financing to offer, the only way that slum dwellers can take advantage of the options provided by the policy, is to access the development capital required for rehabilitation, themselves.

It could be argued that the private sector could quite ably deliver the solutions required. The SRA scheme was indeed developed on the assumption that the profits to be made by the private sector would more than cover the costs of providing basic rehabilitation housing. However private developer performance under the SRA has been weak, with only 440 schemes initiated. Many of these were approved but never, in fact, delivered. This lack of performance has been brought about by the poor returns on investment to be had by developers. Mumbai real estate prices fell dramatically in the 18 months following announcement of the SRA policy in 1996<sup>25</sup> due to a complexity of factors<sup>26</sup>. In addition restrictions on the use of TDR have affected the TDR market. The complexities of arranging transit accommodation and organising households living in slum settlements have also acted as disincentives to developers with the result that although the developers have considerable land holdings they have held back from any major construction relating to the rehabilitation schemes.

It could also be argued that the State could deliver as a developer in its own right. This has, in fact been attempted with dismal failure under the state agency SPPL<sup>27</sup>. The SPPL has proved no more able than private developers to organise communities to the level required for their constructive

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<sup>22</sup> Sharma (2000)

<sup>23</sup> The policy was developed on the basis of recommendations from the Afzulpukar Committee, on which the Alliance was represented. SPARC estimates that the Alliance was able to influence nearly 60 of the main provisions covered within the SRA policy as a result of their input into the Committee's deliberations. The Alliance based many of its recommendations on its historical experience in implementing rehabilitation projects, particularly that of Markhendya, a development based in Dharavi where the Rajiv Indira –Suryodaya Scheme is also located.

<sup>24</sup> In the early 90's the Mahila Milan or MM type housing was initially considered to entail considerable risk. Jan Kalyan was an Alliance demonstration project, developed to house slum dwellers relocated by the State from along the railway tracks. It provided an alternative model that helped the Alliance to demonstrate how community led design and construction could deliver an acceptable, affordable and far cheaper product than the state had previously considered. The MM housing was delivered at Rs25,000, as compared to the Rs85,000 units delivered by the State within the PMJ project that was implemented during the same period. Five years later the market value of the Jan Kalyan housing exceeded that of the state delivered units. The MM model is now recognised by agencies such as HUDCO which provides long term financing for such schemes on the basis of a 10% deposit by participating households.

<sup>25</sup> Interviews by author with D.T. Joseph and Gautam Chatterji, Slum Rehabilitation Authority.

<sup>26</sup> These included the anticipated release onto the market of significant land holdings associated with abandoned textile mills, and over-inflation in the real estate market.

<sup>27</sup> Shiv Shahi Punar Vasun (Rehabilitation) Project Ltd



engagement with the planned developments. In addition there have been inherent weaknesses in the management of state enterprises, which are well recognised by both governmental and non-governmental stakeholders<sup>28</sup>.

The Alliance, therefore, faces a considerable dilemma. One option is to avoid the risk of seeking to implement SRA based projects and accept that rehabilitation options will remain seriously limited within the city as a whole. Or it can engage with the state to develop options within the SRA framework but at considerable risk to its own reputation and financial security. The dilemma is compounded by indications that the SRA policy will become operable in all Maharashtra cities, not just Mumbai. Given the Alliance's *raison d'être*, which is to support the development of settlements for the benefit of the poorest of the poor<sup>29</sup>, choice of the latter option would appear inevitable. The issue is not whether to engage with the SRA policy, but how best to do it by managing and mitigating the risks involved.



**Photo 5 - Clearing sewage in Dharavi during monsoon season prior to the Rajiv Indira Suryodaya project (see contrast with Photo 7)**

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<sup>28</sup> See the Habitat II Agenda resulting from the 1996 UN Istanbul City Summit

<sup>29</sup> It should be noted that the day-to-day risks faced by poor people living in sub-human conditions are the backdrop to this debate.



Photo 6 – Mr Shanmugan, Chairman of the Rajiv Indira Housing Co-operative, prior to the project in 1997 and surrounded by pre-project housing lived in by members.

## 7. MANAGING AND MITIGATING THE RISKS

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The detailed risk management and mitigation steps associated with different aspects of the Alliance's work have already been considered in Table 4. However there is a wider and more general aspect to risk management and mitigation within the work of the Alliance that requires recognition.

As the research progressed and the growth of the Alliance's work over the last fifteen years was tracked and discussed, consistent patterns began to emerge, one of which was the recurrence, again and again, of a bankers phrase, frequently heard in negotiations – “we are looking for the comfort factor”. Everyone involved is only too aware of the high incidence of bribery involved in local construction contracts. This is one of the factors that a community-driven process had been shown to eliminate. But the “comfort” being sought by the banks was nothing so obvious or crude. It was a far less tangible, more intuitive sense that lending in a particular context “felt right”. Exploration of how the “comfort” factor is created is important if the ways in which credit risk perceived by the banks is to be understood.



**Photo 7 - The first Rajiv Indira rehabilitation block in progress**

In talking to senior representatives of financial institutions it became clear how difficult they found it to develop the “comfort” factor in the absence of familiarity with how things worked at community level. To those working within the formal sector the development processes involved in community-driven development can appear chaotic and unreliable. The internal logic associated with these processes is “invisible” to the observer familiar with high levels of bureaucracy. Perhaps most importantly, the processes through which information is collected and processed at community level, largely through the “chat” networks of the women who lead the savings and loan groups, is oral rather than written, as many of the women are illiterate. The credit checking carried out at this level may be just as rigorous, if not more so, than the checking carried out by banks, but it is difficult to translate into a set of procedures and ratings that can be recognised by banks. When senior officials from Citibank spent time in the communities with the women running the savings and loan systems who were also responsible for co-ordinating socio-economic data collection, they rapidly realised that the principles that were being applied in the community financial systems were, in fact, almost identical to those used within the formal banking system. As a result they became much more confident about lending. However they came to these conclusions largely on an individual basis. They had no way of systematising their learning within the formal procedures of the bank and so when Citibank staff were transferred the process of “educating the bankers” had to begin all over again (see next section).

The Alliance has extremely limited financial and physical assets – the security required to back conventional lending by bankers. However they do have an alternative asset that has grown from the Alliance’s investment in the creation of human and social capital. This asset is “knowledge” or intellectual capital. It is the amassed learning from thousands of slum dwellers who have been engaged in the Alliance’s development processes including enumeration. This learning has been systematically shared and refined through community-to-community exchanges at local, city, state, regional and international levels<sup>30</sup>. The “knowledge” of the Alliance is diverse – ranging from an understanding of effective savings and loan management through to techniques for influencing state bureaucrats and the development of detailed socio-economic data bases that enable planning of complex resettlements. Importantly, this knowledge is also reflective – it incorporates the development of knowledge about the learning process itself and can be characterised as the triple loop learning or meta-learning described in the work of Senge (1990) and Pedler (1998). In terms of risk management it has a particular significance.

Beck (1992, 1994)<sup>31</sup> has an analysis of risk that proved helpful in the Indian context. He argues that .....

*“Risks only exist in terms of the .... knowledge about them. They can be changed, magnified, dramatized or minimized within knowledge, and to that extent they are particularly open to social definition and construction. Furthermore some people are more affected by the distribution and growth of risks and there are winners and losers in risk definitions. Power and access to and control of knowledge thus becomes paramount in a risk society”.*

It is through accessing and controlling knowledge that the Alliance’s greatest advantage is developed. More precisely, it is the Alliance’s strategic use of knowledge that allows it to “change the rules of the urban development game” by persuading the state and others, of the efficacy and logic of the precedent-setting projects in which it invests. As the “rules of the game” are changed to facilitate a more equitable and active role for the urban poor, so too are the risks undertaken by the poor in engaging with the state and the financial sector reduced.

To enable this process to develop further the Alliance will need to systematise its knowledge base so that it becomes more visible to others. At one level this will involve investment in strengthening the internal management systems of the Alliance and those of the newly formed Section 25 Company, Nirman. However a more conscious effort is also required to make the tacit knowledge of the Alliance leadership more explicit. This is particularly true of areas such as costing and planning where the leadership has proved successful in the use of intuitive methods. The basis of this intuition needs to be “unpacked” so that it can be understood by a larger group of people within the Alliance. Fortunately the Alliance has developed a range of strong partnerships with professional engineers, surveyors, and architects who have modified their way of doing business and found ways to work effectively as partners of the urban poor. However the “translation” that has had to take place to enable these partnerships to work should be looked at more closely, so that a

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<sup>30</sup> See ACHR, Face-to-Face 1999 and Homeless International, Dialogue, the Community Exchange Process 1999.

<sup>31</sup> Quoted by Nick J. Fox in Lupton, 1999

wider range of people within the Alliance can become fluent in the new development lexicon that is slowly emerging.

## 8. ACCESSING LOANS FOR PILOT PROJECTS AND SCALING UP

With negligible formal assets that financial institutions would recognise as collateral, a track record of construction of high-rise units limited to one earlier scheme, Markhendya<sup>32</sup>, and the current Rajiv-Indira-Suryodaya development, and a savings pool that cannot meet the capital costs entailed, the Alliance faces considerable difficulty in mobilising the capital it requires for SRA projects. Even if local financial institutions can be persuaded eventually to lend to the Alliance, ways must still be found to cover the two to three years of bridge financing that is generally needed to cover the initial project costs. Guarantees are also needed to encourage local financial institutions to release the necessary funding. The Alliance faces similar constraints in accessing capital for infrastructure projects although, following the success of a city-level toilet construction project in Pune, there are indications that the Unit Trust of India may be prepared to finance a replication of the approach used in Mumbai. However this will require the provision of guarantee deposits by the Alliance.

The Rajiv Indira Suryodaya project provides a useful illustration of the need for bridge financing and guarantees. The Guarantee component has been provided by Homeless International, in a highly publicised arrangement with Citibank. In practice, delays in negotiating the Guarantee resulting from high staff turnover at Citibank, as well as design modifications resulting from expansion of the project and modifications required under the Coastal Zone Restrictions Act, have meant that the entire first phase of the project has had to be financed with Bridge Financing amounting to 20 million Rupees (US\$435,000 equivalent) made available by Northern NGOs and from the Alliance's own limited core reserves. The project is "charged" 14% for use of the funds, the same rate that has been negotiated for the financing to be provided by Citibank once agreement on final project details is reached.

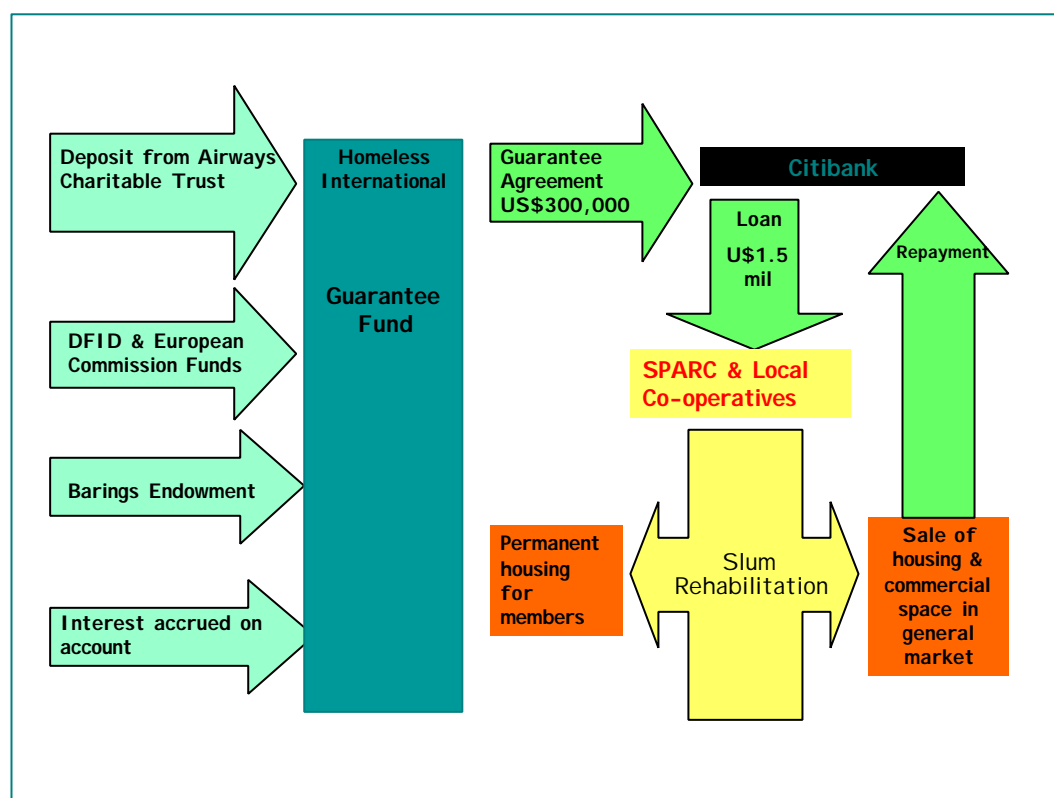


Figure 5 – How the Guarantee for Rajiv Indira Suryodaya works

<sup>32</sup> Also in Dharavi.

The delays experienced in finalising the Guarantee agreement with Citibank require further explanation. When the Guarantee was first initiated by the Alliance and Homeless International it led to the involvement of fifteen senior level staff from Citibank in the scheme. They visited the community, became familiar with how the community savings and loan system worked, and collaborated in the development of a method for determining the viability of the project. They were able to develop the “comfort” factor sufficiently to agree to finance this experimental project. However, within 18 months, as a result of acquisition and merger activity ALL fifteen Citibank staff had been transferred leaving a “knowledge vacuum” within Citibank and resulting in the financing arrangements grinding to a halt. During the research project discussions were held with Citibank in New York concerning the difficulties that Citibank had in developing internal mechanisms for learning from the relationship with the Alliance, and for retaining the knowledge developed as a result of that learning within its organisational memory. As a result discussions began again in Mumbai, a new team was formed within Citibank to work with the Alliance, and discussions are now underway between the Alliance, Homeless International and Citibank, to explore how Citibank can help itself and other financial organisation, to strengthen their internal capacity to learn in this kind of context.

Despite these problems with initial financing of the scheme, the Rajiv Indira Suryodaya project has become a flagship for the SRA as well as for the Alliance, greatly enhancing the credibility of a community-led approach to slum rehabilitation. The relationship with Citibank has been of particular importance in building this credibility by creating the space needed to negotiate with other commercial finance institutions. It is perhaps ironic that this benefit has resulted, even though the delays in Citibank’s financing have been as great as those experienced with state financial institutions such as the Housing and Urban Development Corporation (HUDCO).

Plans to replicate the Rajiv Indira Suryodaya project with seven other adjacent housing co-operatives have necessitated a search for additional sources of development finance. This search has included explorations of the use of hard currency loans from European NGOs. As yet, this form of finance has not been used by the Alliance but it is under serious consideration. Loans would however have to be agreed by the Reserve Bank of India. An overview of the conditions and options of such an arrangement are summarised in Table 4

|    |   |
|----|---|
| 1  | All external loans require National Reserve Bank of India (NRBI) approval.  |
| 2  | Loans cannot be used for speculative activity or investment in immovable property (i.e. land).  |
| 3  | NRBI only administers small loans, larger loans would have to be approved by the Government of India. The limit on loans that NRBI can approve directly is currently US\$10 million per organisation at any point in time.                  |
| 4  | Funds can be delivered in instalments rather than in a single payment.  |
| 5  | Loans sourced from the Asian Development Bank under a special arrangement with ADB for support of housing programmes have to be issued through registered Micro-finance institutions.   |
| 6  | The rate of Interest on the loan should be competitive – LIBOR+ 2.5 for ten year loans. The most important question to be addressed is how the borrower will service the loan.  |
| 7  | NRBI will need information on the Organisation that is intending to borrow, its objectives, its historical performance and its existing projects.   |
| 8  | It may be necessary to go to the Ministry of Finance for approvals in which case Form ECB6 will have to be filled out.  |
| 9  | Loans agreed may have staged or bullet repayments but in either case the last instalment should be paid at least three years after the loan is extended. Loans of more than US\$5 million require a repayment period of five years or more. |
| 10 | NRBI does not deal with general lines of credit.  |
| 11 | Withholding tax is normally charged at 15% of the interest on any loan. However agencies can apply for exemption from this tax.   |
| 12 | Foreign banks in India can lend directly without NRBI approval.   |
| 13 | The main risk recognised by the NRBI is in exchange rate fluctuations that will effect loan repayments.   |
| 14 | There is currently no options market for rupees/US\$. Forward buying is possible but only at a 5% annual premium  |

**Table 4 – National Reserve Bank of India Requirements for External Loans**

## 9. OTHER POTENTIAL FORMS OF FINANCE

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There are a range of potential forms of finance that have not, as yet, been considered or tried by the Alliance. The World Bank has recently emphasised the need for the development of financing options which help to mobilise local contributions, credit and private investment, in order to better leverage scarce public finance resources and to scale up community driven programmes. The potential for new forms of municipal financing is also being explored by the United States Agency for International Development (USAID) through its Indian FIRE programme<sup>33</sup>. Table 5 provides an overview of the forms of finance that have been utilised by the Alliance to date and an indication of other forms that have yet to be explored. The following forms of finance could usefully be further explored by the Alliance for use in the scaling up of precedent-setting projects:

- ◆ State Finance Institution loans, particularly from HUDCO
- ◆ Commercial Bank Loans
- ◆ Regional Development Bank loans
- ◆ Bilateral loans
- ◆ Multilateral Financial Institution Loans
- ◆ Syndicated Loans
- ◆ Municipal Bonds
- ◆ Project Bonds
- ◆ Pension and Mutual Fund Loans

Of these alternatives, loans from Pension and Mutual Funds probably offer the greatest immediate potential. Municipal bonds, particularly for investment in infrastructure would also be a good option but are likely to be dependent on the credit rating and initiative of the local Municipality. A third likely option is that of borrowing from the Municipal Infrastructure Investment Facility (MIFF)<sup>34</sup> that is currently being set up as a result of the Bridging the Finance Gap project. This facility will be available through the UNCHS-World Bank Cities Alliance Programme, is to be administered by Homeless International and is expected to become operational in April 2001.

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<sup>33</sup> See Fire (1999)

<sup>34</sup> This is referred to in detail in the main report of this research

| FORM OF FINANCE   | USE           | SOURCE   |
|---|---------------|--|
| <b>FUNDS FOR BUILDING THE SOCIAL AND ECONOMIC BASE</b>              |               |  |
| Community Savings   | Yes           | Federations  |
| NNGO Grants   | Yes           | UK, Belgian, Dutch, Australian, Swiss NGOs   |
| Bilateral Grants  | Yes           | DFID   |
| Multi-lateral Grants  | No            |  |
| Corporate Grants  | Yes           | Citibank   |
| NNGO Loans  | No            |  |
| State Micro-finance Loans   | Yes           | RMK  |
| NNGO Equity Finance   | No            |  |
| Private Sector Equity Finance                                       | No            |  |
| <b>PILOT/DEMONSTRATION FUNDS</b>                                    |               |  |
| Community savings   | Yes           | Federations  |
| NGO Core Funds  | Yes           | UK, Belgian, Dutch, Australian, Swiss NGOs   |
| NNGO Grants   | Yes           | UK, Belgian, Dutch, Australian, Swiss NGOs   |
| Bilateral Grants  | Yes           | DFID   |
| Multi-lateral Grants  | Yes           | DFID, EC   |
| NNGO Bridging Fund Grants   | Yes           | Misereor, Cordaid  |
| NGO Loans   | No            |  |
| State Bank Loans  | No            |  |
| Commercial Bank Loans   | Yes           | Citibank   |
| Bi Lateral Loans  | No            |  |
| Multi-lateral Loans   | No            |  |
| NNGO Guarantees   | Yes           | Selavip, Homeless International  |
| Contracted project funding from Government                          | Yes           | Pune, Mumbai and Bangalore Municipalities  |
| <b>FUNDS FOR SCALING UP</b>   |               |  |
| NNGO Grants   | Yes (partial) | European NGOs  |
| NNGO Bridging Fund Grants   | Yes (partial) | Misereor, Cordaid  |
| Direct Government Subsidies   | Yes           | State funding for toilets in Pune with new schemes under negotiation in Mumbai and Bangalore |
| Contracted project funding from Government                          | Yes           | Pune Municipal Corporation, Mumbai Municipal Corporation.                                    |
| State Finance Institutions loans                                    | No            |  |
| Commercial Bank Loans   | No            |  |
| Regional Development Bank loans                                     | No            |  |
| Bilateral loans   | No            |  |
| Multilateral Financial Institution Loans                            | No            |  |
| Syndicated Loans  | No            |  |
| Municipal Bonds   | No            |  |
| Project Bonds   | No            |  |
| <b>FUNDS FOR LEARNING, KNOWLEDGE CREATION AND CAPACITY BUILDING</b> |               |  |
| Community Savings   | Yes           | Federations  |
| NGO Core Funds  | Yes           |  |
| NNGO Grants   | Yes           | UK, Belgian, Dutch, Australian, US, Swiss NGOs/Foundation                                    |
| Bilateral Grants  | Yes           |  |
| Multi-lateral grants  | No            |  |
| Corporate grants  | No            |  |
| <b>REACTION OF NEW ALLIANCES</b>                                    |               |  |
| Community Savings   | Yes           | Federations  |
| NGO Core Funds  | Yes           | UK, Belgian, Dutch, Australian, US, Swiss NGOs/Foundation                                    |
| NNGO Grants   | Yes           |  |
| Bi-lateral Grants   | Yes           |  |
| Multi-lateral Grants  | Yes           |  |
| Corporate Grants  | No            |  |
| <b>RISK MANAGEMENT &amp; MITIGATION FUNDS</b>                       |               |  |
| Community Savings   | Yes           | Federations  |
| NGO Core funds  | Yes           |  |
| NNGO Guarantees   | Yes           | Homeless International, SELAVIP  |
| NNGO Grants   | No            |  |
| NNGO Hedge Funds  | No            |  |
| Corporate grants  | No            |  |
| Government subsidies  | No            |  |
| Bilateral grants  | No            |  |
| Multilateral grants   | No            |  |
| <b>REFINANCING</b>  |               |  |
| Building Society  | No            |  |
| Mutual and Pension Funds  | No            |  |
| Government Financial Institutions                                   | Yes           | HUDCO  |
| Banks   | Yes           | HDFC   |

**Table 5 – Options for Financing Community Led Housing and Infrastructure and access obtained to date by the Alliance**



## 10. CONCLUSIONS AND RECOMMENDATIONS

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- 9.1. The project portfolio of the Alliance is growing rapidly despite the difficulty in locating adequate development capital. This is because the Alliance initiatives are successfully responding to the difficulties that Municipalities have been having in delivering infrastructure to low income and informal settlements and to the opportunities created by the SRA legislation. High expectations on the part of Municipalities and the Federation may conflict with the Alliance's capacity to deliver, particularly if adequate levels of capital cannot be accessed. [Collaboration in the formation of the Municipal Infrastructure Investment Facility being developed by Homeless International, DFID and the World Bank is recommended as the Alliance would be an excellent candidate for loans and guarantees from that source.](#)
- 9.2. The Alliance's access to local loans is constrained by the lack of a "comfort" factor that can only be developed when financial institutions provide structured opportunities for their staff to be exposed to the ways in which communities implement projects on the ground. It is through this exposure that trust can be developed, providing the basis of the "comfort" factor required. [The Alliance should increase the assistance that it gives to financial institutions in exposing their staff to the financial processes of the Federations and Mahila Milan.](#)
- 9.3. Risks associated with the current Alliance portfolio include financial, credit, market, political, organisational and construction risks. In addition, should the Alliance begin to take on loans sourced from outside of India, foreign exchange rate risk will become an important factor. Nearly all the critical risks are affected by the impact of delays in project implementation, many of which result from factors that are beyond the Alliance's immediate control. Risk is currently most highly concentrated in the projects taking place under the SRA. These projects also require the largest up-front capital investment within the portfolio. [The Alliance should negotiate additional assistance from Financial Institutions, particularly Citibank, in developing internal systems for analysing and prioritising risk.](#)
- 9.4. The most important resource that the Alliance has in managing and mitigating the risks within its portfolio is the knowledge creation process that has been developed among the NSDF and Mahila Milan members. Systematisation of this knowledge base is an important investment for the Alliance to make if it is to scale up its current work whilst remaining financially and operationally viable. In addition, dissemination of the knowledge should facilitate the creation of the "comfort factor" in other cities and, potentially, in other countries where the same processes are used. [The Alliance should work collaboratively with Homeless International to develop a partnership with Finance Institutions in order to carry out further research in this area.](#)
- 9.5. Alternative forms of finance could usefully be explored by the Alliance. [In particular the use of mutual and pension funds, municipal bonds, and multi-lateral loans to be extended under the Municipal Infrastructure Financing Facility \(MIFF\) should be explored. The Alliance and Homeless International should collaborate in this area during 2001.](#)

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## APPENDIX 1 THE INDIAN PEST ANALYSIS CHANGES IN THE EXTERNAL ENVIRONMENT

### POLITICAL/LEGAL FACTORS

| INDIA  | UK/EUROPE  | GLOBAL   |
|--|--|--|
| <ul style="list-style-type: none"> <li>• Deregulation of financial institutions</li> <li>• Increasing access by NGOs to DFID and European funding .</li> <li>• Devolution of power to local authorities</li> <li>• World Bank and UNDP emphasis on private investment in infrastructure</li> <li>• Options for strong NGOs to influence state shelter &amp; infrastructure policy.</li> <li>• Land policies continue to exclude the poor in both urban and rural areas.</li> <li>• Indian Government collaboration in the launch of the UNCHS Secure Tenure Campaign co-ordinated in India by the Alliance.</li> <li>• Changes in the Foreign Contributions Regulations Act.</li> <li>• Introduction of Coastal Zone Restrictions Act</li> </ul> | <ul style="list-style-type: none"> <li>• OECD/DAC targets to reduce absolute poverty by 50% by 2015.</li> <li>• UK Government - planning new act on international development – emphasis on poverty elimination – in line with OECD targets. Change in structure of DfID.</li> <li>• DFID relocating control to geographical desks .</li> <li>• DFID emphasis on sustainable livelihoods.</li> <li>• New DFID Urban Poverty Strategy Paper.</li> <li>• Trends in DFID mirrored in NGO circles.</li> <li>• Trend to consultation with NGOs linked to accountability.</li> <li>• Increasing emphasis on development education by DFID.</li> <li>• Change in structure of European Commission for development initiatives .</li> <li>• Trend for mergers of charities across Europe and within the UK</li> <li>• Abandonment of DFID Urban Poverty Office in India</li> </ul> | <ul style="list-style-type: none"> <li>• World Bank pressure on poorer countries to produce Poverty Reduction Strategies as a condition of further assistance.</li> <li>• World Bank committed to developing a focus on poverty.</li> <li>• Increasing emphasis on NGO accountability to governments and communities.</li> <li>• World Trade Organisation agreements will be contentious particularly with respect to intellectual property rights.</li> <li>• UNCHS role redefined to focus on management and resourcing of cities focused around two major campaigns on Urban Management and Secure Tenure.</li> <li>• Access to, and control over land will continue to be a critical political issue in both rural and urban areas ..</li> <li>• Evangelistic move into micro-finance lending to individuals and the provision of short term credit justified by neo-liberal theories of market completion, increasing interest in “gap” area of housing and infrastructure finance.</li> <li>• Increased attention to regulation of micro-finance sector.<sup>35</sup></li> </ul> |

<sup>35</sup> Ed. Rachel Rock, Maria Otero, From Margin to Mainstream : the Regulation and Supervision of Microfinance. Accion Monograph Series No. 11 January 1997

## ECONOMIC FACTORS

| INDIA   | UK/EUROPE  | GLOBAL   |
|---|--|--|
| <ul style="list-style-type: none"> <li>• Signs of increased financial provision for housing and infrastructure programmes by ADB.</li> <li>• State subsidies to Municipalities for infrastructure provision not used as no appropriate delivery mechanism.</li> <li>• Community savings and loan systems will grow rapidly, be linked through federated structures and provide a strong base for leveraging additional capital.<sup>36</sup></li> <li>• There will be an increasing effective demand for medium and long term credit with few institutions able to supply informal settlements. Housing Development Finance Corporation and Housing and Urban Development Corporation continue to receive main credit lines for housing and infrastructure from KFW and ADB.</li> </ul> | <ul style="list-style-type: none"> <li>• Slow down in economy, potential recession. Strength of pound and impact of exchange rates esp. with Euro and \$US.</li> <li>• Shrinking Aid budgets more being channelled through multi-laterals.</li> <li>• Charitable giving stable or declining. Bigger share going to the top ten charities.</li> <li>• Welfare state continues to erode.</li> <li>• UK homeless charities facing financial problems and increasing competition for funds.</li> <li>• Trend for mergers of charities across Europe.</li> <li>• EU charities moving into loan extension.</li> <li>• Expansion of EC likely to lead to pressure on funding assistance for developing countries.</li> <li>• UK Trusts and Foundations more prepared to offer core and programme funds. Interest in institutional capacity building continues.</li> </ul> | <ul style="list-style-type: none"> <li>• Resistance to role of World Bank and IMF.</li> <li>• Increasing power of multi-national corporations.</li> <li>• Budgetary allocations to UN being renegotiated.</li> </ul> |

## SOCIO-CULTURAL

| INDIA   | UK/EUROPE   | GLOBAL  |
|---|---|---|
| <ul style="list-style-type: none"> <li>• One third of population living in metropolitan areas (cities over 1 million) the second largest urban population (after China) in the world.</li> <li>• 50% plus of urban populations living in informal settlements.</li> <li>• Increase in size, range and sophistication of community/peoples movements.<sup>37</sup></li> <li>• Organised crime and political patronage continue to have a major impact on low income communities.<sup>38</sup></li> <li>• Daily survival burden disproportionately shouldered by women.</li> <li>• Evidence of commitment by Municipalities to work in partnership with organisations of the urban poor.</li> </ul> | <ul style="list-style-type: none"> <li>• Growing public concern on ethical issues.</li> <li>• Increasing government emphasis on tenant choice and participation.</li> </ul> | <ul style="list-style-type: none"> <li>• Increasing urbanisation especially through intermediate centres.</li> <li>• Younger populations heavily exposed to global consumption aspirations.</li> <li>• Growing disparity between the rich and the poor within and between countries.</li> <li>• Resistance from North to control growth of consumption.</li> <li>• Continuing growth of Shack Dwellers International (SDI).</li> <li>• Multinational corporations become increasingly concerned about social responsibility.</li> </ul> |

<sup>36</sup> David Hulme & Paul Mosley, Finance against poverty, Vol 2 , Routledge 1996

<sup>37</sup> ESCAP/UNCHS report on Urban Community-based Savings and Credit systems in Cambodia, Loa People's Democratic Republic and Viet Nam, United Nations 1997

<sup>38</sup> Arif Hasan, Raising the curtain on the urban drama: the need for a new approach to policy, in Living in Asian Cities, UNDP 1996

## TECHNOLOGICAL FACTORS

| INDIA   | UK/EUROPE   | GLOBAL   |
|---|---|--|
| <ul style="list-style-type: none"> <li>• Massive pressure on water and sewage systems as urbanisation continues.</li> <li>• Environmental pollution will continue to impact disproportionately on urban poor.</li> <li>• People living on marginal land continue to be vulnerable to natural hazards</li> <li>• Increasing use of Internet and email .</li> <li>• Keeping up with developments in hardware will be expensive and unaffordable for many organisations</li> <li>• Cell phone networks will become available to many organisations unable to access conventional phone systems.</li> </ul> | <ul style="list-style-type: none"> <li>• Increasing use of email and Internet and dependence on these technologies.</li> <li>• Telephones become cheaper – increased use of digital technology.</li> <li>• Growing concern with intellectual property rights linked to technologies of bioengineering etc.</li> </ul> | <ul style="list-style-type: none"> <li>• Telephones become cheaper – increased use of teleconferencing etc.</li> <li>• Global warming.</li> <li>• Increased use of digitalised imaging.</li> <li>• Problem of information overload.</li> </ul> |

## APPENDIX 2

### OVERVIEW OF FINANCIAL REQUIREMENTS OF CURRENT AND PLANNED PROJECTS AS OF AUGUST 2000

| Type of product                    | Cost per unit                     | Estimation of requirement in 2000-2002  | Total Project Cost (Rps 000's) | Type of financing needed  | Amount Still Needed |         |        |
|------------------------------------|-----------------------------------|---|--------------------------------|---|---------------------|---------|--------|
|                                    |                                   |   |                                |   | C                   | D       | F      |
| <b>Transit Housing</b>             | Rps 20,000 to Rps 25,000          | 1. 3,100 houses for pavement dwellers @ Rps 20,000 per house in Mahol.  | 77,500                         | C for initial development<br>D, E and F if SRA based follow up occurs to be implemented by Alliance<br>H if scheme is contracted out by State | 15,500              |         |        |
|                                    |                                   | 2. First Transit camp at Kanjurmarg   | 22,850                         |   | Done                |         |        |
|                                    |                                   | 3. 2,500 houses @ Rps 25000 per house in Bombay under MUTPII . Communities have the contract to build the houses. | 62,500                         |   | 12,500              |         |        |
| <b>Mahila Milan Type of houses</b> | Rps 30,000 to Rps 55000           | 1. 1,000 houses in A.Pradesh  | 45,000                         | C until long term finance is received from HUDCO  | 18,000              |         |        |
|                                    |                                   | 2. 2,250 houses in Sholapur   | 101,250                        |   | 60,750              |         |        |
|                                    |                                   | 3. 500 houses in Pune   | 49,750                         |   | 25,870              |         |        |
|                                    |                                   | 4. 500 houses in Bhubaneshwar   | 22,500                         |   | 13,500              |         |        |
|                                    |                                   | 5. 110 houses in Cuttack (tribal)   | 4,950                          |   | 2,970               |         |        |
| <b>SRA projects</b>                | 200,000 per house tenement        | 1. Rajiv Indira and Suryodaya in Dharavi  | 87,335                         | D, E, and F   |                     |         |        |
|                                    |                                   | 2. 5 projects in the making in Bombay   | 173,750                        |   |                     | 72,975  | 14,595 |
|                                    |                                   | 3. Milan Nagar  | 168,750                        |   |                     | 54,000  | 10,800 |
|                                    |                                   | 4. Kanjurmarg   | 252,585                        |   |                     | 106,086 | 21,217 |
|                                    |                                   | 5. Pune   | 49,750                         |   |                     | 25,870  | 5,175  |
|                                    |                                   | 6. Cuttack  | 4,950                          |   |                     | 13,440  | 2,688  |
| <b>Infrastructure projects</b>     | 35,000 per community toilet block | 1. Bombay contracts for toilet construction   | 84,000                         | D for 2 years covering 15% of the project cost.   | 12,600              |         |        |
|                                    |                                   | 2. Pune contracts for 43 toilets and a similar contact will come later  | 23,000                         |   | 3,450               |         |        |
|                                    |                                   | 3. Bangalore contract currently under negotiation.  | 23,000                         |   | 3,450               |         |        |

#### KEY

- C:** Short term (grant based) project bridging finance
- D:** Short term project bridging loan
- E:** Long term housing loan
- F:** Guarantee
- G:** State subsidy
- H:** State contract

**APPENDIX 3 - BRAINSTORMING MAP OF RESOURCES, ASSETS AND RISKS  
ASSOCIATED WITH THE ALLIANCE AND ITS MEMBERSHIP**

**APPENDIX 4**  
**PRESS CUTTINGS RELATED TO THE WORK OF THE ALLIANCE**





## APPENDIX 5

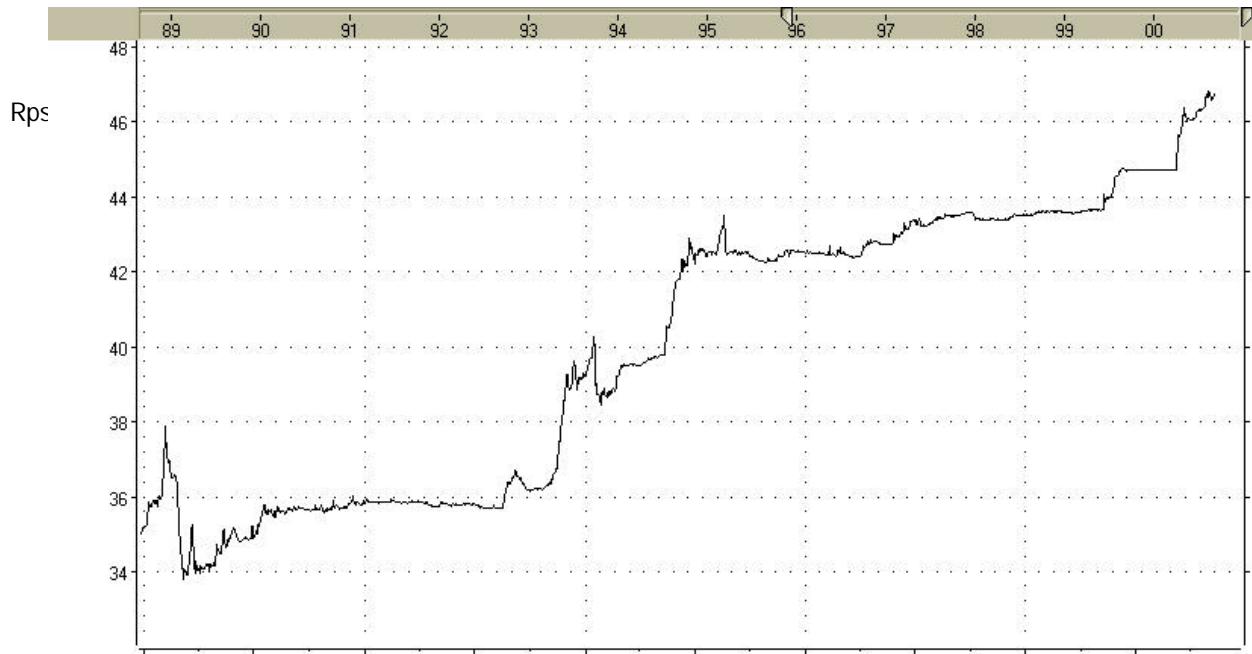
### SUMMARY OF SPREAD OF PROJECTED BRIDGING AND GUARANTEE REQUIREMENTS ACROSS PROJECTS

| PLANNED ACTIVITIES                            | Model   | # # rehab holds | % of total rehab house holds | Total project cost   | Loan source | Est. delay in receiving loan funds | % of housing portfolio cost | Cumulative Bridging need 2000/2001 | % of bridging need 2000/2001 | Peak Bridging need 2001/2002 Qu 2 | % of bridging need 2001/2002 | Guarantee 2000/1  | % of Guarantee need 2000/01 | Guarantee 2001/2  | % of guarantee need 2001/2 |
|---|---------|-----------------|------------------------------|----------------------|-------------|------------------------------------|-----------------------------|------------------------------------|------------------------------|-----------------------------------|------------------------------|-------------------|-----------------------------|-------------------|----------------------------|
| Rajiv Indira - Suryodaya                      | SRA     | 234             | 2%                           | 87,335,000           | Citibank    |                                    | 7.9%                        |                                    |                              |                                   |                              | 14,000,000        | 58%                         | 14,000,000        | 22%                        |
| Surrounding coops Dharavi                     | SRA     | 500             | 4%                           | 173,750,000          | HUDCO       | 1 year                             | 15.8%                       |                                    | -                            | 52,125,000                        | 17%                          |                   |                             | 14,595,000        | 23%                        |
| Mahila Milan Nagar                            | SRA     | 500             | 4%                           | 168,750,000          | ?           | 1 year                             | 15.3%                       | 33,750,000                         | 18%                          | 54,000,000                        | 17%                          |                   |                             | 33,750,000        | 54%                        |
| Pavement dwellers resettlement Mahul          | Transit | 3,100           | 24%                          | 77,500,000           | HUDCO       | 6 months                           | 7.0%                        | 31,000,000                         | 17%                          |                                   |                              |                   |                             |                   |                            |
| First railway transit, Kanjurmarg             | Transit | 914             | 7%                           | 22,850,000           | HUDCO       |                                    | 2.1%                        |                                    |                              |                                   |                              |                   |                             |                   |                            |
| Railway slum dwellers resettlement Kanjurmarg | Transit | 2,500           | 19%                          | 62,500,000           | HUDCO       | 6 months                           | 5.7%                        | 25,000,000                         | 13%                          |                                   |                              |                   |                             |                   |                            |
| Pune River Bed                                | SRA     | 200             | 2%                           | 49,750,000           | SPARC       | 1 year                             | 4.5%                        | 19,900,000                         | 11%                          | 25,870,000                        | 8%                           | 9,950,000         | 42%                         |                   |                            |
| Sholapur Beedi workers                        | MM      | 1,250           | 10%                          | 56,250,000           | HUDCO       | 1 year                             | 5.1%                        | 22,500,000                         | 12%                          | 33,750,000                        | 11%                          |                   |                             |                   |                            |
| Sholapur Mathadi workers                      | MM      | 1,000           | 8%                           | 45,000,000           | HUDCO       | 1 year                             | 4.1%                        | 18,000,000                         | 10%                          | 27,000,000                        | 9%                           |                   |                             |                   |                            |
| Guntoor                                       | MM      | 1,000           | 8%                           | 45,000,000           | HUDCO       | 6 months                           | 4.1%                        | 9,000,000                          | 5%                           |                                   |                              |                   |                             |                   |                            |
| Bhubaneshwar                                  | MM      | 500             | 4%                           | 22,500,000           | HUDCO       | 1 year                             | 2.0%                        | 9,000,000                          | 5%                           | 13,500,000                        | 4%                           |                   |                             |                   |                            |
| Cuttack (Purighat)                            | SRA     | 200             | 2%                           | 32,000,000           | HUDCO       | 1 year                             | 2.9%                        |                                    |                              | 9,600,000                         | 6%                           |                   |                             |                   |                            |
| Cuttack (tribals)                             | MM      | 110             | 1%                           | 4,950,000            | HUDCO       | 1 year                             | 0.4%                        | 1,980,000                          | 1%                           | 2,970,000                         | 1%                           |                   |                             |                   |                            |
| <b>TOTAL HOUSING PORTFOLIO</b>                |         | <b>12,922</b>   | <b>100%</b>                  | <b>1,100,720,000</b> |             |                                    | <b>100.0%</b>               | <b>170,130,000</b>                 |                              | <b>294,590,500</b>                |                              | <b>23,950,000</b> |                             | <b>62,345,000</b> |                            |
|   |         |                 |                              |                      |             |                                    |                             |                                    |                              |                                   |                              |                   |                             |                   |                            |
| Total   | SRA     | 2,548           | 20%                          | 764,170,000          |             | 1 year                             | 69.4%                       | 53,650,000                         | 29%                          | 217,370,500                       | 70%                          | 23,950,000        | 100%                        | 62,345,000        | 100%                       |
| Total   | MM      | 3,860           | 30%                          | 173,700,000          |             | 1 year                             | 15.8%                       | 60,480,000                         | 32%                          | 77,220,000                        | 25%                          | -                 | 0%                          | -                 | 0%                         |
| Total   | TRANSIT | 6,514           | 50%                          | 162,850,000          |             | 6 months                           | 14.8%                       | 56,000,000                         | 30%                          | -                                 | 0%                           | -                 | 0%                          | -                 | 0%                         |
| Total   | TOILET  |                 |                              | 130,000,000          |             |                                    |                             | 16,050,000                         | 9%                           | 16,050,000                        | 5%                           |                   | 0%                          |                   | 0%                         |
| <b>TOTAL PORTFOLIO</b>                        |         | <b>12,922</b>   |                              | <b>1,230,720,000</b> | <b>-</b>    | <b>-</b>                           | <b>100.0%</b>               | <b>186,180,000</b>                 | <b>100%</b>                  | <b>310,640,500</b>                | <b>100%</b>                  | <b>23,950,000</b> | <b>100%</b>                 | <b>62,345,000</b> | <b>100%</b>                |

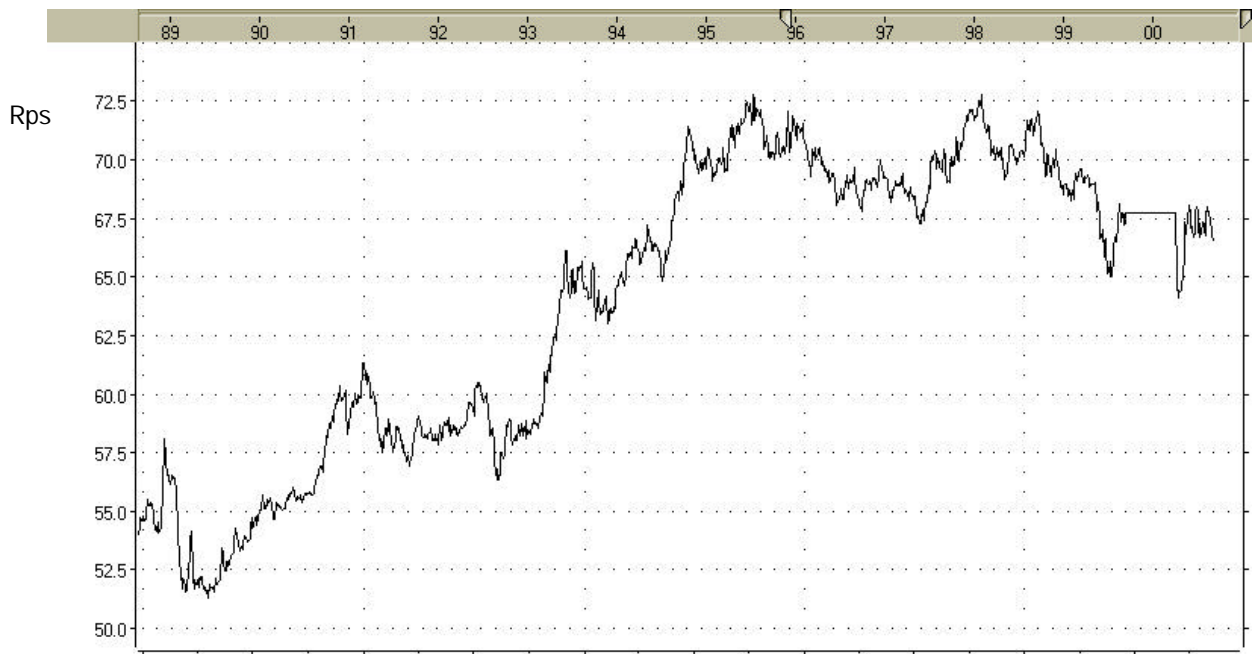
**APPENDIX 6**  
**PLANNED CHANGE IN ROLES AND RESPONSIBILITIES ACROSS THE ALLIANCE**

| FUNCTION   | 2000/2001 |       |      |          | 2001/2002 |       |      |          | 2002/2003 |       |      |          |
|--|-----------|-------|------|----------|-----------|-------|------|----------|-----------|-------|------|----------|
|  | NIRMAN    | SPARC | NSDF | M. Milan | NIRMAN    | SPARC | NSDF | M. Milan | NIRMAN    | SPARC | NSDF | M. Milan |
| <b>ESTABLISHING THE CAPACITY</b>                     |           |       |      |          |           |       |      |          |           |       |      |          |
| Establishing Federations                             |           |       |      |          |           |       |      |          |           |       |      |          |
| Strengthening Federations                            |           |       |      |          |           |       |      |          |           |       |      |          |
| Organizing Federation rituals                        |           |       |      |          |           |       |      |          |           |       |      |          |
| Developing financial base in communities             |           |       |      |          |           |       |      |          |           |       |      |          |
| Management of foreign donor core grants              |           |       |      |          |           |       |      |          |           |       |      |          |
| Management of loans for micro-finance                |           |       |      |          |           |       |      |          |           |       |      |          |
| Developing pilot/demonstration projects              |           |       |      |          |           |       |      |          |           |       |      |          |
| <b>SCALING UP</b>                                    |           |       |      |          |           |       |      |          |           |       |      |          |
| Project design & development                         |           |       |      |          |           |       |      |          |           |       |      |          |
| Project Management                                   |           |       |      |          |           |       |      |          |           |       |      |          |
| Project marketing                                    |           |       |      |          |           |       |      |          |           |       |      |          |
| Management of foreign donor bridge funds             |           |       |      |          |           |       |      |          |           |       |      |          |
| Management of foreign donor & local FI project loans |           |       |      |          |           |       |      |          |           |       |      |          |
| Management of foreign donor guarantees               |           |       |      |          |           |       |      |          |           |       |      |          |
| Management of HFI loans                              |           |       |      |          |           |       |      |          |           |       |      |          |
| Provision of TA to other organisations               |           |       |      |          |           |       |      |          |           |       |      |          |
| <b>CHANGING POLICIES</b>                             |           |       |      |          |           |       |      |          |           |       |      |          |
| Policy dialogue at city level                        |           |       |      |          |           |       |      |          |           |       |      |          |
| Policy dialogue at state level                       |           |       |      |          |           |       |      |          |           |       |      |          |
| Policy dialogue @ international level                |           |       |      |          |           |       |      |          |           |       |      |          |

## APPENDIX 7 HISTORICAL EXCHANGE RATE DATA



### INDIAN RUPEE VS US DOLLAR 10 YEAR PLUS PERIOD



### INDIAN RUPEE VS GBP 10 YEAR PLUS PERIOD

SOURCE : SEQUENCER WEB SITE

## APPENDIX 8

### VIABILITY ANALYSIS MODEL DEVELOPED FOR THE RAJIV INDIRA – SURYODAYA SRA SCHEME

| COST BREAK DOWN OF BUILDINGS AT RAJIV-INDIRA AND SURYODAYA B SITE |                   |                   |                   |                   | Total Rehab       | Building 3              | TOTAL             |
|---|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------------|-------------------|
|   | Building 1(a)     | Building 1(b)     | Building 2        | Building 3        |                   | Building 3              |                   |
|   | Rajiv Indira      | Rajiv Indira      | Rajiv Indira      | Suryodaya         |                   | Suryodaya -<br>for sale |                   |
| Number of Units   | 63                | 42                | 64                | 50                | 219               | 10                      |                   |
| Floors  | Ground + 2        | +2                | Ground + 7        | +7                |                   | Ground                  |                   |
|   | HIGH CEILING      | LOW CEILING       | LOW CEILING       | LOW CEILING       |                   | LOW CEILING             |                   |
| Construction (see below for break up)                             | 760               | 630               | 690               | 695               |                   | 695                     |                   |
| Development   | 180               | 180               | 180               | 180               |                   | 180                     |                   |
| Survey/Engineering/Architect                                      | 55                | 55                | 70                | 70                |                   | 70                      |                   |
| Transit accomadation charges<br>(borne by beneficiaries)          | 0                 | 0                 | 0                 | 0                 |                   | 0                       |                   |
| Total Costs   | 995               | 865               | 940               | 945               |                   | 945                     |                   |
| Contingency provision 5%  | 50                | 43                | 47                | 47                |                   | 47                      |                   |
| <b>Total project cost per square foot</b>                         | <b>1045</b>       | <b>908</b>        | <b>987</b>        | <b>992</b>        |                   | <b>992</b>              |                   |
| <b>BREAK UP OF CONSTRUCTION COST</b>                              |                   |                   |                   |                   |                   |                         |                   |
| Piling  | 130               | 0                 | 130               | 120               |                   | 120                     |                   |
| Plinth  | 60                | 0                 | 60                | 55                |                   | 55                      |                   |
| Framework   | 225               | 285               | 200               | 215               |                   | 215                     |                   |
| Brick, Masonary   | 155               | 155               | 110               | 110               |                   | 110                     |                   |
| Finishing i.e plastering, painting etc                            | 85                | 85                | 85                | 90                |                   | 90                      |                   |
| Electrification, plumbing etc                                     | 80                | 80                | 80                | 80                |                   | 80                      |                   |
| Miscellaneous   | 25                | 25                | 25                | 25                |                   | 25                      |                   |
| <b>Cost of construction per sq foot</b>                           | <b>760</b>        | <b>630</b>        | <b>690</b>        | <b>695</b>        |                   | <b>695</b>              |                   |
| <b>PERCENTAGE COSTS OF CONSTRUCTION</b>                           |                   |                   |                   |                   |                   |                         |                   |
| Piling  | 17                | 0                 | 19                | 17                |                   | 17                      |                   |
| Plinth  | 8                 | 0                 | 9                 | 8                 |                   | 8                       |                   |
| Framework   | 30                | 45                | 29                | 31                |                   | 31                      |                   |
| Brick, Masonary   | 20                | 25                | 16                | 16                |                   | 16                      |                   |
| Finishing i.e plastering, painting etc                            | 11                | 13                | 12                | 13                |                   | 13                      |                   |
| Electrification, plumbing etc                                     | 11                | 13                | 12                | 12                |                   | 12                      |                   |
| Miscellaneous   | 3                 | 4                 | 4                 | 4                 |                   | 4                       |                   |
|   | 100               | 100               | 100               | 100               |                   | 100                     |                   |
| <b>Total project cost</b>   | <b>18,742,031</b> | <b>10,862,216</b> | <b>17,987,088</b> | <b>14,127,159</b> | <b>42,976,463</b> | <b>2,825,432</b>        | <b>45,801,895</b> |
| <b>SQUARE FEET FOR CONSTRUCTION</b>                               |                   |                   |                   |                   |                   |                         |                   |
| Carpet area   | 225               | 225               | 225               | 225               |                   | 225                     | 1,125             |
| add: 15% for FSI  | 34                | 34                | 34                | 34                |                   | 34                      | 169               |
| Subtotal  | 258.75            | 258.75            | 258.75            | 258.75            |                   | 258.75                  | 1,294             |
| add: 10% for superstructure                                       | 26                | 26                | 26                | 26                |                   | 26                      | 130               |
| <b>Total</b>  | <b>284.75</b>     | <b>284.75</b>     | <b>284.75</b>     | <b>284.75</b>     |                   | <b>284.75</b>           | <b>1,424</b>      |
| No. of units  | 63                | 42                | 64                | 50                |                   | 10                      |                   |
| Total sq ft for construction                                      | 17,939            | 11,960            | 18,224            | 14,238            | 62,360            | 2,848                   | 65,208            |
| Cost of construction per sq ft                                    | 1045              | 908               | 987               | 992               |                   | 992                     |                   |
| Total project cost  | 18,742,031        | 10,862,216        | 17,987,088        | 14,127,159        |                   | 2,825,432               | 64,543,927        |
| Sale price per sq ft  |                   |                   |                   |                   |                   | 2,500                   |                   |
| <b>Total sales</b>  |                   |                   |                   |                   |                   | <b>7,118,750</b>        | <b>7,118,750</b>  |

| <b>FOR SALE COMPONENT OF RAJIV INDIRA-SURYODAYA</b>     |  |                   |                    |              |
|---|--|-------------------|--------------------|--------------|
|   | <b>Building 5</b>                              | <b>Building 6</b> | <b>Building 5*</b> | <b>TOTAL</b> |
|   | Suryodaya                                      | Suryodaya         | For sale           |              |
|   | Bank   | Residential       | Residential        |              |
| For sale FSI (sq feet)                                  | 2,395  | 11,451            | 2,848              | 16,693       |
| + built up area @ 30%                                   | 719  | 3,435             |                    |              |
| Total built up area for construction                    | 3,114  | 14,886            |                    |              |
| Construction cost per sq foot (see below for break up)  | 760  | 695               |                    |              |
| Development   | 180  | 180               |                    |              |
| Survey/Engineering/Architect                            | 55   | 70                |                    |              |
| Transit accommodation charges ((borne by beneficiaries) | -  | -                 |                    |              |
| Total Construction and Development Costs                | 995  | 945               |                    |              |
| Contingency provision 5%                                | 50   | 47                |                    |              |
| <b>Cost per square foot</b>                             | <b>1,045</b>                                   | <b>992</b>        |                    |              |
|   |  |                   |                    |              |
|   | * see for sale component on cost summary sheet |                   |                    |              |
| <b>BREAK UP OF CONSTRUCTION COST</b>                    |  |                   |                    |              |
| Piling  | 130  | 120               |                    |              |
| Plinth  | 60   | 55                |                    |              |
| Framework   | 225  | 215               |                    |              |
| Brick, Masonary   | 155  | 110               |                    |              |
| Finishing i.e plastering, painting etc                  | 85   | 90                |                    |              |
| Electrification, plumbing etc                           | 80   | 80                |                    |              |
| Miscellaneous   | 25   | 25                |                    |              |
| <b>Cost of construction</b>                             | <b>760</b>                                     | <b>695</b>        |                    |              |
|   |  |                   |                    |              |
| <b>PERCENTAGE COSTS OF CONSTRUCTION</b>                 |  |                   |                    |              |
| Piling  | 17   | 17                |                    |              |
| Plinth  | 8  | 8                 |                    |              |
| Framework   | 30   | 31                |                    |              |
| Brick, Masonary   | 20   | 16                |                    |              |
| Finishing i.e plastering, painting etc                  | 11   | 13                |                    |              |
| Electrification, plumbing etc                           | 11   | 12                |                    |              |
| Miscellaneous   | 3  | 4                 |                    |              |
|   | <b>100</b>                                     | <b>100</b>        |                    |              |
| <b>SQUARE FEET FOR CONSTRUCTION</b>                     |  |                   |                    |              |
| Built up area (sq feet)                                 | 3,114  | 14,886            | 2,848              | 20,847       |
| Total project cost per sq foot                          | 1,045  | 992               | 992                |              |
| Total cost of construction                              | 2,366,328                                      | 10,345,693        | 2,825,432          | 15,537,453   |
| Total project cost                                      | 3,252,922                                      | 14,770,524        | 2,825,432          | 20,848,878   |
|   |  |                   |                    |              |
| <b>SALES</b>  |  |                   |                    |              |
| Sale price per sq ft                                    | 4,000  | 2,000             | 2,000              |              |
| Total sales   | 12,454,356                                     | 29,771,779        | 5,695,000          | 47,921,135   |
|   |  |                   |                    |              |
| <b>TOTAL RECOVERY FROM SALE IN SITU</b>                 | <b>47,921,135</b>                              |                   |                    |              |

## TDR CALCULATION

| Available Plot area |              |                              | CRZ affected * | CRZ free |
|---------------------|--------------|------------------------------|----------------|----------|
|                     | Rajiv Indira | 19,531 Sq feet               | 3,728          | 15,803   |
|                     | Suryodaya    | + 19,169 Sq feet             | 19,169         |          |
|                     | Ganga        | + 4,712 Sq feet              | 4,712          |          |
|                     | =            | <u>43,412 sq. ft of plot</u> | 27,609         | 15,803   |

|                                    |   |                                      |        |        |
|------------------------------------|---|--------------------------------------|--------|--------|
| <b>Maximum permissible FSI is:</b> |   | 43,412 sq. feet of plot              |        |        |
| FSI ratio                          | x | <u>FSI ratio</u>                     | 1.33   | 2.5    |
|                                    | = | <u>76,227 FSI allowable for site</u> | 36,720 | 39,508 |

\* falls within 100m of creek so

### Rehabilitation units to be built

|               |   |                                |
|---------------|---|--------------------------------|
| Building 1(a) | + | 63 units                       |
| Building 1(b) | + | 42                             |
| Building 2    | + | 64 units                       |
| Building 3    | + | 50 units                       |
| Subtotal      |   | 219 total rehabilitation units |

### The area to be considered for FSI purposes

|               |  |
|---------------|--|
| Building 1(a) | 16,301 sq feet   |
| Building 1(b) | 10,868   |
| Building 2    | 16,560   |
| Building 3    | 12,938   |
| <b>Total</b>  | <u>56,666 sq feet of FSI to be used for rehabilitation</u> |

### The compensatory component of FSI is:

|   |                                     |
|---|-------------------------------------|
| Building 1(a)                               | 17,939 sq feet                      |
| Building 1(b)                               | 11,960                              |
| Building 2                                  | 18,224                              |
| Building 3                                  | 14,238                              |
| <b>Total</b>                                | 62,360                              |
|   | x <u>Compensatory ratio allowed</u> |
|   | 1.33 under SRA                      |
| <b>Providing total compensatory FSI of:</b> | <u>82,939 sq feet</u>               |

A number of for sale units are built of built up area:  
Consuming FSI for sale in situ of

|   |                |
|---|----------------|
| Total built up area approved for scheme | 62,360         |
| plus                                    | 82,939         |
| Subtotal                                | <u>145,299</u> |
| TDR =                                   | <u>66,246</u>  |

The total development is within overall FSI

|                |        |
|----------------|--------|
| allowance of   | 76,227 |
| Rehab units    | 56,666 |
| For sale units | 16,693 |
| Balance of FSI | 2,868  |

CRZ may not be applied in which case maximum  
FSI permissible =

108,530

## VIABILITY ANALYSIS OF THE RAJIV-INDIRA SURYODAYA PROJECT

### COSTS

|  |                   |                   |
|--|-------------------|-------------------|
| Total Construction & Development costs | Costs             | 82,567,373        |
| Capitalised Interest                   |                   | 13,871,319        |
|  | <b>Total cost</b> | <b>96,438,691</b> |

|                         |            |       |
|-------------------------|------------|-------|
| % Loan Financed         |            | 80%   |
| Principal borrowed(max) | 66,053,898 |       |
| Finance Period (mths)   |            | 36    |
| Interest Rate(mths)     |            | 1.17% |

### LESS SALES RECEIPTS

|                                 |          |
|---------------------------------|----------|
| From Residential Units for sale | 17,733.4 |
| From Commercial units for sale  | 3,113.6  |
| From TDR for sale               | 66,245.9 |

|                                     |       |
|-------------------------------------|-------|
| Price of residential units (per sq. | 2,000 |
| Price of Commercial units (per sq   | 4,000 |
| Price of TDR (per sq.ft)            | 450   |

|                               |                   |
|-------------------------------|-------------------|
| Income from residential units | 35,466,779        |
| Income from commercial units  | 12,454,356        |
| Income from TDR sales         | 29,810,646        |
| <b>Total sales income</b>     | <b>77,731,781</b> |

### NET COSTS

|                     |           |                   |
|---------------------|-----------|-------------------|
| Sterling equivalent | £ 271,115 | <b>18,706,910</b> |
|---------------------|-----------|-------------------|

### AVERAGE CONTRIBUTION PER SALE UNIT

|                               |                |
|-------------------------------|----------------|
| Total Construction Cost sq ft | 992            |
| Sale price per sq ft          | 2000           |
| Average size of sale flat     | 225            |
| <b>Contribution per flat</b>  | <b>226,744</b> |

|                        |       |
|------------------------|-------|
| Break Even Extra Flats | 83    |
| Unused FSI Available   | 2,868 |
| Max Flats              | 13    |

**Sufficient Flats ?** **No**