Diploma Work for Master’s Degree Thesis, 30 ECTS, Autumn Semester 2010
Programme for Spatial Planning at Blekinge Institute of Technology
Karlskrona, Sweden

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Preface

Our work with this thesis started in the early spring of 2010 when it dawned on us that we wanted to go abroad to perform our thesis for a Master’s degree in Spatial Planning at the Blekinge Institute of Technology. After some discussion we decided to focus on India and the slum issue was close at hand. We found slums and slum upgrading to be an interesting subject since it is well connected with our previous studies but still adds new dimensions of scale, density and prerequisites, amongst other things. Slums present a huge challenge to many professions around the world and of course to the people living in them. When the subject was chosen we diverted our attention towards finding local tutors and funding. We were rewarded funds by the Swedish International Development Cooperation Agency (Sida) to carry out a Minor Field Study during the autumn of 2010, and in October we left for nine weeks in India. We met a country that was both beautiful and friendly, but where many places were in great need of upgrading. Six weeks were spent at the UDRC office in Bhubaneswar and here we learnt a lot about slums and slum upgrading and our field trips with representatives from SPARC in Mumbai were also very illuminating. We have but scratched the surface of this topic and there is so much more to learn, but still we feel it has been a very rewarding study both academically and personally.

Finally we would like to thank some of the people that made this possible: our Swedish tutors professor Dick Urban Vestbro at the Royal Institute of Technology and Gunnar Nyström at Blekinge Institute of Technology for advice and guidance, our local tutor Monalisa Mohanty at UDRC for helping us settle in and inform us on how things are done in India, Sundar Burra and Sheela Patel at SPARC for broadening our notion of slums, all other friends and staff at UDRC and SPARC for your kindness and patience, and all the women from Mahila Milan we met during our stay. You have all been very inspirational, thank you!

Lena Johansson and Emma Josefson

March 2011, Lysekil, Sweden
Abstract

In *From Different Perspectives - A Case Study of a Slum Area in Bhubaneswar, India* we set out to investigate the residential effects of a very special phenomenon. In 2007/08 we entered the Urban Millennium when for the first time in history as many people lived in cities as on the countryside. This massive urbanisation has many consequences and one of the greatest issues to handle for planners is where all these immigrants are to reside. The response in many cities comes in the shape of informal settlements/slums/squatter settlements wherever there is vacant space. Our aim with this thesis is to gain a greater understanding of the difficulties and possibilities with slums and slum upgrading in both theory and practice, originating from a case study, and to answer the questions of what a slum is and how its physical conditions can be improved.

According to UN-HABITAT a slum household is a group of individuals living under the same roof in an urban area who lack one or more of the following five conditions: durable housing, sufficient living area, access to improved water, access to sanitation, and secure tenure. Our case-area Salia Sahi houses approximately 40,000 slum dwellers and lacked all these five conditions. It is also the state of Odisha’s biggest slum, situated on forest land in central Bhubaneswar and an effect of an urbanisation process where people from rural surroundings moved to the city in hope of finding a job. The area was appointed to us by UDRC that wanted to see how the area could be upgraded. We worked in the classical planning manner of survey - analysis - plan and finally we put forward a land-use plan for the entire Salia Sahi and a development plan for a smaller part called Adibasi Gaon.

There are many ways on looking at slums and slum-upgrading and they do not always correspond or converge, hence the title of this thesis “From Different Perspectives”. Slums are not present in all of the world’s countries, but where it is present it is quite widespread and in attending. We performed our case study in India, which is a country where the “problems” of slums have been present for many years and where the work in trying to help and upgrade conditions for slum dwellers has been longstanding. When investigating how physical conditions of slums can be improved we found two main contradictory points of view, one focusing on providing slum dwellers with houses and infrastructure (top-down), another focusing on supporting slum dwellers to help them help themselves to better housing and infrastructure (bottom-up).

Our experiences have taught us that no slum is like the other and different prerequisites require different slum-upgrading solutions. One of the biggest obstacles to slum-upgrading as we perceive it apart from financial issues is to get all actors involved to strive towards the same goal. From presenting our proposals we learned that none of the remarks from the different groups were on the same track. Within groups reactions were consistent but between groups they criticised our proposals from different angles and wanted different solutions. We believe this is where the planner could take an intermediate role and try to gather all the different ideas and thoughts into one proposal that is accepted by everyone involved. It is essential to give notion to the importance of time when building relations and carrying out upgrading, and a main focus must also be not to build the slums of tomorrow but actually present solutions that will work over time and for the poorest slum dwellers too.
Acronyms and Abbreviations

ASF Sweden Architecture Sans Frontières / Architects Without Borders Sweden
BMC Bhubaneswar Municipal Corporation
BTA Built Total Area
CDP City Development Plan
FSI Floor Space Index
GoI Government of India
GoO Government of Odisha
JNNURM Jawahar Lal Nehru National Urban Renewal Mission
NGO Non-Governmental Organisation
OSDF Orissa Slum Dweller Federation
RAY Rajiw Awas Yojana – Guidelines for Slum-free City Planning
SPARC Society for the Promotion of Area Resource Centres
ST/SC Scheduled Tribes and Scheduled Casts
UDRC Urban Development Resource Centre
UN-HABITAT United Nations - Human Settlements Programme

I keep six honest serving men
(They taught me all I knew);
Their names are what and why and when
And how and where and who

- Rudyard Kipling, 1902
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1. Introduction

In 2007/08 a very special occasion took place when we entered the Urban Millennium. For the first time in history we reached the point where as many people lived in cities as on the countryside. This massive urbanisation brings both positive and negative sides, and one of the greatest issues to handle is where all these people are to reside, work and prosper. In this thesis we are to handle one response to the issue of residence; slums. Slums come in different shapes and sizes, and are known by different names in different parts of the world: favelas in Brazil, barriadas in Peru, ghettos in the USA and shanty towns in South Africa. Globally the terms informal settlements, squatter settlements and deprived areas are used synonymously with slums. In this thesis we are to investigate slums from a spatial point of view in order to see how living conditions for slum dwellers can be improved by physical means. Our aim is to gain a greater understanding of the difficulties and possibilities with slums and slum upgrading in both theory and practice, originating from a case study. This is to be achieved in part by reading literature on slums and related subjects as well as carrying out and learning from a field study in Bhubaneswar, India.

India is often called the world’s largest democracy due to its large population of approximately 1.2 billion people and to its democratic government. The political power is gathered with the Central Government in India’s capital Delhi, and from there decentralised to State Governments and furthermore divided to municipalities. The country’s history goes a long way back in time, but more recently a new era began in 1947 when colonialist rule of British India deceased and British India was divided in India and Pakistan. From a planning perspective Bhubaneswar posed a few, to us new, difficulties such as a lack of maps, comprehensive plans or strategies, and tracing paper. At some times the language was an issue as well. But our willingness to learn was great and the obstacles were overcome and the result is this report.

Here in the first chapter we will discuss our thesis aim in more detail and break it down into operational research questions, and here you will also find out how we have worked our way through this process. The second chapter is the theoretical part of this thesis where we present different ways of looking at and defining slums and slum upgrading, plus scrutinising relevant notions associated with slums such as urbanisation, informality and poverty. In chapter three India is given a more thoroughly introduction and we also look closer on how slums, slum upgrading, urbanisation, and informality is perceived and handled within the country and with a special focus on Bhubaneswar. Chapter four contains our survey, analysis, plan and assessment of our case area Salia Sahi. We present a land-use plan for all of Salia Sahi which is followed by a development plan for a part of Salia Sahi called Adibasi Gaon. The fifth chapter looks deeper into how slum upgrading can be seen from different point of views, and knowledge gained from the work of chapter four is implemented and further investigated. Chapter six is where we discuss our findings and present our conclusions.
1.1 Aim and Research Questions

The aim with our thesis is to;

*gain a greater understanding of the difficulties and possibilities with slums and slum-upgrading in both theory and practice, originating from a case study.*

In our theoretical part we aim to focus on slums and slum upgrading in general and in India as this is where our case study will take place, and in our practical part we plan to investigate and describe local conditions of our case area in Bhubaneswar and make a plan proposal for how it can be developed. This will be followed by an assessment of our proposal and after this we will individually investigate different perspectives of slum upgrading.

The limitations of our work are geographical boundaries and in time, see below for a map showing our case area in Bhubaneswar. We will mainly look at spatial implications when planning our area although there might be some issues that require us to move into other fields such as policies, economy and social aspects.

Our research questions that will set the framework of this thesis and our case study follow below;

1. What is a slum?
   - How can a slum be defined?
   - How are slums linked to phenomenon such as urbanisation, informality and poverty?
   - Can our case area Salia Sahi be defined as a slum and how is it linked to urbanisation, informality and poverty?

2. How can the physical conditions of a slum be improved?
   - What kinds of strategies are there and how can they be implemented?
   - How can the physical conditions of Salia Sahi be improved?
   - Which actors are involved with the physical improvement of our case area?
   - What obstacles are there to different improvement processes?
1.2 Methodology

Within the realm of this thesis our ambition is to investigate both a practical problem and a research problem, as stated in the previous section. The research problem handles the issues of slum and the growth of the same in general and putting it in a global context, whilst the practical problem has to do with how the upgrading of our case area Salia Sahi can be planned. The difference between a practical and a research problem is that the former is solved by doing something practical to handle the root of the problem meanwhile the research question is affected not by an experienced unease but by a notion of inadequate knowledge and understanding of an issue (Booth et al., 2004). Nor can a research question be solved by answering the connected practical problem even if it is the practical problem that is initiating the research question. The relation linking practical and research problems can be lined out as in Figure 1.1, and it is because of this relation we are undertaking both kinds of problems, since we believe there is mutual gain and mutual learning to be achieved by combining the two in one thesis. One way of combining the two is by working with the methodology of case studies which does exactly this, joins research and practice (Johansson, 2002).

The practical problem has been handled through implementing the classic way of planning, following the model survey – analysis – plan, where the theory section of this thesis is both the contextualisation of our case study as well as the investigation for answering our research questions. We have chosen to carry out the practical part of our thesis as a case study since the case of slums and slum settlements in Bhubaneswar is complex and should not be analysed with a single method, but with a variety of methods covering both qualitative and quantitative measures. We were also intrigued by the open and flexible learning process case study offers by being, according to Johansson (2000), both a process of gaining knowledge about the case itself and the result of learning. The case study method as it is perceived today has been developed under pressure from two greater fields of research (Johansson, 2000): firstly from an anthropological side where focus is on case descriptions and on understanding the case, and secondly from experimental traditions within the fields of psychology and pedagogies concentrating on a wish to be able to draw generalisations from the examined case. This has given the case study research a pragmatic and eclectic attitude towards methodology (Johansson, 2002).

Deriving from a number of case study researches’ writings, Johansson (2000:66) has found five cornerstones joining the different schools of case study methodology. Combined it is stated that a case study:

- shall have a case as object of study
- which shall be a complex functioning unit,
- investigated and surveyed in its natural condition,
- with a variety of methods and
- be contemporary.

According to Scholz and Tietje (2002), a case is a defined unit with clear geographical or organisational boundaries and it can be an institution, a company or a city. Johansson (2000) confirms
this notion and further adds that a phenomenon must be complex to be accounted for as a case. Thus, being complex implies the line between the focal phenomenon and its context is not always obvious and that this line characteristically is due to be adjusted during the time of study. Deriving from this we get that Salia Sahi is suitable for a case study since it has both a well defined boundary and both research and practical interests connected to the case. We also have the possibility to explore our case area with a variety of methods and in present condition since it is a current phenomenon.

When carrying out our case study and our readings we have given notice to the fact that we are influenced by our backgrounds, being Swedes, being females, and being planning students. What we see or perceive may not be the same thing as a dweller in Salia Sahi perceives even though we are looking at the same things at the same time. There may be differences in concepts, interpretation, meanings and values that separate our notion of Salia Sahi from the inhabitants’ notion. Therefore one must keep in mind when carrying out a case study, that there is no such thing as a value-free description of one’s environment (Hillier, 1999:179). In the middle of the 20th century, professional knowledge, such as architecture and planning, was seen as the application of scientific theory and technique to the instrumental problems of practice (Schön, 1983:30) and that this was the origin of the technical rationality, which was a descendent of Positivism, and Technical Rationality [was] the epistemology of practice (ibid.). Although one may see a problem or a case as a technical one and therefore solve it ‘rationally’, the setting of the problem itself is not technical (Schön, 1983), but includes selection and exclusion of factors that we find either relevant or irrelevant. Therefore, already at an early stage in the process we define which and whose values are considered. To solve this question of which and whose values are to be taken into account Schön (1983:54) argues for “Reflection-in-Action” as an evolution of “Knowing-in-Action”, and as a way for the practitioner to surface and criticize the tacit understandings /.../ of a specialized practice (Schön, 1983:61) as well as to recognize that his technical expertise is embedded in a context of meanings (Schön, 1983:295).

To compile with this we have used triangulation which is a typical method for validation of information when dealing with case studies (Johansson, 2000). Triangulation implies the usage of at least three alternative ways of gathering information and can be carried out as triangulation of either information, researchers, theories, or methods. We have been working with triangulation of methods where different methods have been used to gather information, namely; literature review, key-person interviews, studies of aerial photographs and GPS-mapping, analysis of statistics, and visual observation, which will be further described individually in the following sections.

The main critique formulated against case studies is how the generally inductive analysis and the amount of gathered material makes it very hard to draw any general conclusions from a case analysis (see for example Johansson, 2003 and Hartley, 2004). The case is by nature intimately linked to its context and therefore it can be misleading to draw to general conclusions that will not be appropriate for another case. There is also the notion of that ‘anything can be proved with a case’, also stemming from the contextual specifics. For us, this critique is important to keep in mind, even though our focus is not only on undertaking research but also to gain planning experience from a foreign country.

1.2.1 Literature Review
A literature review has been made as mentioned above both for finding answers to our research questions and to place our case phenomenon in its context. Initially our readings were focused on theory concerning urbanism, informality and
slums to investigate the bigger issues of slum on a global scale and to see which factors that might affect and promote slum creation. We also scrutinized the literature in search of different definitions of slum to compare with each other. For this we mainly read UN-HABITAT publications and relevant articles, and we also found literature within this subject published in India. Once in place in Bhubaneswar, we started to search and identify official documents concerning slums and slum upgrading, such as missions issued by the Government of India to promote slum-free cities. We also went through the City Development Plan for Bhubaneswar, various Project Development Reports for slum upgrading projects and other documents to get an overview over slum conditions in Bhubaneswar.

Our readings can be divided into three categories; scientific theory, official statistics and policy documents. The first two categories focus on describing how and why things are or have been in the past regarding our subject, meanwhile the last category provides information on how politicians in India and other places would like to see slums develop.

1.2.2 Key-Person Interviews

The key-person interviews were not always carried out as proper interviews with composed questions prepared, but rather information was gathered at various meetings, both at the Urban Development Resource Centre (UDRC) office, on site while walking around with representatives for the inhabitants of Salia Sahi and asking representatives for the Society for the Promotion of Area Resource Centres (SPARC) and UDRC for additional information when out on field trips. The language difficulties were an issue, but we tried to work around this by posing clear questions and repeating until we felt quite confident that the questions and answers had been understood by all parts. Usually there was at least one person able to interpret and we consider the interpreter to be reliable and not bending the words of the Oriya-speaking person. This verbal information helped us both with understanding the case of Salia Sahi better, and was also of great value in understanding the issues of slum and its practical implications. For example in Mumbai we were able to visit several different kinds of slum areas and learn from both the SPARC representative accompanying us and from the people SPARC is working with out in the field.

1.2.3 Aerial Photographs and GPS-Mapping

Due to several factors it has been very hard finding maps showing our case area. Since the area is located on forest land owned by the Central Government no maps have been created for this area by the municipality. The consequence has been that we have used Google Earth and Google Maps for aerial survey and map material, thus giving the insecurity of measurements has kept us from planning any area in detail and we have kept our planning proposals at a larger scale.

GPS-mapping was carried out together with
representatives from Mahila Milan associated with UDRC, and together we mapped the boundary of Salia Sahi within ward 16 by walking around and marking waypoints which were later on adjoined in a computer in Google Earth to map our area boundary. The GPS-device, a Garmin eTrex H, has an approximately inaccuracy of 10-15 feet when mapping the waypoints and is therefore only suitable for mapping boundaries and not for mapping individual buildings or other structures. We have continued to work with the Google Earth software instead of other more advanced GIS software available at our home university since many Non-Governmental Organisations (NGOs) in developing countries, such as UDRC and SPARC, cannot earmark funding for distributing expensive programmes to all associated users, and instead they are building their systems around free and open source software.

1.2.4 Analysis of Statistics
A number of surveys have already been made in or concerning our case area. These surveys are made as parts of mapping who and how many that resides in a specific slum, hence focusing on persons and their proximity to different services rather than buildings or plan structures. UDRC has conducted two surveys which we have been using in our thesis; one Slum Profile Survey (UDRC, 2010a) for all of Bhubaneswar and one Household Survey for Salia Sahi (UDRC, 2010b). The slum profile survey estimates the number of families and slum dwellers inhabiting a specific slum based on information from local community leaders and covers more or less all slums of Bhubaneswar. The household survey is a more exact document where all households have been given a number of identification which also will be found on the household’s house, identification card and in all lists made by UDRC. In these lists, which are a part of larger enumeration projects, the number, sex and age of all household members are gathered and gives the household a proof of residence which can be used when development is underway to claim a dwelling and beneficiary status. Also the Bhubaneswar Municipal Corporation (BMC) has its own listings on slums on governmental respectively private-own land, where another estimation is available concerning number of households and people residing in a specific slum (BMC, 2010).

When compiling the material there were a few difficulties. Usually we could find most slums of Salia Sahi in both BMC’s lists and the UDRC’s slum profile survey, but there were some queries since ward numbers did not match and the number of households and slum dwellers could alter a lot in between the different lists. The household survey was not complete at the time of our study, but some slums where listed and here one could also find great varieties when comparing number of household supposed to be residing in different slums. After speaking with the people at UDRC we found that the information in the slum profile survey was gathered by asking community leaders to estimate the number of households and residents within their respective area. Here it is easy to see that errors can be made, both regarding the number of households given and the estimated number of members in each household. Maybe the community leaders have given a vague approximation and perceived boundaries might overlap which makes these kinds of estimations quite insecure. Also the number of members in each household varies greatly as one can see when scrutinising the household survey where household size ranges from one to nine members, with an average of 3.3 members per household (UDRC, 2010b). Unfortunately it has been very hard trying to get in touch with representatives for the BMC, and therefore we do not know how their estimations were done. But we believe there has been an estimation of households in the area and then this number was multiplied with a factor five to get an approximately size of the population (BMC, 2010). And as seen in the household survey (UDRC, 2010b), five seems to be a too big factor since the average household size in Salia Sahi was 3.3 members.

After stressing the above mentioned sources of error we decided to work from the notion that there are 9,120 households residing in Salia Sahi, with 40,750 inhabitants as derived from the slum profile survey of UDRC (2010a). The
The reason for accepting this information is twofold. Firstly, we carry out this project in cooperation with UDRC and since this is their estimation it is more useful for them to get plan proposals in accordance with their figures. Secondly, we consider it is better to plan rather for too many than for too few future inhabitants. Also, Salia Sahi is not the only slum in Bhubaneswar in need of regeneration and since both the urban and slum population are growing in the city there will most certainly be dwellers to occupy initially vacant apartments.

Albeit shortcomings these surveys have been of great value to us. The household survey (UDRC, 2010b) also contains information on when the individual dwellers moved to Salia Sahi and what they are working with. For us it would have been very hard to find all this information that these surveys contain on our own within such short period of time and without speaking the local language.

### 1.2.5 Visual Observations

Visual observations of our case area were performed at the same time as we were walking around the area doing the GPS-mapping. This was very convenient for us since it gave us a reason to be spending time in the area without people being suspicious or at unease having strangers straying in their area. At these times we were always accompanied either by someone from UDRC, from Mahila Milan, or the husband of the community leader in ward 16. So if a local dweller had any questions there was always someone who could explain who we were and what we were doing there.

Documentation of our visual observations was done by taking photos as well as writing down our impressions of the area after each visit. These photos and notes were later on used in our analysis and plan proposal stages and we also went back to the site to complement and verify lacking and uncertain information.

We did not only undertake visual observations in Salia Sahi for our case study, but we went on several field trips both in Mumbai, Cuttack, Puri and Bhubaneswar to gain greater knowledge on slums and slum upgrading in practice. In Mumbai we visited a street where pavement dwellers reside, which also was the starting point for the work of Mahila Milan and SPARC. We also went to see India’s biggest slum, Dharavi, and an in-situ redevelopment project; transit camps for railway dwellers and finally a resettlement for prior slum dwellers. In Cuttack we visited a community outside town which had been totally destroyed in the cyclone of 1999 and then rebuilt by the help of Lion’s. In Puri we followed the architects from ASF Sweden (Arkitekter utan gränser) to Gokha Sahi and Mangala Sahi where they were working on a project together with UDRC and we were also able to take a look at their other project in Nayapalli in Bhubaneswar. Another field trip in Bhubaneswar was made to further investigate middle-income groups’ houings, since there is a want that we would reserve land in Salia Sahi to be developed for this specific segment.

### 1.2.6 Selecting a Case Area

In order to carry out our case study, a case area was needed to be appointed. Together with the people at UDRC we chose to work with Salia Sahi; Odisha’s biggest slum housing approximately 40,000 inhabitants, which is easily accessible by several and big roads and situated in a prime location next to big hotels and expensive offices. We found this to be a very interesting and exciting case area since it contains many of the issues and aspects of slum upgrading accounted for in our theoretical part of this thesis. Furthermore, the upgrading process was at an
early stage and nothing had been drawn previous to the time of this case study.

There was also the advantage that the Deputy Mayor of the Bhubaneswar Municipal Corporation (BMC) and a resident of Salia Sahi, Ms Singh, showed great interest in developing the slums in her custody and also was very helpful with advice and information on the wishes of how the inhabitants of Salia Sahi would like to see the area being developed.

### 1.2.7 Distribution of Work

When performing a joint master thesis at the Blekinge Institute of Technology one of the preconditions is to include two clearly visible separate parts within the work so that the examiners can assess us individually. Therefore the distribution of our work has been carried out as follows: program, methodology, background, survey, and analysis were done jointly and in close collaboration. We also carried out the first two plans together since we were on site in Bhubaneswar and it would have been very strange working separately when time was short and we wanted to present plans and ideas to the people we cooperated with before we left. This was the land-use plan for all of Salia Sahi and the development plan for Adibasi Gaon. Comments and remarks on these plan proposals were gathered from different concerned actors and these we put together in an assessment of our proposals. Well back in Sweden we continued with the assessment and continued our work by focusing on different perspectives on slum upgrading, taking inspiration from what we learned on site in Bhubaneswar. Finishing up with discussion and conclusions was done collectively and eventually we put it all together in this report you now are holding in your hand or watching on your screen.
2. Slums and Slum-Upgrading

In chapter two we look for answers to our first research question of what a slum is and how it can be defined. Theoretical studies of the notions of urbanism, informality and poverty are undertaken in order to understand underlying aspects of slums, and to broaden the perception of the same. Finally we give a brief introduction to slum-upgrading and other ways of handling slums in practice.

2.1 Urbanisation

The 21st century has since 2007/08 seen the dawn of the “urban millennium” (UN-HABITAT, 2006; 2008; 2009, Satterthwaite, 2005a). The total population living in urban areas of the world today is estimated to 3 billion which is the same amount as the total population of the world in 1960 (Satterthwaite, 2005a).

The urbanisation process has implied major changes throughout the world, both positive and negative. In the following part we are to investigate the urbanisation process and aspects behind the process.

The term urbanisation is a word which describes a certain process often characterized by demographic shifts of people moving from rural to urban areas (UN-HABITAT, 2008). The urbanisation process which is caused by movements of people in or out from an urban centre should not be confused with the term urban growth which defines the increase of the population in a town/city, or the term urbanism defining how the social and behavioural characteristics of urban living has transformed across society as a whole (Pacione, 2009). In order to understand this process one also needs to know how to define what urban is. The United Nations have defined “urban” as follows;

an urban agglomeration as the built-up or densely populated area containing the city proper, suburbs and continuously settled commuter areas. It may be smaller or larger than a metropolitan area; it may also comprise the city proper and its suburban fringe or thickly settled adjoining territory (UN-HABITAT, 2006:5).

A city proper represents the single political jurisdiction which also contains a historical centre (UN-HABITAT, 2006). Though looking at countries all over the world, one will find that different countries use different criteria and methods on how to define urban. These different criteria are ranging from using administrative data, population size or population density, availability to urban infrastructure, and some countries also use economic characteristics whereas some countries do not have a definition of urban at all (UN-HABITAT, 2006). All these different definitions make it hard to conclude one definition which counts for all countries. This means that the world could gain several hundreds of millions more urban dwellers if countries like China or India changed their definition of urban, to that of Sweden for example, from one day to another (Satterthwaite,
The different definitions of urban also make it difficult to compare the rate and level of urbanisation between different countries as it is measured from the proportion of people living in urban centres.

The process of urbanisation goes back in history but it was first during the industrial revolution in the 19th century that it started to grow significantly, mainly in the Western Europe and the United States (Jenkins, Smith & Wang, 2007). In the beginning it was the industrialisation and the development of the railway and other modern modes of transportation that contributed to the process.

The urbanisation process that occurred during the 20th century has been unprecedented (Satterthwaite, 2005a). Not only in terms of the global urbanisation level but in the size of the world’s total urban population and how many countries that have become urbanised, together with the number and size of very large cities.

Looking at a table (Figure 2.1 below) from the report called *The scale of urban change worldwide 1950-2000 and its underpinnings* published by the Institute for Environment and Development (Satterthwaite, 2005a), one can see how much the time needed for the urban population to increase with one billion people has declined during the last century.

Although these numbers tell us nothing about the causes that lie behind this change, the numbers do tell us that something significant has happened for the world’s total urban population to change this tremendously during the last 50 years. During the last century there have been economic, social, political and demographic changes which together have promoted this process (Satterthwaite, 2005a). Besides from the huge growth of the urban population the world’s economy has also multiplied, the employment sector has shifted from agriculture to industrial and the colonial empires have disappeared.

Although much of the total urban statistics tell us that there can be comparable trends all over the world, Satterthwaite (2005a) points out that these statistics hide national and local factors which might affect these trends. According to Satterthwaite (2005a) this rapid change is not progressing in all of the world’s urban centres, instead there are actually many cities that have more people moving out than in. A few countries have tried to restrain the urbanisation process by using the power of the state (Kojima, 1996). South Africa is one example that is well known for the Apartheid policy which aim was to limit “blacks’” access to land to only 9 percent of the country’s total area. Government’s attempt to restrain this process has regardlessly failed and these countries can now expect the same overpopulated cities as in the rest of the deve-

<table>
<thead>
<tr>
<th>World’s total urban population</th>
<th>Years taken</th>
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<tr>
<td>0 to 1 billion urban dwellers</td>
<td>10,000 years? (c.8000 BC-1960)</td>
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<tr>
<td>1 to 2 billion urban dwellers</td>
<td>25 years (1960-1985)</td>
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<tr>
<td>2 to 3 billion urban dwellers</td>
<td>17 years (1985-2002)</td>
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<tr>
<td>3 to 4 billion urban dwellers</td>
<td>15 years (2002-2017)</td>
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Figure 2.1 (Source: Satterthwaite, 2005a).
loping world (ibid.). In India rural poverty has been the country’s central challenge since their independence in 1947, and despite of the urbanisation process little has changed (Burra, 2005). For many of the Indian political leaders, migration to cities is seen as a threat to the survival of cities. Because of this, investment in housing and infrastructure for the urban poor is unthinkably as this might be seen as an invitation for increased migration to the city.

In a report from UN-HABITAT (2009), it is argued that there is a direct correlation between a country’s level of urbanisation and its wealth. This is also argued in the report from Satterthwaite (2005a) where he shows that, according to an analysis performed by Diana Mitlin, the countries with the highest economic growth also has the highest level of urbanisation and contrariwise; the countries with a low level of urbanisation have deprived economic performance. This is also underpinned by the fact that rural-to-urban migration is a result of people moving to urban centres looking for better economic opportunities and that it is the areas with expanding economies that attract migration (ibid.). Advani (2009), on the other hand, argues that urbanisation and economic growth not necessarily come hand in hand since many of the people migrating to the city in hope for an employment end up with a job outside the formal economy. Jenkins, Smith and Wang (2007) also point out the fact that although South America has a similar level of urbanisation to that of Europe it is still a developing region economically.

Migration is evidently one of the main causes behind urbanisation (Satterthwaite, 2005a), and besides better economic opportunities Vestbro (2010a) mentions some other factors behind the migration which he refers to as “pull factors”. Better access to health centres, to education and to other urban services are just a few of these pull factors which makes it more attractive for people to migrate to urban centres. Whereas pull factors are aspects that attract people to the ur-

Urban expansion in Mumbai, the pavement dwellers in the shadow of high rise buildings.
ban centres there can also be “push factors” that more or less force people to migrate because there is no longer any opportunity in making a living in rural areas (Vestbro, 2010a). Reasons for this are for example dispossession of peasant land or establishment of larger companies that take no consideration of the local population. In low-income countries natural disasters like flooding, soil erosion and deforestation can also be factors which force people to leave their villages as they do not have the possibility to recreate what has been lost.

Apart from all the factors that have affected the process of urbanisation one must not forget the differences between all countries which show a great diversity in the urbanisation level and trends. Economic, social, political and demographic patterns are all different in each country which also influence the urbanisation process.

As mentioned earlier the process of urbanisation has both negative and positive aspects, but most countries have adopted a hostile attitude connecting it with negative consequences (UN-HABITAT, 2009). Although it is easier to focus on the negative consequences of urbanisation it has also generated fundamental changes in society mainly of a positive character. A few examples of the positive changes is according to the UN-HABITAT (2009) within the employment sector where there has been a change from agriculture-based activities to an industrial society, also changes of societal values and modes of governance, the spatial scale with density and activities of the city, the composition of social, cultural and ethnic groups as well as in the extension of democratic rights especially women’s empowerment. Another positive change that has played a big part and influenced most countries in the urbanisation process is the internationalisation of world production and trade (Satterthwaite, 2005a). Being a part of the world trade together with both international and national tourism is something that many cities owe their prosperity as the development of the economy also generates new work opportunities and therefore more people move to the cities. Nevertheless one cannot escape the unrelenting fact that the urbanisation process has been strongly associated with poverty and slum growth.

It is a common belief that the urban in-migrants are the poor and uneducated slum dwellers not well adapted to urban life (Jenkins, Smith & Wang, 2007). On the contrary in-migrants tend to come from all classes and are often at the same level as the native urban inhabitants concerning education, job status and income. According to research (ibid), migrants to the urban areas are often well educated and have an income background in the area of origin while the poorer migrants that are not so well educated tend to go to other rural areas. The problem in urban areas is that this rapid urbanisation has created great difficulties in providing the inhabitants with appropriate infrastructure and housing (Vestbro, 2010a). According to Vestbro (2010a:4),

*the fact that most low-income countries lack economic resources, adequate institutions and professional skills to deal with urbanisation, means that migrants are forced to sleep on streets or occupy any type of land to satisfy their shelter needs.*

As many people come to the city in search of a job, living standards are not their highest priority and since most work opportunities are located in the city this is where they need to be (Correa, 1989). The consequence of this is that they rather live on the pavement close to the work than outside the city with extra expense for the transport to the work. All these factors are reasons behind the development of slum areas and informal settlements, which today is estimated to provide shelter for as much as 72 percent of the urban population in Sub-Saharan Africa, 42 percent in Asia and another 32 percent in Latin America (Vestbro, 2010a).

Other consequences of urbanisation around the world is the uncontrolled expansion of urban areas, also called urban sprawl, characterised by the excessive consumption of land for low-density development (UN-HABITAT, 2009). Urban sprawl occurs when there is a misalignment between the population growth and the physical expansion of a city. One classic example of this is the metropolitan of Los Angeles where the
Urban expansion in Bhubaneswar.

population increased with 45 percent between 1970 and 1990 and at the same time expanded its physical area with 300 percent (ibid.). As sprawl has been an actuality in most developed countries for some time it is now increasingly happening in the developing world too. In developing countries one often sees two contrasting types of sprawl where one is characterised by large peri-urban areas with slums and informal settlements combined lacking infrastructure, public facilities and basic services. In contrast to these areas stands the sub-urban area with residential zones for middle- and high-income groups often together with business and shopping centres with good infrastructure (ibid.). The problems with these areas are often the same in the developed as in the developing countries as it claims valuable agriculture land including high infrastructure costs (Vestbro, 2010a). Another problem with sprawl which is more prevalent in low income countries is the distance to work, as most people cannot afford the transportation costs (ibid.).

One might wonder for how much longer the process of urbanisation will continue and what the outcomes of this transformation will be. Looking at the near future surely the world will be more urbanised with larger cities, though according to Satterthwaite (2005a) it might be less than predicted. Regarding the level of global urbanisation and whether it will grow or not depends on different country’s economic success according to Satterthwaite (2005a), because it only takes a country like India to sustain economic growth for the world to become more urbanised (Satterthwaite, 2005a).
2.2 Informality

In many cases slums are being referred to as informal settlements. These expressions are often used synonymously for describing a gathering of dwellings not regulated according to formal laws and planning systems and lacking basic amenities. In order to gain a greater understanding of slums we are here to investigate the notions of informality in general and how this informality can affect settlements and people living and working under informal conditions.

Informality is a concept built on the dichotomise relation between something formal and something informal. According to The Concise Oxford Dictionary (1995), formality can be a thing done simply to comply with a rule or the rigid observance of rules or convention (p. 532). Informality is its opposite, where something is (done) without ceremony or formality, hence it cannot exist without the notion of formality. If there were no things formal, it would be meaningless to discuss informality, but since the Indian society do have laws, norms, and customs there is also informality. Informality has, in an article investigating informality as a planning strategy, also been described as unregulated behaviour (Portes et al., 1989 in Innes et al., 2007), and onwards the authors state that informality may be illegal, like squatter settlements or the hiring of undocumented workers, but it also includes actions and communications that are neither prescribed nor proscribed by any rules (Innes et al., 2007:198). What separates formalistic interaction orders from informalistic ones is according to the article that the former approach produces routinization of interaction, procedural fairness, and detachment, while the latter produces creativity and a free flow of information, affective involvement, and relative chaos (Innes et al., 2007:198). Here one can easily see that informality, as well as urbanisation, holds both positive and negative sides, and that informality in itself is neither nor. If informality is beneficial or not when working with different forms of poverty reduction, i.e. slum upgrading and job creation, is debated.

Tranberg Hansen and Vaa, for example, argues for how informal activities and practices may be illegal or extra-legal but are not necessarily perceived as illegitimate by the actors concerned (Tranberg Hansen & Vaa, 2004:7). They continue by saying that it is likely that many urban residents consider what from the official standpoint is illegal or irregular as not only functionally but normal and legitimate practices (ibid.:8). Here informality can be perceived as something positive. Of the opposite opinion is for example a British think tank on international development, where it is argued that low income countries face the challenges of large informal sectors and labour markets that function poorly (Higgins, 2009:2).

In the publication Poverty in Focus published by United Nations Development Programme (UNDP), informal employment has been broadly defined as self-employment in informal enterprises... or wage employment in informal jobs (Chen, 2008), and according to Chen, around 75 percent of the South Asian workforce is occupied by informal employment. Characteristic for informal employment is that goods created or services provided are un-registered by or hidden from the State, most importantly for tax, social security and labour law purposes (Drechsler et al., 2008:8). The average wages in informal employment are lower than in the formal sector, but to link informality to poverty is hazardous since there is segmentation of informal employment earnings, where informal employers can be non-poor while formal employees are poor (Chen, 2008). However, informal workers in developing countries tend to be younger, less educated, and earn less than their counterpart in the formal sector (Amaral & Quintin, 2006) and, as has been shown in a study, managers in the informal sector choose to enter formal markets only when the return for doing so is greater than the tax and other fees they will have to pay for their newfound formal status (ibid.). For the employees this is of course a source of uncertainty and we assume the
wage-earners would like their employer turning formal, since this would increase the employees’ rights, wages and employment security.

Looking at employment in the informal sector from a probabilistic migration model, the informal employment is just a steppingstone for workers who are new to a city (Banerjee, 1983) before gaining access to a formal employment. This model was first developed in 1969 and sees migration as a two-stage phenomenon, but empirical evidence from a study carried out in Delhi in the 1980’s the model did not seem to match the reality of migrants moving into Delhi (Banerjee, 1983). Or as Banerjee puts it;

not all informal sector entrants saw their job as a means of financing search for formal sector employment. A substantial proportion of informal sector entrants were attracted to Delhi by opportunities in the informal sector (1983:419).

In the following section we will discuss the notion of slum more carefully, but here we are content with stressing that if the same would be valid for informal settlements as for informal employment, informality would be a hinder to slum upgrading since slum dwellers would not want to be part of a formalised settlement. A slum cannot, given its nature, be formal and if an informal settlement will be regarded as an end and not a means by its inhabitants there will be problems for upgrading, i.e. lack of incentives to save for a housing, or organise oneself in community groups. Since a move from informality to formality demands time, energy, and other resources, and often also education (see for example Banerjee, 1983), it can also be seen as a problem not concerning the poorest of the poor since they will be totally occupied by making it through another day.

Looking at informal economy is another way of investigating informality, and this is intimately linked to informal employment. The notion of informal economy was first “discovered” in Africa in the 1970’s and from that time on, three major schools of thought have dominated the debate on what causes it and what governments can or should do to handle it (Chen, 2008). According to Chen (2008:7) the first school of thought argues that informal operators or micro-entrepreneurs deliberately choose to avoid taxes or other cost of formality, the second that the working poor eke out a livelihood or try to survive in the informal economy out of necessity, and the third that informal employment is deliberately created by formal firms, either directly by employing them informally or indirectly by making self-employed dependent on a single dominant firm. The respective responses to these different forms of informality are regulation of informal enterprises, protection of the working poor and promotion of formal employability through activities such as skills training and job matching (Chen, 2008). The author suggest a combination of these three ways of handling informality, and by pointing out that informality needs to be dealt with implies that the author sees informality as something negative, meanwhile as shown in the article mentioned above by Amaral and Quintin (2006) managers of informal enterprises only see formalisation as something positive if the earnings from formalisation will exceed the costs of the transformation.

According to Gilbert and Gugler (in Tranberg Hansen & Vaa, 2004) studies and articles often claim that there is a close relationship between informal housing, informal income generation, and poverty. Tranberg Hansen and Vaa disagree and state that: even if they often overlap, poverty, expressed by low incomes and substandard shelter, and extra-legality of income generation and housing are two distinct phenomena (2004:8). The authors continue by discussing how the standards of informal settlements can be as different as in the case of income generation in the informal sector discussed above, exemplified by how

in recent years, an increasing number of middle and high standard housing areas have developed informally, as illegal forms of land occupation and unauthorized subdivision of land (Fernandes & Varley 1998, in Tranberg Hansen & Vaa, 2004:8).

This we also experienced during our field trips where we got to see how housing standards
could differ within and between different slums. Although, the majority of dwellers in informal settlements still are poor and living in such settlements generally means lacking a legal address and so not being able to vote or access public services, as well as living under the constant threat of eviction (Satterthwaite, 2005b:3). Being informal in a developing country, whether it is one’s job or house, often means being insecure and lacking protection from unforeseen events, or protection from events that were foreseen but could not be avoided.

In formal construction of dwellings in most countries, the usual routine is to first create a formal plan where the buildings are marked on a map, then deliver services to the area, and as a third step actually erect the buildings. It is only in the fourth stage that the inhabitants move in and start living in the area, which is a typical display of a “provider” model when coming to provision of housing (Misra, 2008). For an informal settlement this routine is usually reversed (ibid.), where the dwellers first occupy vacant land in a city, and only later on build dwellings from scratch with poor materials. After some time, services, such as roads, water and sewerage, and schools, might be delivered in and to the area, and the final step to move from informal to formal is if the area is formalised retroactively in an official land-use plan. This can be seen as part of a “supporter” model for generating housing (Misra, 2008), and for many people it is the only way of obtaining security of tenure. Informal settlements will be further discussed in the next section and more aspects than only informality will be considered, but we can conclude here that the people advocating the “supporter” model, according to Misra (2008:22), more often are weak in power than the group that promotes “providers” models; they are instead strong with economic power boosted by the cartel of real-estate developers and the interest seeking nexus between the politicians-bureaucrats-developers. As planners usually are working for the government, Misra (2008) argues that they are forced to comply with this “provider” model and will thus promote a more formalised way of planning and also of upgrading. This can affect supporter strategies negatively unless planners strike a good balance between the “provider” and “supporter” models. Combining “provider” and “supporter” models, and formality and informality can be tricky, but this cannot keep planners from trying to strike this wanted balance. Or as Innes, Connick and Booher (2007:207) put it;

planning is about the uncertain future and thus cannot be fully formalised in rules and procedures, but planners nonetheless have to be answerable to formal agencies and accountable to the public.
2.3 Slum

Slums, and the informal economy of which they are part, are the physical manifestation of urban poverty. It is ironic that the homes of the poor, which are not only their place of residence but also a potential source of earnings for many low income families, are seldom recognized as houses, which means they cannot be insured or used as collateral. Thus the largest single investment that most households make in their lifetime is, in the case of the urban poor, discounted as having no economic value (Tibajjuka, 2005:18).

Cited above is the former Executive Director of UN-HABITAT, Ms Anna Tibajjuka, and with just a few words she manages to highlight under how harsh and uncertain conditions the urban poor are living. Mentioned are the aspects of tenure rights, home-based enterprises, informality, urbanism, and poverty. We have in the previous chapters discussed both urbanisation and informality and now we are to look deeper into poverty and investigate how these concepts are connected to slums, how a slum can be defined, what consequences there may be from living in a slum, and how slums can be upgraded.

From reading the literature, it is clear to see that slums are considered as an urban phenomenon, which is also in accordance with the observations we made on site in India. If a deprived or informal settlement was within the boundaries of a city’s jurisdiction it was (if not ignored) listed as a slum, whereas a similar area outside a city was seen as a poor village or community. Since we now have entered the urban millennium, where for the first time in history more people are living in cities or urban agglomerations than on the countryside, handling slums is an important question in order to improve the lives of the many urban poor. According to estimations made by UN-HABITAT, one out of every three city dwellers, or almost one billion people, is living in slums and 90 percent of all slums are located in cities of the developing world (UN-HABITAT, 2006). By acknowledging these urban trends and seeing how many people that are affected by slums, the case of improving living conditions in slums is seen as one of the key dimensions to achieve the Millennium Development Goals as stated in the United Nations Millennium Declaration in 2000 (UN-HABITAT, 2006). The overarching goal of the Millennium Declaration is to halve world poverty by 2015 (United Nations Department of Economic and Social Affairs [UN DESA], 2009) and Millennium Development Goal 7, target 11 is more specifically concerning slums: by 2020, to have achieved a significant improvement in the lives of at least 100 million slum dwellers (UN-HABITAT, 2006:39).

There are many different ways to define poverty, and some of the most prominent ways is to use monetary measurements based on income levels or economic deprivation, such as the World Bank’s “$1 a day” or poverty lines where people are poor if they earn less than $1.25 or $2.50 each day (see for example Chen & Ravallion, 2008). However, this approach has been criticised for not taking into account how exchange of goods and services can happen without monetary transactions, and others criticise the approach for not seeing all aspects of poverty. For example, in a report published by the United Nations Department for Economic and Social Affairs, it is stated that poverty is a multidimensional phenomenon that extends beyond the economic arena to encompass fac-
tors such as the inability to participate in social and political life (UN DESA, 2009:8), and that three aspects are necessary to acknowledge to get a truly multidimensional perspective of poverty; restrictions in opportunity, vulnerability to shocks, and social exclusion (UN DESA, 2009:9). It is also one of our Human Rights, from the Universal Declaration from 1948, that everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services (UN DESA, 2009:6). When discussing poverty further in this thesis, we abide by United Nations’ definition where poverty is seen as a multidimensional phenomenon and non-monetary aspects are seen as equally important reasons for deprivation, poverty, and lack of quality of living.

2.3.1 Definition of Slums
The term “informal settlements” is, as mentioned before, often used almost synonymously with the term “slums”, although the first term does not take other dimensions into consideration but the mere informality of a settlement. Whether the dwellings are in good or bad condition, or whether the degrees of services and infrastructure are good or bad is not taken into account when referring to slums as informal settlements, and as discussed in previous chapter informality is not always linked to poverty. Meanwhile slums are being described by representatives for the United Nations as the physical manifestation of urban poverty (Tibajjuka, 2005:18) or as the shelter dimension of urban poverty (UN-HABITAT, 2006:26), the word “slum” first appeared in London during the 19th century with the meaning of a room of low repute or an unfrequented part of the town. By the late 19th century the word was defined in the Oxford English Dictionary as a street, alley, court, etc., situated in a crowded district of a town or city and inhabited by people of a low class or by the very poor (UN-HABITAT, 2003:7). Already at this time slums were marked out as areas suffering from poverty and overcrowding, and emerged at the same time as urbanisation increased heavily in England. Today the term still includes the aspects regarding poverty, urbanism, and high density and usually the settlement’s informal status is added on as an extra dimension.

In order to work with slum issues and poverty reduction as stated in the Millennium Declaration, UN-HABITAT (2006) has tried to come up with an operational definition of what characterises a slum, without falling back into dividing people into “the poor” and “the non-poor”, since this kind of measurement does not necessarily take multidimensional aspects of poverty into consideration. The definition is considered operational since it includes measurable indicators and uses households as the basic unit of analysis, recognising that slum households can appear both as larger gatherings of structures or as isolated units (UN-HABITAT, 2006). According to UN-HABITAT’s definition a slum household is a group of individuals living under the same roof in an urban area who lack one or more of the following five conditions: durable housing, sufficient living area, access to improved water, access to sanitation, and secure tenure (ibid.). For further details of this definition see box 2.1.

Of course it is not an easy thing to define what a slum is that can be true in each and every country, but the UN-HABITAT definition seems to cover the most important issues of slums as well as trying to prepare for measuring. What is durable can be debated; if the walls are to be accounted for, the roof material, or both, and the same materials might be perceived at different levels of durability in different parts of the world. The criteria for sufficient living area can also depend on context, but at least it sets an exact number. However, when the definition argues for sufficient amount of water, at an affordable price and that toilets are to be shared with a reasonable number of people there is a risk of judgments being made ambiguously, with the consequence of varying results from
settlement to settlement. The last condition regarding security of tenure stresses the important difference between possessing a legal document and de facto or perceived protection against forced evictions (UN-HABITAT, 2006). The slum dweller has either some kind of documentation that gives him or her right to the house or, as in the second case, such things as traditions or political standpoints make it impossible to carry out slum clearances in a certain area is giving the slum dweller a perceived protection.

The last component of the UN-HABITAT definition of slums is suggesting that all informal settlements should be considered as slum settlements, but in the Informality chapter we discussed and showed that informality does not always imply poverty of the settlements’ inhabitants. To call people slum dwellers when living in reasonably large and durable houses with access to water and sanitation just because their house is constructed violating building laws does not feel correct. To come around this problem, one could argue that a well-built house is enjoying a strong de facto protection against forced evictions, since one can assume politicians are more likely to knock down houses that are in worse condition and that people living in well-built but illegal houses are wealthier and would be harder to force to move.

Tenure issues in developing countries interest many researchers, maybe because land is unlike other resources in that it cannot be made or moved. It also excites intense emotional and psychological attachment in a way that services, materials and finance do not (Payne, 2000:2).

Payne further stresses that many different tenure systems exist and that they are affected by both historical and cultural influences, and he presents a variety of tenure categories arguing for that it would be simplistic to think of tenure in black and white terms, such as legal or illegal (Payne, 2000:4), and that there is a range of categories moving between legal or illegal, or in other words: formal or informal. Payne (2000) presents ten tenure categories that often are found in cities, and Figure 2.2 shows a typical distribution of these urban tenure categories by legal status. In Figure 2.3 the likely consequences of a provision of titles to “owners” of slum dwellings are illustrated. Here categories four to eight will move to the third category but

Box 2.1: UN-HABITAT’s Definition of Slums

A slum household is a group of individuals living under the same roof in an urban area who lack one or more of the following five conditions:

Durable housing: A house is considered “durable” if it is built on a non-hazardous location and has a structure permanent and adequate enough to protect its inhabitants from the extremes of climatic conditions, such as rain, heat, cold and humidity.

Sufficient living area: A house is considered to provide a sufficient living area for the household members if not more than three people share the same room.

Access to improved water: A household is considered to have access to improved water supply if it has a sufficient amount of water for family use, at an affordable price, available to household members without being subject to extreme effort, especially on the part of women and children.

Access to sanitation: A household is considered to have adequate access to sanitation if an excreta disposal system, either in the form of a private toilet or a public toilet shared with a reasonable number of people, is available to household members.

Secure tenure: Secure tenure is the right of all individuals and groups to effective protection against forced eviction. People have secure tenure when there is evidence of documentation that can be used as proof of secure tenure status or when there is either de facto or perceived protection against forced evictions. (UN-HABITAT, 2006:19)
still be likely to increase their security of tenure substantially, now as “newly legalised freeholder of squatter house or plot”. By improving tenure rights (not providing entitlement to land) in unauthorised settlements Payne suggests the likely consequences will be increased tenure security for the most vulnerable social groups, as shown in Figure 2.4. One of the greatest benefits for improving slum dwellers’ security of tenure is according to Payne (2000), apart from the psychological relief, the encouragement for the owner to invest in the plot and structure. The land or dwelling can also be giving access to formal credit and hence give the slum dweller an opportunity to invest in a small enterprise or in the house itself (see for example Payne, 2000 and Field, 2005). Looking at the tenure issue from this perspective, improving the security of tenure for slum dwellers would be a good way to help slum dwellers help themselves.
2.3.2 Consequences of Living in a Slum

Across the world there are many different kinds of slums; they can be vast, small, old, new, lack one of the components in the UN-HABITAT definition, or all five. They can be situated in the very centre of a city or on its outskirts, and also the evolution of a slum can differ in various ways. For example, a slum can be created when people in search of work move into cities and have no other place to stay than on the pavement. Later on these pavement dwellers start constructing settlements on previously vacant land and a slum settlement is created. There is also the case where a deprived rural village is incorporated into a city due to urban expansion, and thus falls under the city’s jurisdiction and gets the status of an urban slum. Another possible creation of a slum settlement may be when a built area that is already part of a city has degraded and lacking amenities turns it into a slum. Of course, different kinds of slums present different consequences for the slum dwellers. Some people are living on the streets without shelter as pavement dwellers meanwhile others are living in proper houses with running water but lacking a toilet. However, the UN-HABITAT highlights a few consequences common for people living in a slum, thus lacking one or more of the five conditions listed in box 2.1. These consequences include hunger and lack of food, higher rates of child mortality compared to other parts of the city, diarrhoea, and exposure to pollution (UN-HABITAT, 2006). Urban poor are disproportionately affected by HIV/AIDS, there are intra-city inequalities in access to education disadvantaging the poor, and slum dwellers are often more vulnerable to crime and natural disasters than other city dwellers (ibid.). Furthermore; there is the case where slum dwellers are paying more than what formal settlers do for services such as water, electricity and sanitation due to their informal status (Satterthwaite, 2005b). Slums are also creating divided cities and spur inequalities since where one lives substantially affect one’s chances of leading a healthy, dignified and happy life (UN-HABITAT, 2006).

One more consequence of living in a slum is that it is usually very dense, both with people and with houses. This depends on many factors, but one of the most prominent is that poor people need to be in close proximity to where they can find work and generate income, which was also discussed earlier in the Urbanisation chapter. Constructing costs are also one essential part, since it is more expensive to build multi-storey buildings than ground-floor structures. Hence the slum dwellers cram together in the city centres wherever there is space since it would be impossible for them to afford public transport, and to many hours a day travelling to and from a workplace will decrease the number of hours that can be spent working and earning. This principle has been presented visually by Vestbro (2008), as shown in Figure 2.5. Based on theories regarding priorities of the poor with respect to housing laid forward by John Turner (1976) it is argued that for very poor people with hardly any income at all a good location is essential, whereas in comparison amenities and services together with tenure status is considered unimportant. For people with a regular but limited income Vestbro (2008) draws the conclusion that land tenure becomes more important than being near work opportunities but the house itself is not considered equally important. Here we can see a form of stabilisation when a household have increased their income and becomes more established in an area. To the far right in the diagram we find the people with relatively higher income. For them it is not an issue to pay for transportation and hence security of tenure, amenities and the house itself become more important than living close to one’s work. Dharavi for example is one of the world’s largest slums housing approximately 800,000 inhabitants, and it is also one of the most densely populated areas of the world (Världen: Slummens arkitekt, 2009) hosting people who are trying to find work and to make a living in the city of Mumbai.

Many slums are not only a place where people live, but also a place where people work to make a living. Many people are working
in their homes with a variety of things and in some slums there are factories producing goods for both national and international markets. In Dharavi in Mumbai for example, it is estimated that goods are produced at a value of US $700 million each year and that there are 4,500 industrial units (Iyer, 2009). In smaller scale there are the so called Home-Based Enterprises, where people working from home as subcontractors are producing a variety of goods, or letting rooms or beds. All these smaller and bigger enterprises make it hard to redevelop slums since there is a sensitive production industry taking place. Often this is one of the most difficult issues to handle when redeveloping a slum; to retain the dwellers’ opportunities for income generation, and usually it is also one of the issues being hardest debated amongst the slum dwellers and developers (Världen: Slummens arkitekt, 2009).

Figure 2.5: priorities of the poor with respect to housing (Horacio, Turner & Seffian in Vestbro, 2008:6).
2.3.3 Two Models for Slum-Upgrading

The widespread problems with slums and informal settlements have introduced almost countless numbers of different ways on how to approach this issue. Slums and informal settlements are often considered to be dirty places with uneducated and criminal people, lacking all types of physical and social qualities according to politicians and planners (Vestbro, 2008). Therefore, many governments’ approach on how to handle “the problem” has often been to demolish the slums and replace these with minimum standard housing in permanent materials. This modernist model, which is referred to as the “provider model”, was the solution of housing problems in many industrialised countries where it has been applied with some success. Without any further investigations it was also accepted in the developing countries where the model never made any success. According to Vestbro (2008), John Turner was one of the first persons to oppose against this model, as he meant that the slum dwellers had enough knowledge and skills to be able to construct their own houses. Turner argued that the governments should cease doing what they were doing badly, for example build and managing houses (Mukhija, 2002). He also meant that the government’s involvement was counter-productive and not in the best interest of the slum dwellers. In contrast to the provider model Turner presented an idea that gave the residents the opportunity to produce their own houses with an incremental process which was realised either through self-help or by small, local construction companies (Vestbro, 2008). Some call this model the “supporter model” as it aims to support the inhabitants in their work to upgrade their housing. In a text by Vestbro (2008) he refers to Hamdi who has made a small model (see Figure 2.6) over how the two different strategies work, which according to Vestbro is a good description that captures the essences of the two very well.

As expected there is critique against Turner’s ideas about the enabling strategy (Mukhija, 2002). One of the two main critiques against the enabling strategy is the assumption that the absence of the government leads to more autonomy among the low-income groups. Though some argue that this will not be the case, as for most of the poor people, choices are constrained. Another critique was the numerous questions, but very little elaboration, on how to implement and institutionally support upgrading.

There is no clear answer to which one of these upgrading models that is the best one to practise. As in many other cases this is dependent on the prerequisites for each slum area as variables like finance, natural conditions and the desires of the people living there often plays an important role.

Figure 2.6: This is a diagram showing the different elements of the provider and supporter models as they were conceived by Nabeel Hamdi in his book Housing without houses (1991). In this book he establishes the fact that none of these models has been clearly successful and this is the reason for the question mark in the end where he opens up for the possibility to combine the two models.
Housing for rehabilitation of railway dwellers top left; bottom left and right: small-scale improvements of households’ living conditions.
3. India

On August 15 in 1947, India of today was born when British India was released from the British colonialist rule and divided into India and Pakistan. But ancient India’s history is dating back to 3000 BC, which was the time of the Indus culture, also called the Harappa culture (Ståhl, 2006). The Harappas lived along the Indus river valley, today situated in Pakistan, and they were the first larger culture in India where the cities, such as Harappa, Mohenjo-Daro and Chanhu-Daro, showed signs of advanced city planning. According to some discoveries they were even equipped with a sanitary system, the first known in history (Ståhl, 2006).

According to some discoveries they were even equipped with a sanitary system, the first known in history (Ståhl, 2006).

India is by geographical area the seventh largest country in the world and houses the second largest population with 1.03 billion inhabitants, according to the latest census carried out in 2001 (censusindia.gov.in, 2011). However unconfirmed sources estimate the current population size to more than 1.2 billion inhabitants.

India is called the largest democracy in the world and during recent decades the country has seen a steady increase in its economy (Ståhl, 2006), but still the majority of the population is living outside the cash economy. More than 35 percent of the population is living below the limits that the United Nations has set for poverty and an estimated 75 percent of the labour force is working in the informal sector (Chen, 2008). Or as Aravind Adiga puts it in his prized novel The White Tiger (2008) when the main character “The White Tiger” is writing a letter to the Chinese Premier Jiabao on occasion of his forthcoming visit to India:

August in Bombay: a month of festivals, the month of Krishna’s birthday and Coconut Day; and this year – fourteen hours to go, thirteen, twelve – there was an extra festival on the calendar, a new myth to celebrate, because a nation which had never previously existed was about to win its freedom, catapulting us into a world which, although it had five thousand years of history, although it had invented the game of chess and traded with Middle Kingdom Egypt, was nevertheless quite imaginary; into a mythical land, a country which would never exist except by the efforts of a phenomenal collective will – except in a dream we all agreed to dream; it was a mass fantasy shared in varying degrees by Bengali and Punjabi, Madrasi and Jat, and would periodically need the sanctification and renewal which can only be provided by rituals of blood. India, the new myth – a collective fiction in which anything was possible, a fable rivalled only by the two other mighty fantasies: money and God (Rushdie, 1981:150).
country’s economic status and its inhabitants’ health status, and during our nine weeks in India we experienced many things and saw a lot of contrasts within India. One of the most remarkable insights was the lack of security for one’s personal identity, since censuses are only performed once every tenth year and personal identification is tightly connected to one’s address. This makes it hard for slum dwellers to get their identity assured to cast a vote or to get a proof of residency, which is very important to have in order to be part of slum rehabilitation or upgrading schemes. The lack of maps was evident and it was interesting to realise that this important activity was in some cases to be carried out by local organisations, rather than the municipality.

Apparently, sir, you Chinese are far ahead of us in every respect, except that you don’t have entrepreneurs. And our nation, though it has no drinking water, electricity, sewage system, public transportation, sense of hygiene, discipline, courtesy, or punctuality, does have entrepreneurs. Thousands and thousands of them (Adiga, 2008: 4).

India is regarded as a developing country since it is situated in one of the seven developing regions of the world as pointed out by the United Nations (unstats.un.org, 2011), but there is no established convention for deciding what is a "developed" or a "developing" country or area in the United Nations system (ibid.). The term “developing country” often refers to a
Another relevant issue for our study is the official status given to people within the so-called “Scheduled Tribes” and “Scheduled Casts”, ST/SC in short. People belonging to the Scheduled Castes are also known as the “untouchable”, and even though “untouchability” is abolished and its practice in any form forbidden, as stated by the Constitution of India, it is still strong within the Hindu society (Planning Commission, 2006). To give these people the same possibilities in life as other Indian residents special strategies have been worked out where some exclusive rights are available to the people within ST/SC populations. For example, which is relevant to our case area where many people belong to SC/STs, the Ministry of Environment & Forests are requested to give legal status to the occupants/possessors of the forest villages and the land cultivated by them, they should be converted into revenue villages (Planning Commission, 2006:32). Furthermore, the Ministry of Housing is requested by the Government of India to purchase and allot land to homeless people within these categories to build on (Planning Commission, 2006:35).

Here we have tried to give an introduction to a grand and varying country. It is hard, but nonetheless there is one more thing needed to be mentioned; India is a country full of contrasts. Adiga’s “White Tiger” can describe it more vibrantly:

Please understand, Your Excellency, that India is two countries in one: an India of Light, and an India of Darkness. The ocean brings light to my country. Every place on the map of India near the ocean is well-off. But the river brings darkness to India – the black river (Adiga, 2008:14).

The light and the dark, the prosperity and the poverty, also exist side by side. Next to the lawyer living further down our street in Bhubaneswar was a slum settlement, and next to our case area, the biggest slum in Odisha, are the city’s fanciest hotels. With this thesis, we hope to explore ways of lightening up the dark.

3.1.1 Urbanisation, Slums and Informality in India

In the beginning of the 20th century 11 percent of the population in India lived in urban areas, constituting 25 million people. Through rapid growth and urbanisation this numbers has increased to 28 percent of the total population constituting 285 million people according to the last census made in 2001(Advani, 2009). Still, India stands out as one of the least urbanised countries among the developing countries (Kojima, 1996). Though looking at the urbanisation process can sometimes be misleading, since every country has its own definition of what is perceived urban which was discussed in previous chapter. In India the minimum population limit for classifying an area as urban has been put rather high (Shinoda, 1996). The limit is set at 5,000 people, and together with a few other criteria, where for example all statutory towns are defined as urban, this will make the urbanisation rate look lower in India than in other countries where the level is set at 2,000-3,000 people minimum. Another reason for the low urbanisation rate is the high pace of rural population growth, but if you compensate for all these factors India will still be one of the least urbanised countries among the developing countries. Despite this, migration rate within the country is not low but actually rather high, but because there is a higher rate of migration between villages the migration to urban areas appears low (Shinoda, 1996).

Urbanisation in India is the result of both migration and reclassification where reclassification is caused by changes in the definition of urban areas (Shinoda, 1996). Urbanward migration in India is nothing that, unlike in China, has been restricted. Although it is obvious that the state and central governments, with their various development and social welfare programmes for the rural population, have played an important role in discouraging urbanward migration. Looking at the urban growth in India, natural increase along with migration has contributed the most, especially during 1961-91, when the urban growth in India was at its peak. Where the reason for migrating according to Shinoda
(1996) differs distinctively between genders as women mainly migrate for marriage and men, although not having any dominating reason, often migrate because of employment.

Urbanisation, high levels of urban growth and absence of adequate planning have resulted in poverty, slum and squatter settlements as well as inadequate water and power supply together with worsen environmental conditions (UN-HABITAT, 2009). The problems caused by the urbanisation in India vary from place to place according to their scale and intensity (Advani, 2009), which we also experienced during our visits to different slum areas in India. These problems are reflected through the growth of the overall population and the absence of infrastructure to manage the increase of the urban population. Some of these problems are directly related to larger cities, especially the capacity of providing basic amenities in urban areas. The inability to manage the problem with a rapidly growing population has lead to unauthorised constructions in urban areas and encroachment along public roads. More or less all cities in India are facing the problems with slums. According to research made by UN-HABITAT (2003) 55.5 percent of India’s population lived in slums in 2001.

Apart from not having access to water, power and other basic amenities, security of tenure is one of the things that people residing in slums usually do not have. This means that they do not have any legal document or “patta” as it is called in India which is a formal proof of land ownership (Advani, 2009). If the slum dweller has a house but not patta this means that the construction and occupation of the house and land are unauthorised. According to Advani (2009), chances of possessing this legal document become lesser in urban areas and in lower classes.

India has also worked out a system on how to identify the condition of different houses in slum areas. They identify a house either as a “pacca”, “semi-pacca” or “kachha” which is a classification of buildings (Advani, 2009). A pacca house means it has been built with either concrete or some other permanent material and the roof is made of the same. A semi-pacca house is usually made from the same material as a pacca house but has problems with either asbestos or that it is smaller than the suggested Floor Space Index (FSI). Kachha houses are found in the last category which includes houses made out of material that requires much maintenance and rebuilding which is also generating a lot of costs. Usually these houses are made out of dirt with a straw roof or corrugated steel. As most of the roofs on the kachha houses are not able to keep the water out, many households try to patch the roof together using plastic material that lets the water run down on the sides instead.
There is an official definition of poverty in India which is based on the minimal income one household is required to have to be able to meet the minimum calorie consumption intake. Households which are not able to acquire the minimum level are classified as Below the Poverty Line (BPL) households which make them eligible to different government programmes (Sida, 2003). In Bhubaneswar this meant that these households were eligible to BPL cards which gave them right to a monthly ration of different groceries like rice, flour and sugar.

As mentioned in the previous chapter, slum is often used as a term for all the informal settlements which are becoming the most visible signs of urban poverty (UN-HABITAT, 2003). Informality is not something that exclusively can be connected with poverty since also other better off segments engage in illegal land occupation and construction to make high profits by for example sub-letting houses (Tranberg Hansen & Vaa, 2004). One might explain informality or the informal economy as De Soto (1989:14); it is the peoples’ spontaneous and creative response to the states incapacity to satisfy the basic needs of the impoverished mass. The informal sector has created a solution for those who are not able to be a part of the formal sector. In India this means that most people living in informal settlements also work within the informal sector (Urban Upgrading, 2000). This gives little protection as they work for less than minimum wage and there is no security that there will be work the next day.

In India there are three main strategies on how to upgrade the living conditions for slum dwellers1. The three strategies used are relocation, redevelopment and in-situ upgrading. For all three strategies, the first step in the process is for the municipalities to decide whether a slum can be notified or not, and for this estimation they use certain criteria. An unnotified slum will not be included in any upgrading programme whereof this process is crucial for the future of the different slum areas. Another key issue is the land ownership concerning if they own or rent the land (authorised) or if it is governmental land (unauthorised). Relocation usually takes place if the slum dwellers do not own the land, the land is earmarked or in a risk of flooding or other environmental threats. The aim is to relocate the slum dwellers close to their current position, which is not possible in all situations. Redevelopment takes place when the land is shared between the slum dwellers and other private persons/developers. Then the slum will be demolished to make room for a redevelopment with medium high apartment blocks, where the housing for the slum dwellers can be cross-subsidised through profits from either selling land to developers or apartments to people in the middle income group. The in-situ upgrading process implies a continuing work from the present situation, an enabling strategy. After establishing the existent conditions, guidelines on how to improve the living conditions is composed. Constructing a community toilet, expanding existing buildings from one-storey to two-storey or a densification with extra buildings are examples of how the in-situ upgrading is performed. In-situ upgrading is not used everywhere and according to Ms Kunte2 at SPARC this is not an upgrading option in Mumbai. The reasons behind this might be the high pressure in housing as this big city inhabits almost 19 millions in the greater Mumbai. Therefore, according to Ms Kunte, redevelopment or relocation are the only upgrading options in Mumbai as this means a possibility to build high and dense inhabiting more households or move the households to another vacant area and sell the land that was occupied.

1 Key-person interview with Ms Keya Kunte at the SPARC office, (Mumbai), 2010-10-09

2 Key-person interview with Ms Keya Kunte at the SPARC office, (Mumbai), 2010-10-09
3.1.2 Non-Governmental Organisations

A Non-Governmental Organisation (NGO) is an independent organisation that is not governed by a government. Although, as these organisations often work with questions that are of interest for the government they sometimes have close contact.

SPARC, Mahila Milan, National Slum Dwellers Federation (NSDF) and Urban Development Resource Center (UDRC) are the NGOs which we have come in contact with and although working with different issues they all work for the same purpose which is to reduce poverty in India. To better understand the work of the different organisations we will now introduce their work more in detail.

SPARC was founded in 1984 and the organisation’s initial work was with women pavement dwellers in Mumbai (Patel & Mitlin, 2001). The work with the women developed to a special organisation called Mahila Milan which means “Women together”. This NGO works with savings and credits for the slum dwellers. For the pavement dwellers, it all began at the train station in Mumbai years earlier, when they as migrants from rural villages came to the city in hope of finding a job. Since they had nowhere to live, no money and there was no space available, the pavement was the only space possible to claim. The women often worked as maids and as they were away for work and the children were in school, the government would come and demolish their houses to make room for pedestrians and bikers who otherwise would use the roadway. To stop the demolitions Ms Sheela Patel got involved and started to organise the women and this also became the start of the savings programme. In every street one woman was chosen to be responsible for the street’s savings account. These women would walk to every household, every day to collect money and in this way they also established a trust by caring for other people’s everyday life. Through the organisation and the savings they could show the government that they existed and that they were organised which became a pressure on the government to stop the demolitions. The savings later also developed into a loan system where the people could loan money with a low interest. Mahila Milan charged Rs.2 per Rs.100 per month compared to Rs.10-15 that other who gave loans would charge. Later on Mahila Milan also established a special saving for housing which was completely intended for new housing if the government gave them land.

SPARC and Mahila Milan continued their work with the pavement dwellers but to enable them to get land for housing from the government they realised that more support was needed (Patel & Mitlin, 2001). They started to cooperate with NSDF, another NGO founded by the urban poor in the mid-1970s. Together, these three NGOs formed “the Alliance” in 1986 and started to work on an organisational and educational strategy for community learning. These pilot projects and exchanges between different low income areas has been the core of the work since then. During the United Nations International Year of Shelter for the Homeless in 1987 many international contacts were established as there was a growing interest in the work of the Alliance. This was used to let the community leaders make exchanges with people from other cities and also other developing countries, although most of the exchanges were made within

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3 Key-person interview with Ms Sharmila Gimonkar at SPARC, visit to Mahila Milan’s first office by the Pavement Dwellers in Mumbai, 2010-10-08
the same city. With a lot of experience and knowledge the Alliance felt that they could take their work to the next step and start building houses. In 1995 a number of different projects had started including the savings and credit activities, exchange programs between communities as well as house building and resettlement.

Through time, the work of the Alliance has developed and the role of the different organisations has changed (Patel & Mitlin, 2001). SPARC’s work is now mainly within fundraising, financial management, research and keeping contact with the state and international agencies to see if there any possibilities of external support. NSDF and Mahila Milan are the grass root organisations working to mobilise the communities. Mahila Milan works as a decentralised community-based network of poor women’s collective (SPARC, 2010). In each collective the women manage the people’s savings and credit activities as well as slum surveys, mapping and housing and infrastructure projects. Empowering women is one of the key activities of Mahila Milan where they are working to encourage women to become leaders of communities and urban development. NSDF has also continued to work as a supporting and lobbying organisation which on daily basis works with education and organising small community groups to deal with essential needs (Patel & Mitlin, 2001).

In Odisha we came in contact with UDRC which together with Orissa Slum Dweller Federation (OSDF) and the local Mahila Milan organisation are a part of the national Alliance of NSDF, Mahila Milan and SPARC. OSDF and Mahila Milan have the same commitments in Odisha as in the rest of the country and have been active in Odisha since 1999 (UDRC, 2008). UDRC was first established in 2008 by professionals who already had been working with the OSDF and Mahila Milan. They thought there was a need for a new organisational structure to accommodate administrative, financial, documentation and other support which is the main function of UDRC today.

The mapping project which was performed during our stay in Bhubaneswar is not only a mapping exercise but also a way for the organisations to connect with the local inhabitants and empower them by helping them to take part in the development of their area. In this work UDRC is aided by SPARC.
3.2 Bhubaneswar

Bhubaneswar is the capital of the State of Odisha (formerly known as Orissa) and according to the last census from 2001 home to 642,000 people (BMC, 2006). Although the projected population for the city is that it has increased to almost 939,000 inhabitants in 2009, presumably resulting from a vast population growth principally in urban areas. The city is situated in the centre of the State of Odisha, which in turn is situated on the east coast of India. Odisha has the Bay of Bengal as its eastern border and West Bengal and Jharkhand bordering in the north, Chhattisgarh in the west and Andhra Pradesh in the south. The State was in 2001 home to 36.9 million people, of whom 15 percent, or 5.5 million, resided in urban areas (BMC, 2006). Odisha is the fifth least urbanised state in India and below the national average of 27.8 percent in 2001, and the illiteracy rate is comparably low with a State literacy rate of 51 percent and a national average of 66 percent. “Scheduled tribes and casts” (ST/SC category) constitute 24 percent of the total population (BMC, 2006). They live mainly in the inlands of Odisha on protected land and run life in a traditional manner. These places are also a main part of the tourism industry in Odisha, although not all tribal areas are open for visitors.

The climate in Bhubaneswar and Odisha is tropical with temperatures varying from maximum highs of 43°C and lows of 12°C in Bhubaneswar (BMC, 2006). The annual precipitation in Bhubaneswar is 1,498 mm, of which most falls during the monsoon season in July to September. The hottest months are April and May with an average high of 37°C and average low of 25°C. December and January are the coldest months when averages drop to 28°C (high) and 16°C (low) (weather.com, 2010). As a consequence of the climate a lot of activities take place outdoors, for example cooking, washing, meetings, trading and playing. This climate also calls for planning actions modified for the heat and rains. For example, very heavy rainfalls during the monsoon are to be taken into account, as well as stroking sun during hot days when the need for shadow is evident. The need for insulation is also lower than in colder places and windows can be smaller since the people are taking advantage of the daylight by being outside.
3.2.1 The History of Bhubaneswar
Bhubaneswar has not always been the capital of Odisha. While the city’s history traces back to the 6th century BC it was not until 1948 that it was decided that the city, then known as the Temple City of India, was to shift titles with Cuttack, the then-capital of Odisha. This was mainly due to spatial advantages such as the altitude (Cuttack is prone to flooding), climate, communication linkages, and the fact that there was a vast plateau possible to develop (BMC, 2006). When this shift was to occur, a new town was to be planned. It fell upon the German architect Otto H. Koenigsberger to do this, and a town for 40,000 inhabitants was planned, built and finished in 1956 based on neighbourhood principles and with administration as its primary function. Many historically and religiously important temples are still present and today, Bhubaneswar with its abode of Lord Jagannath form one part of the ‘Golden Triangle’ of Odisha together with the Jagannath temple in Puri and the Sun temple in Konark. It is estimated that around 600,000 visitors come every year to Bhubaneswar, hence creating an important part of the city’s economy.

3.2.2 Planning in Bhubaneswar
The city administration in Bhubaneswar is vested with the Bhubaneswar Municipal Corporation (BMC). Administrational, Bhubaneswar is divided into 60 wards and each ward is represented within the BMC by a corporator elected by the people. Two of these corporators are selected to become the Mayor and Deputy Mayor of the BMC and thus representing the people’s interest towards the bureaucratic side of BMC. Apart from the corporators, the BMC consists of an executive body headed by the Municipal Commissioner to act upon decision on a day-to-day basis (BMC, 2006). BMC obey under decisions and guidelines regulated by the Odisha State Government, which in turn are under the rule of the Government of India. The BMC has put forward a City Development Plan in 2006 where, among other issues, the slum question is highlighted. The document has the contents typical for an inventory where a lot of facts are gathered but the visions for the future are often lacking.

In order to handle the slum issue on a nationwide scale, the Jawaharlal Nehru National Urban Renewal Mission (JNNURM) was launched in 2005 by the Government of India through the Ministry of Urban Employment and Poverty Alleviation and the Ministry of Urban Development. The mission statement is

to encourage reforms and fast track planned development of identified cities. Focus is to be on efficiency in urban infrastructure and service delivery mechanisms, community participation, and accountability of ULBs/Parastatal agencies towards citizens (Government of India [GoI], 2005:5).

Through this project the central government will fund cities for developing urban infrastructure and services, and the mission comprise two sub-missions, namely Urban Infrastructure and Governance and Basic Services for the Urban Poor (GoI, 2005). From this mission 60 cities are eligible to apply for funding and Bhubaneswar is one of these cities. The JNNURM is supposed to run from December 2005 and seven
years onwards, but in 2009 another initiative was launched by the Central Government, called Rajiv Awas Yojana (RAY) that presented further guidelines for slum-free city planning (GoI, 2009). RAY envisages a ‘slum-free India’ through encouraging States/Union Territories to tackle the problem of slums in a definitive manner (GoI, 2009:1) and emphasise factors such as security of tenure, provision of basic amenities for slum dwellers, and tackling shortages of urban land with a whole-city approach. Funding for RAY-projects will come from the Central Government, just like JNNURM funding, but within RAY there is a greater focus on mapping and enumeration of slums and all cities wanting funding need to put together a city-wide slum survey where all slums in the city are marked out, and urban development is to be inclusive. These initiatives are not only about physical changes, but focus very hard on governance to be effective and accountable for its work towards its citizens. It is not only municipal bodies that can apply for funding; also organisations can in cooperation with slum dwellers run their own projects. However this can be difficult since both JNNURM and RAY demand information that can be hard for a small organisation to compile on its own.

3.2.3 Slums in Bhubaneswar
The initial 40,000 inhabitants have now been well outnumbered by today’s population and the city has grown rapidly and thus being faced with many of the difficulties of urbanisation, as discussed earlier in the theory section. There has been a threefold increase of the number of slum dwellers between the census 1991 and 2001, when not only rural people came to Bhubaneswar looking for jobs but where a great share also came as a consequence of the ‘Super Cyclone’ which struck Odisha in 1999.

When the municipality makes its list of slums, a total of 377 slums were identified in Bhubaneswar. 99 of these were listed on private-owned land and 278 on governmental-owned land. According to the 2001 census, 11 percent of the urban dwellers in Bhubaneswar were slum dwellers (BMC, 2006), though today the BMC estimates the slum population of Bhubaneswar to 308,000 people which approximately constitutes 32 percent (BMC, 2010). It is further stated in the city’s City Development Plan that the characteristics of these slums usually include

dilapidated housing structures with poor ventilation, overcrowding, inadequate lighting, lack of potable water, absence of sanitation facilities, faulty alignment of streets/lanes, inundation during monsoon season, lack of access for fire-fighting and control measures, and other basic physical and social services (BMC, 2006:5).

Even though the literacy rate among the slum dwellers is 56 percent and thus higher than the State average, it is well below Bhubaneswar’s rate of 78 percent (BMC, 2006). It is also observed in the City Development Plan that the average household is smaller in the slums than in the city in general (3.96 respectively 4.49 members per household). However, the average household size is not very informative and it can be delusive since households may range from one to ten members, and age structure and other variables are not shown in these averages.

In the notified slums estimations have been made on the status of the houses (BMC, 2006). Only 10-12 percent may be perceived as pacca by nature, while 15-20 percent may be semi-pacca and the remaining 68-75 percent may be kachha in nature. These numbers indicate high costs for capital upgrading of existing slums, and therefore the BMC, as well as the Government of India, is actively looking for opportunities for Public Private Partnerships where some costs can be financed through various ways of cross-subsidising.
4. The Case of Salia Sahi

Salia Sahi is Odisha’s biggest slum, situated on forest land in prime location in central Bhubaneswar next to big hotels and expensive offices it houses approximately 40,000 slum dwellers. The area was appointed to us by UDRC that wanted to see how the area could be upgraded. We worked in the classical planning manner of survey - analysis - plan and after six weeks in Bhubaneswar we put forward a land-use plan for the entire Salia Sahi and a development plan for a smaller part called Adibasi Gaon. As we had no previous experience of performing a slum upgrading project our proposal for Salia Sahi is one example of how this issue can be approached. Our intention has been to create proposals which later could be evaluated and then our continuing work focuses on the pros and cons of different work methods. This chapter constitutes the practical part of our case study and thesis where we will present our thoughts and proposals for this redevelopment project and finish with an assessment of our plan proposals. The assessment was done by letting representatives for both UDRC and Salia Sahi dwellers evaluate our work and suggest possible changes.

4.1 Background

Salia Sahi was founded about 30 years ago when people from the Salia tribe moved into the area searching for work in Bhubaneswar. The area, approximately 105 hectares, was at this time covered by jungle, but trees were chopped down to make room for dwellers and their new houses. First the male side of the population moved in and as they had settled the rest of their families followed. Today there is hardly anyone left from the Salia tribe, but the community still exists and there are other scheduled tribes represented within the area’s population. The slum is situated on forest land which is owned by the Central Government, and ruled under the notion of the Ministry of Forest and Environment. It is divided into two wards (number 15 and 16) by the BMC and consists of approximately 40 notified but unauthorised slums, which means that the slums in Salia Sahi are on the lists of BMC (notified) but that the dwellers cannot claim possession of the land where their houses are situated (unauthorised).

As mentioned before, Salia Sahi is Odisha’s biggest slum and it is situated in a prime location in Bhubaneswar, see map below. Next to the sheds of the estimated 40,000 slum dwellers there are several big and fancy hotels, such as the Mayfair Lagoon and the Trident, and big roads keep the area well-connected to other parts of Bhubaneswar and nearby towns. This great location is to be taken advantage of when financing the redevelopment project.
Map 4.1 over Bhubaneswar showing the main spatial features together with Salia Sahi.
For the development to happen a significant part of the costs must be funded by either in part of the Government of India through the JNNURM and RAY Missions, or by public private partnership such as cross subsidisation. 10 percent of the redevelopment costs can be funded by the state government and another 10 percent by the beneficiaries themselves. Cross-subsidising can be made by using incomes from selling land for commercial use and use the money for amenities such as infrastructure (roads, water, sewerage, etc) and for constructing community functions like community halls and schools. There are two identified options for commercial use of land to subsidise the upgrading for the slum dwellers:

1. Build and sell apartments to middle-income groups, either if the state builds and sells or sells the empty land to private developers
2. Build spaces for shops and offices which are to be let, either by the state government, BMC, or a private developer

We will not further discuss how this cross-subsidisation is to be implemented, nor is it within the realm of this thesis to carry out any cost-benefit calculations, but in our structure plan we will show areas that may be suitable for commercial usages and hence suitable to provide cross-subsidisation.

Any time-frame is not set for the redevelopment and the project is at an early stage, but the RAY mission is for five years more to come and the UDRC representatives believe the mandatory city slum profile survey is expected to be done by 2011-2012, with construction possible to start shortly after.

4.1.1 Salia Sahi and UDRC’s Wishes and Aims

From what we learned there was a wish for redevelopment slum upgrading where all existing houses can, if needed, be demolished to provide land for new buildings, both for slum dwellers as well as for commercial uses that would help cross-subsidising the well-needed redevelopment.

When planning for new dwellings in Salia Sahi we were asked to plan for a redevelopment with new buildings replacing the old. Transit houses where the slum dwellers can stay during reconstruction will have to be provided, and preferably they should be located within Salia Sahi. Although this is important it is something we will not investigate further. The Government of Odisha has set the minimum living space to 275 ft² per family but the inhabitants of Salia Sahi claim that this would be too small and that they require around 375 ft² per household. All apartments should contain a separate kitchen and bathroom. The height of the buildings may vary from three-story to six-storey buildings to make it possible to free land for commercial and communal uses. We have also been asked to plan primarily for the present slum dwellers and take help from BPL-cards, and different surveys made to identify slum dwellers and to figure out how many new dwellings that are needed. If free to choose, the dwellers would prefer to have their own garden and a place to keep their cattle, but community-based solutions like allotments and common grazing grounds seem hard to implement due to maintenance issues.

When planning the area the upgraded dwellings are preferred to be kept separate from the middle-income group dwellings due to differences in dwelling sizes and facilities. Although,

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4All information in this section comes from a meeting with Ms Bharati Singh, Deputy Mayor of BMC and corporator of ward 16 in Bhubaneswar, and representatives from UDRC held at the UDRC’s office (Bhubaneswar), 22/10/2010
5Below Poverty Line-cards are issued by the Government of Odisha to people who need subsidised food to survive. The BPL cardholders can collect groceries at Public Distribution Centres (PDC).
common facilities like schools, market places and community halls can be used jointly, creating connecting points and nodes. The land on which the new houses are built will initially be owned by the Government of Odisha, but it is the aim and hope of UDRC and the people of Salia Sahi that the land ownership will be transferred to cooperative societies consisting of the people living in a house where one man and one woman from every household should be listed as part-owners of the land. This is to avoid households from selling their plot or house and the aim is that all individual apartments will be owned by the heads of the household living there and thus giving them secure entitlement to the land.

4.1.2 Forest Land and its Implications
As mentioned before in the chapter “Slum”, one of the greatest issues for people residing in slum areas is security of tenure and the case of Salia Sahi is no exception. Salia Sahi is situated on forest land which means that it is under the jurisdiction of the Ministry of Forest and Environment. In short, this means that the people residing there have no legal rights to the land that they are occupying, although they are in possession of the house that they have built.

In 2006 an act called “The Forest Rights Act” was signed by the president, but was first notified into force on January 1st 2008, one year later (GoI, 2006). The act was made to address all the people residing on forest land, as “forest land” in India is not always an actual forest, but land that was recorded as Government forest land during the “Indian Forest Act” without taking any consideration into who actually lived in those places. In Odisha this meant that almost 40 percent of the forest land was never surveyed. This led to evictions with the pretext that the residents where encroachers on their own land. The original purpose of the act was to provide the British need for timber, by overriding the existing rights and forest management systems and turning the forest into state property.

"The Forest Rights Act” has been created to restore the rights of these people and grant legal recognition to traditional communities residing in forests. To get eligible under the act one has to satisfy a few conditions which are that you should primarily be residing in a forest and be dependent on the forest as a livelihood and proof that this has been true for the last 75 years or that you are a scheduled tribe in any way (GoI, 2006). Although this act has been established none of the residents in Salia Sahi are included since the area was occupied only 30 years ago and none of them are actually dependant on the forest land as livelihood which leaves them still residing “illegally” on forest land.

Another complication in the area is that neither the municipality nor state of Odisha are allowed or entitled to invest any money or change anything in the area because it is owned by the Central Government (GoI, 1980). This means that if it shall be possible to convert the forest land into residential use, the state of Odisha / municipality first needs an approval from the Central Government to proceed with such plans. According to UDRC6 the work on converting the land is an ongoing process between the Central Government, State of Odisha and the municipality and the outcomes are still unclear. Although this is an issue that needs to be solved before any redevelopment of the area can take place, we will not investigate this issue further.

In the RAY guidelines for slum free city planning (GoI, 2009), one of the aims for creating an inclusive city is security of tenure through entitlements. This means that central assistance will be given under the conditions that the state provides legal entitlements for the slum dwellers over their dwelling space. Considering that these are the goals from the Central Government there might be a possibility to convert the forest land into residential area since this no longer is used as forest land today but as home for 40,000 slum dwellers. Another positive thing is that the RAY mission officials have requested the Ministry of Forest and Environment to consider slums located on forest land to be development land and in that case converting the land might be an easier process7.

6 Meeting with Shibani Mohanty at UDRC office (BBSR), 2010-11-08
7 Meeting with Shibani Mohanty at UDRC office (BBSR), 2010-11-25
4.2 Planning Area

From mapping with GPS we defined the outer boundaries of Salia Sahi as shown on the map below. The map also shows the wards which Salia Sahi is located within. Being situated within three different wards can cause problem when handling the juridical part of the redevelopment. Ms Singh, which we have been in contact with, is corporator within ward 16 and might have different ideas of how the area should develop compared to the corporators of the other wards.

Early in the process it became evident to us that we needed to plan on not one but on several levels of scale. We needed a comprehensive plan for all of Salia Sahi to better understand the preconditions for how to develop a smaller area of Salia Sahi such as Adibasi Gaon, as well as making sure that enough land was being made available for the market to cross-subsidise the redevelopment. Hence, our first step was to create a land-use plan for all of Salia Sahi. After this we continued by making a development plan for Adibasi Gaon in the search for a model that could be used for the redevelopment.

For our land-use plan we have excluded the detached northern part of Salia Sahi, since here it could be more suitable with upgrading on a smaller scale.

Map 4.2 displays the different wards and the outer boundaries of both Salia Sahi and Adibasi Gaon.
4.3 Survey of Salia Sahi

The survey conducted has been on the entire area of Salia Sahi although without going into any closer details since the area is so large. The survey will discuss all the different prerequisites that we found relevant within the area, and this will be the basis for our analysis and further on for our plan proposals.

4.3.1 Population

In the Bhubaneswar Slum Profile Survey conducted by UDRC (2010a) they have estimated the population within all the slums in Bhubaneswar. From this we have taken all the slum areas in Salia Sahi and summoned the figures to a total population of 40,750 people within 9,120 households living in Salia Sahi (UDRC, 2010a). Although there are a few insecurities on whether these are the exact numbers as mentioned earlier in the methodology, these will be the numbers that we will continue to work with. The population of Salia Sahi is divided into 31 slums where 14 are situated within ward 16 and 17 in ward 15 (UDRC, 2010a). Because Salia Sahi is situated on forest land, this means that none of them are “patta” holders of their land.

The majority of the people living in Salia Sahi are working outside the area except for those who keep a shop or small workshop in their house or in the area. A few families keep cattle but most of them live in the outskirts keeping the cattle away from the residential area.

In the 16th ward where Ms Singh is corporator there is a self-help group that reaches out to almost a 100 percent of the population there. Mahila Milan has also just recently started to work with the inhabitants there and about 40 percent of the population in ward 16 are saving and borrowing money from Mahila Milan.

8 Meeting with Ms Bharati Singh, Deputy Mayor of BMC and corporator of ward 16 in Bhubaneswar, at UDRC’s office (Bhubaneswar), 22/10/2010
9 ibid.

4.3.2 Buildings and Building Structure

All of the houses in Salia Sahi are ground-floor structures but in very different conditions. Some of the houses are built for more than one household where each one has their own entrance, and some are for one household. The material used vary a lot where some households only have mud walls with a roof made out of straw or corrugated steel, whereas others are built in concrete or tiles. The mud houses are classified as “kachha” houses and the ones built in concrete represent the semi-pacca, none of the houses in the area are considered to be in the condition of a pacca house (UDRC, 2010a). To ventilate their houses there are often openings up close to the roof and also windows, although not made out of glass, which can be covered by wooden shutters. To avoid floods and rain from running into the houses most of them are built on a higher groundwork. Each household often creates some kind of boundary with a fence or hedge to point out their living space, since the outdoor area is also used for many different things like cooking and washing clothes.
4.3.3 Open Spaces and Streets
Open spaces are found in between houses or at road crossings where you often find a temple and some shops and there is also a large open play field within the area. Most of the open spaces are created underneath the overhead power line corridors although in some places you also find houses there which should be considered a dangerous place to locate one’s house. There are a couple of squares as well as bigger play/sports fields within Salia Sahi where people play cricket or football which are quite frequently used.

Streets are usually quite narrow with only four to five metres between opposite building facades, and it can be difficult for big vehicles to move through the area. Instead, rickshaws (a local three-wheeler) and light motorcycles are in favour, if not walking or biking. There are also many narrow alleys created when houses lie back-to-back but leave a gap for ventilation, and overall land is not always used in the most efficient way.

4.3.4 Services
In Salia Sahi the main land-use is residential so there are no markets or larger shops within the area. Some households keep a smaller shop within their house where it is facing the road, but for larger purchases the closest market is situated about ½-1 km away (UDRC, 2010a). Within the different slums there are different services available, for example some of the slums have a community hall, library, and temples according to the survey. There are a few pre-nursery schools for the smallest children and the Loyola School which is from pre-nursery to children up to the age of 10 is situated in north Salia Sahi. For high school the children have to go to a school situated outside the area. There is no health institution located within the area and the closest one is within ½ km distance is private and the closest governmental medical centre is about 1 km away. 14 Public Distribution Centres are also to be found in Salia Sahi, which is where people with a BPL card go to collect their food and other necessities.
4.3.5 Accessibility
Salia Sahi is situated in the north-western parts of Bhubaneswar connected by bigger roads in three directions and with the forest and a botanical garden to the west. Although it is not situated close to the centre of Bhubaneswar or close to the railway station (5 km) the area is surrounded by the city’s best hotels and largest business centres in one of the up-market areas in the city (see map below).

Accessing the area is easiest done by rickshaw since when driving deeper into the area roads become narrower and can only provide space for one car at a time. According to the survey done by UDRC all of the roads in the area are kachha roads (UDRC, 2010a). As the road surfaces are not prepared but consisting of red dirt roads are bumpy and not appropriate for heavier vehicles. Public transports are only available from the bigger roads surrounding the area about ½ km away and here one can take the bus to the city centre. In the area there is no heavy traffic since only rickshaws have the possibility to drive on the narrow roads and instead most people use either bicycle or motorcycle.

4.3.6 Electricity
Most of the households in Salia Sahi are provided with electricity through a legal connection. Some of the roads in the area have street lights but this is far from sufficient since many streets are still without any light during the darkest hours of the day (UDRC, 2010a). Across the whole area of Salia Sahi you find an overhead power line corridor, which not necessarily has kept people from building their houses underneath it. Powercuts are something the households suffer from as this is a common feature within the entire electricity system for the city of Bhubaneswar.

Map 4.3 showing business, hotels, institutions and residents surrounding Salia Sahi. West of the area lies the Ekamra Gardens, which is a part of the Chandaka Reserve Forest and a popular spot for day-trippers.
4.3.7 Water and Sanitation

Clean water is one of our most basic needs, consequently, lack of clean water is one thing that not only complicates daily life but also is health and life threatening (UN-HABITAT, 2006:82). In Salia Sahi none of the households have individual water which is a consequence from being situated unauthorised on forest land. The water supply in the area therefore mostly comes from bore and open wells (see Figure 4.2) and then there are also two public taps and a few tanks providing water (UDRC, 2010a). Since the wells are taking water from the groundwater there is no backup if the water becomes polluted, and since waste management or sewerage does not exist in the area the water is highly exposed to contamination risks.

Almost half of the households in Salia Sahi have individual toilets that are connected to a septic tank, but for the households that do not have individual toilets (see Figure 4.1) this means that they have to defecate out in the open. This creates an intolerable odour making the surrounding houses suffer and the absence of toilets are not only affecting the environment but are also a violation of the residents’ right to privacy and is also an insult to their dignity (UN-HABITAT, 2006:82). Mahila Milan is currently working with a community toilet project planned to provide sanitation for one of the slums, which is one step towards better sanitation. Wastewater (greywater) is either discarded on open outdoor area or through pipes leading from individual buildings, both which end up in the rainwater drainage system.

During the monsoon period, when it rains almost constantly during two to three months the capacity of the drainage system is highly stressed. Salia Sahi has its highest elevation in the north and the lowest in the south which means that most of the water runs off to a small watercourse south of the area. In the south of the area there is also a large drainage ditch which has an open solution that collects water from almost entire Salia Sahi. Within the area superfluous water not absorbed by the ground runs down the streets in ditches probably once created by the water but which are also maintained as drainers by the residents.

4.3.8 Solid Waste Management

Solid waste management does exist in Salia Sahi but insufficiently thus creating an unhealthy and dirty environment that also can affect the ground

![Sanitation Facility](image)

![Water Facility](image)

*Figure 4.1. and 4.2. Illustrating the distribution between different sanitation and water facility conditions (UDRC, 2010a).*
water quality. Within the area there are a few BMC bins and then the inhabitants also gather their waste on open places as it is later collected by the BMC. We could also see disposal of waste along the road sides in the outskirts of the area. It is the residents themselves that sweep the streets and keep their surroundings reasonably clean. The insufficient waste management is causing a lot of clogging problem with the storm water runoff. Another consequence of disposing waste out in the open is that it becomes accessible for cows and pigs, probably affecting them since this garbage to some extent is their food. This does not have to be a problem as long as it is only the remaining food that is accessible for them, but when they also eat both plastic and other non-digestive materials this can injure the animals. As the people also use the cows for milking, materials like plastic might also affect the quality of the milk.

4.3.9 Environment
Situated on forest land, most of Salia Sahi is very lush and green, creating a pleasant and shadowy environment. As the climate in Bhubaneswar is very hot during most of the year the city is at risk of becoming a heat island (see box below) and then the trees help to create a cooler environment which is beneficial for the residents of Salia Sahi. Other positive aspects for maintaining greenery in the city is that it creates a better microclimate, prevents erosion, absorbs carbon dioxide at the same time as it creates a pleasant environment. In the area of Salia Sahi many of the inhabitants originate from tribes and hence we believe nature has a cultural value to them. The trees and vegetation in the area are not only used for shadow as the residents also create fences and hedges from this material. One of the aspects when planning the area, is that as many trees as possible should be kept\textsuperscript{10}. Although not having a more detailed map over the area will limit our possibilities to take every single tree into consideration.

Based on looking at wells and other dug holes in the area, the ground seems to consist mostly of several metres thick red dirt. The ground surface also consists mostly of red dirt and has not been turned into hard surfaces in many places. The dirt makes it easy for the water to be absorbed into the ground making water go away faster. The trees and other vegetation in the area also help to absorb the water, which is very beneficial during the monsoon rains when water can sink away quickly. Salia Sahi is apparently not severely affected by these heavy rains and usually does not get flooded\textsuperscript{11}.

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Heat Islands:
Heat island is a phenomenon that occurs when a city has a higher temperature than its surroundings; hence the city becomes a heat island. This difference in temperature can stem from a variety of factors, such as that the built environment locks in heat from the sun during daytime and then works as a radiator during night, combined with the higher density of people and exhausts in big and dense cities around the world. Vegetation is good for reducing this effect since it both absorbs and reflects sun heat.

\textsuperscript{10}Meeting with Monalisa Mohanty at UDRC office 2010-10-26

\textsuperscript{11}Information given by Mr Singh, associated with the UDRC, on site in Salia Sahi (BBSR) 29/10/10
4.4 Analysis

In this section we are to analyse our findings from the survey based on principles and definitions from the previous theory section and from principles of spatial planning. The first analysis is a slum characterisation of Salia Sahi where we compare our case area with other slums and investigate if UN-HABITAT’s definition of slums is appropriate for Salia Sahi. This is followed by an analysis of building patterns in Bhubaneswar, a typology of houses and a typology of building materials found in the area. All of these have a more spatial approach focussing on physical conditions. Finally we list a few prominent qualities we would like to take into our redevelopment process and conclude by looking forward to our planning stage.

4.4.1 Slum Characterisation of Salia Sahi

In an earlier chapter we discussed the term slum, how it can be defined and that there are many different kinds of slum. Poverty, overcrowding and high density are just a few characteristics that are linked to the perception of slums. The growth of slums has been called an urban phenomenon, which is also true for the case of Salia Sahi.

It all started about 30 years ago when people moved into the city in search for work and needed a place to stay. At that time the area was located outside the city centre but today, due to the expansion of the city, Salia Sahi is located in a prime location. The same thing has happened to other areas, today defined as slum areas, which once were deprived villages but now have been incorporated in the city due to urban expansion. UN-HABITAT (2006) has estimated that on a global average, one out of every three city dweller is living in a slum which also is the case in Bhubaneswar where almost 32 percent of the total population are slum dwellers.

A monetary value is a common way to define poverty and even if slum areas should not always be directly connected to poverty it is interesting to compare how the situation in Salia Sahi stands in comparison to the World Bank’s poverty level of “$1 a day” per person. “$1 a day” is approximately the same as “Rs.53 a day” and the average household income in Salia Sahi ranges between Rs.1,500 to Rs.2,000 per month. This means that these households have approximately Rs.50-Rs.67 to live on each day, which is far below the poverty line since most households have more than one member. As most households live below or on the edge of poverty and barely can afford to put food on the table each day there is obviously only little money left for housing, travel expenses or other basic amenities. If there are children included in the households (which it often is) it will be up to the workers to provide for them so that the children can attend school. Otherwise they may need to work to provide for themselves and/or for their family too.
Given that most households live on the edge of poverty, it is not surprising that Salia Sahi can be defined as a slum based on the UN-HABITAT (2006) definition. Salia Sahi is a slum, as it is lacking five out of five criteria for not being a slum. As presented in a survey by the UDRC (2010a), the inhabitants of Salia Sahi are lacking durable housing as none of the houses are classified as pucca and approximately 25 percent are classified as semi-pucca and the remaining 75 percent are kachha houses. Overcrowded houses with more than three people in each room was another of the five conditions which also concerns Salia Sahi as the average slum household has 3.96 family members. Although this do not account for all of the households in Salia Sahi, as some only have two household members whereas others have five or more. Lacking access to improved water and sanitation are another two of the five conditions in the definition of a slum. Almost half of the population in Salia Sahi have no such facilities at all and the other half has individual toilets connected to a septic tank. Most of the households get water from either tube wells or open wells and none of the households have individual water. The last condition, in accordance with the definition, is that households in Salia Sahi are lacking security of tenure. Being situated on forest land none of the households own the land which they are residing on and as mentioned earlier, for that to become possible the land must be transferred in some way from the Forest Ministry to the municipality of Bhubaneswar and then either classified as developing land or handed over to the dwellers. Salia Sahi conforms with all five conditions to be defined as a slum and this also correspond to the experiences we got during our time of study in the area.

The definition of slums tell us that if only one of the five conditions is lacking in any area it can be defined as a slum, but it does not say anything about the actual conditions in the area which can vary enormously between different slums. It is a common assumption that all slum areas have very high density, high levels of poverty and deprivation, and are overcrowded. In Salia Sahi most households are overcrowded but the area has a very low density and the poverty rate varies between the households. The
similarities and dissimilarities between different slum areas depend on several factors where for example location can be crucial. Salia Sahi is nowhere close to the density that is found in Dharavi but then there is also the difference that Bhubaneswar has one million inhabitants compared to the 19 millions living in Mumbai.

Living in a slum does not make it easier for the inhabitants to improve their situation. For example, most of the Salia Sahi inhabitants do not have an address which makes it hard to get a proof of residency, which in turn would ease the process of getting an identity card or a BPL-card. Since we have chosen to define poverty not only in monetary terms the inhabitants of Salia Sahi are also poor in the sense that it is harder for them to participate in social and political life. There are also other restrictions in opportunity as it is hazardous to invest in their dwellings and without a permanent job it is hard to get a loan from the bank. The slum dwellers of Salia Sahi are also more vulnerable to chocks such as rains and mass eviction as well as social exclusion for it is evident that they are living in a slum. This further illustrates that poverty is not only an economic issue but a multidimensional phenomenon creating difficulties and inabilities for the slum dwellers to participate in social and political life.

4.4.2 Building Patterns of Bhubaneswar
To gain a greater understanding of how different areas in the city have been planned for different target groups, we have studied the building pattern in one upper middle-class, one middle-class and one slum area. The red circles on the map below show where the different areas are situated in Bhubaneswar. Please note that illustrations of the building patterns are not equal in scale.

Example of a house in a Salia Sahi where the house is made out of mud with a straw roof.

Three-storey middle-class house in concrete.
1. Upper Middle-Class Area
This pattern is from BJB Nagar where mostly people from the upper middle-class are living. This means paved streets and plots with gardens and often a very big house, though there can be more than one household in each house since the houses are very big.

2. Middle-Class Area
This area has three-storey buildings attached next to each other. Each house has one apartment on each floor giving every family approximately 90 m². Each house has a small backyard. The roads in this area are paved and they often have some shared open spaces or playfields.

3. Slum Area
The building pattern in the slum area is organic and the roads are not always connecting roads but just connect through small paths between the buildings. Although the houses lie very close most have clear boundaries to separate the private space from the roads and other open areas.

Conclusions
Comparing the three areas there is one very clear difference between the slum area and the other two areas. The first two areas have been planned and therefore they have a more organised street system and the plots have been divided in the same sizes. Since the slum area is not preceded of any planning there have been no regulations on how the streets should go or how big each plot should be. Another clear difference between all three is the size of the houses, going from very small in the slum area, then quite narrow three-storey houses and finally large houses with a big garden for the upper middle-class which the pictures to the left illustrate.
4.4.3 Typology: Outline of Houses
All of the houses in Salia Sahi are ground floor structures. We found four main categories of dwelling outlines in the area, differing in layout and access to semi-private open space (marked in shades of grey).

1. Single
These houses are situated either very scattered or gathered in small units of three to four houses, and one house is usually housing one household. The scattered houses do not usually have a veranda, thus lacking semi-private space. The unit houses create together with fences enclosed semi-private outdoor space. These dwellings also have verandas.

2. Attached Single
These houses come either with or without verandas. The attached single houses facing the street usually have a veranda, and the houses with their side to the road create enclosed space which is considered private.

3. Double
Not a very common dwelling structure, but some houses are built as doubles where two families live.

4. Row House
One structure containing three to four households in one apartment each, always with semi-private outdoor space.
4.4.4 Typology: Building Materials and Ventilation

The houses in Salia Sahi do not only differ in outline, but they are in very different conditions and to illustrate this we here show the materials most frequently used for walls and roofing, as well as solutions for ventilation.

**Building Material**

- **Mud**
  - Available in the area and therefore not expensive
  - Good for keeping the heat outside and the inside cool
  - Not a long-lasting material
  - Needs much maintenance

- **Concrete**
  - Solid and long-lasting material
  - Expensive

- **Bricks**
  - Good bricks are solid material
  - Bad bricks are more common

**Roof Material**

- **Straw**
  - Keeps the house ventilated
  - Not expensive, available in the area
  - Not water resistant
  - Needs maintenance
  - Has to be changed every year

- **Corrugated steel**
  - Long-lasting
  - Rain resistant
  - Corrosion might occur
  - Heat preserving
  - Expensive

- **Asbestos**
  - Long-lasting
  - Toxic

**Ventilation**

In this humid and hot climate ventilation becomes a very important issue to keep the moist and heat away. Therefore most houses have small openings close to the roof so the house can self-ventilate. As illustrated below they can be both a decorative part of the house or a bit more basic.
4.4.5 Qualities in the Area to Bring into Redevelopment

In order to summarise visible and experienced qualities in Salia Sahi we have given notion to the elements presented by Kevin Lynch in *The Image of the City* (1960) (see box below), but we have not undertaken to perform a detailed Lynch-analysis of all of Salia Sahi. The area is too big for that and it would be very hard to locate all meeting points etc in detail since map material is scarce. Instead, we have used the notion of the elements and compiled qualities within the area which we would like to take into our proposals for redevelopment. These qualities could many times be categorised into either nodes or paths and hence we are still building on the principles mentioned above.

The area is restrained by a big barrier to the west in the shape of a wall enclosing the Ekamra Park. Surrounding roads can be crossed without more hassle than anywhere else in Bhubaneswar, and do not create further borders. There is one clearly visible landmark and that is the power lines in and around the area. This landmark is to be kept since we consider it impossible to move or put underground due to its high importance for the national electricity grid and high costs for changing it. Therefore, also in the future the residents of Salia Sahi will be able to look at the power lines and use them for orientation. Below follows five points summarising existing qualities in Salia Sahi which we would like to take inspiration from and where possible put into our plan proposal:

• Life Between Buildings

Stemming partly from small indoor space, smoky food preparations, and a hot climate outdoor spaces are frequently used for socialising, cleaning, cooking, washing and handcrafting. The habit of being outdoors is enhanced and improved by verandas and a general openness between the outside and inside of houses. Usually small shops are lining the streets where children are playing and bikes pass by, and open spaces such as small squares and play fields are often populated.

Lynch Analysis:
In 1960, Kevin Lynch presented five elements one will find in a city’s spatial composition. They are as follow: nodes – point elements where roads meet and one can change direction; paths – linear element along which people are moving; landmarks – point elements easing orientation; barriers/borders – linear elements enclosing or divides one area from another; and areas – areas where its internal structure creates coherence.
The street pattern in Salia Sahi (as displayed to the left) is not a consequence of previous planning, but a result from step-by-step development adding house to house. The outcome is a varying, winding, and exciting system of roads where by bike or by foot are the easiest ways to get around. There are cars in the area, although they cannot reach every street and they have to move very slowly.

Natural meeting points have evolved around cross-roads, temples, small squares, and play fields where kiosks also have popped up later on. These places are usually protected to some extent by the shadow from trees.

Apart from providing shadow and overall a more pleasant micro climate in Salia Sahi, the vegetation is used for fencing and as building material. All plants also help to prevent erosion and the ground stays stable even during monsoon. Salia Sahi is very lush in some parts, almost as green as one could expect a forest to be.
As shown above, Salia Sahi holds many qualities but these ones listed are not always beneficial when taken in excess. The organic street pattern can many times be confusing for visitors and it is also a hazard since it is difficult for firefighters or ambulances to drive up to the places or persons in need. Organic street patterns make it hard and expensive to provide infrastructure. The dense vegetation combined with the street pattern also makes it even worse to orientate since it can be very hard to see where a road turns or where even a bigger house is situated.

To condense and connect to Lynch’s ideas on a city’s elements, we would like to suggest that presently there are many paths and nodes within Salia Sahi, that the area has well-defined borders, one obtruscing barrier and is lacking landmarks. The final element yet to be mentioned is the area. Salia Sahi makes up one very distinct area when comparing to the surrounding areas constituted by big institutional buildings, neighbourhood principle-based residences, and fancy hotels placed in parkland. But within Salia Sahi it is very difficult to distinguish one slum from another, although we perceive the slum dwellers themselves not to have the slightest issue with this at all. So in order to work thoroughly accordingly to Lynch’s principles we will also try to plan for smaller areas within Salia Sahi to generate its own identity, thus making orientation easier as well as trying to lessen the stigma attached to the name of Salia Sahi by highlighting its various parts.
4.4.6 Conclusions
After this survey and analysis we have learnt a lot about Salia Sahi and Adibasi Gaon. Some of the strengths of the area that struck us are, apart from the great location, the area’s green structure, the community participation, and gathering nodes around temples, schools and smaller open spaces. The area’s main drawbacks are the lack of basic amenities such as running water, sewerage, waste management and well-managed roads. Inhabitants of Salia Sahi are living beneath both poverty levels and power lines, and to have any sort of privacy is difficult. There is a greater vulnerability to flooding and other environmental disasters, water contamination, outbreak of deceases, but maybe the biggest risk is that the area may never develop and the dwellers will continue to live under these poor living conditions. However, with the JNNURM and RAY missions and/or cross-subsidisation there are possibilities to get funding to create a better living environment with improved housing, water provision and sanitation. The area is big and we believe it is possible to build new houses and infrastructure such as roads and still be able to keep a lot of greenery.

Today the inhabitants of Salia Sahi have established a life in Bhubaneswar and found work opportunities within a reasonable distance from home. This means that they are not interested in moving to any other vacant area as they need to be close to their work. An upgrading or redevelopment of the housing in Salia Sahi is therefore more appropriate within the area.

We have decided to make a land-use plan for all of Salia Sahi since we felt that there was a lack of visions and strategies for the area’s future as a whole. With a land-use plan we can also suggest which usage that can be most suited to different areas, and we can set comprehensive outlines for infrastructure. In a land-use plan a road network can be combined with sewerage systems and water pipes to provide the inhabitants with basic infrastructure services and the roads can be used by emergency vehicles and for waste collection.

To see how the upgrading can be done more in detail we have planned for a smaller area called Adibasi Gaon, where the interaction between buildings and open spaces can be further investigated, which we believe will be a good basis for discussion.
4.5 Plan Proposal for Salia Sahi

Since the land on which Salia Sahi is situated is marked as forest land, no development or structure plans exist for the area; all official maps and plans say ‘forest’. We perceived a comprehensive land-use plan beneficial given that it is easier and cheaper to prepare for accessibility and infrastructure in initial stages so this does not need to be handled in the end when other structures already have been built and thus can be in the way. We also needed to make sure the land was designated for its most appropriate purpose (for commercial, forest, or redevelopment) to make this redevelopment scheme feasible with cross-subsidising. It is usually also easier to gain coherence for big changes when they are presented as a whole package, so that everyone can see that even if a few details might not be someone’s cup of tea they can see that the big ideas and changes as a whole are beneficial.

4.5.1 Land-Use Plan

From measurements in the online software Google Earth Pro we get that Salia Sahi covers an area of approximately 95.4 ha, when excluding its detached northern part. According to a survey carried out in 2010, the number of households presented in the different slums of Salia Sahi is 9,120 (UDRC, 2010a). So we are to plan for 9,120 dwelling units with a minimum of 375 ft² each, which is equal to approximately 35 m². In our continuous work we will use the metric system. To be able to cross-subsidise the costs for redevelopment with commercial funding a suggested disposition of land was put forward by our local tutor¹² which stated that approximately 15 percent of the land should be marked as forest land, since all of the land now is forest; 35 percent should be marked for commercial usage; 30 percent for redevelopment; and 20 percent for infrastructure such as roads, drainage and power lines.

Our suggested land-use plan for Salia Sahi can be seen on the following page, where land-use is marked out as well as important connections through the area. Approximately 46 percent of the land is designated for commercial usages, i.e. housing for middle-income groups, business, institutions, or hotels; 37 percent is designated for redevelopment housing for the slum dwellers; and 12 percent is marked out as forest land/park. The remaining 5 percent constitutes of bigger roads within the area, and further infrastructure is to be constructed within the commercial and redevelopment land respectively. There is also an area along the central road where we suggest a mixture of redevelopment and commercial usage to get a more vivid district. In order to get most possible value out of the commercial land we chose to mark the areas we estimate being of highest value for these purposes. Hence we put commercial land next to the big road east of the area and in proximity to hotels, institutions, and other housing for middle-income groups. Given the above stated percentages there will be 35.3 ha of land for redeveloping dwellings for the Salia Sahi inhabitants, compared to today’s 95.4 ha (see figure below).

<table>
<thead>
<tr>
<th>Land-use</th>
<th>%</th>
<th>Hectare</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial</td>
<td>46</td>
<td>43.9</td>
</tr>
<tr>
<td>Redevelopment</td>
<td>37</td>
<td>35.3</td>
</tr>
<tr>
<td>Forest Land/Park</td>
<td>12</td>
<td>11.4</td>
</tr>
<tr>
<td>Other</td>
<td>5</td>
<td>4.8</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td>100</td>
<td>95.4</td>
</tr>
</tbody>
</table>

¹² Meeting with Ms Monalisa Mohanty on UDRC’s office, 2010-10-29
Map 4.4. In the land-use plan for Salia Sahi important new connections are marked out going both north-south and east-west through the area. Here it will be possible for larger vehicles to get through and main pipes and sewerages can be places next to these. Areas for commercial use are placed next to other commercial buildings and close to the main road east of Salia Sahi, which gives an easy access to the new commercial areas. Forest land/Parks are marked out in larger gathered areas where parks can serve the inhabitants with closeness to nature and where land is suitable. Vegetation is also to be kept wherever possible when developing the area. Trees can line the main roads to give protection against strong sun and pollution. The resettlement areas are kept separate but close to housing for the middle-income groups and meeting places like schools, squares etc are to be used jointly.
4.6 Plan Proposal for Adibasi Gaon

The area of Adibasi Gaon is 6.4 ha and after subtracting the area in the north consisting of the Mahatma Gandhi School, 5.5 ha is left to redevelop. 6.4 ha is about 18 percent (6.4 ha/35.3 ha) of the land marked for redevelopment in the land-use plan and given the fact that 9,120 dwelling units (one for each household) are to be built on 35.3 ha, 18 percent or 1,641 dwelling units are to be built in Adibasi Gaon. This number we have rounded up to plan for 1,700 dwelling units, and furthermore there needs to be places left for schools, community centres, temples, market places, and so forth, in accordance with the wishes of the inhabitants of Salia Sahi. Today 545 households live in Adibasi Gaon, and there are also two temples, one school, two ”mandas” (squares), one liquor-bar, and one community toilet under construction.

*Map 4.5 shows where the area of Adibasi Gaon is situated within Salia Sahi.*
4.6.1 Density Analysis of Adibasi Gaon
To illustrate the proportions of the land available and how many households we are planning for we have made a density analysis. The pictures below show the relationship between different kinds of houses and the land that is at our disposal, in red. To be able to make this comparison we have created different typehouses, which are shown on the next page and in Appendix A, so that we know that the different proportions are correct and include space needed for staircases etc. in structures higher than one floor. Adibasi Gaon has a total area of 5.5 ha and that is illustrated through the red square on which the houses are placed.

**Ground Floor Structures**
This first analysis is made with a 35 m² (approx. 375 ft²) apartment which is the area requested from the inhabitants. As illustrated there is no possibility to build just ground floor structures since there is no space left for infrastructure and other open spaces.

**Two-Story Structures**
The second analysis show the relationship when the 35m² is divided into two floors. This solution saves much more space than the one above but can still not provide space enough for infrastructure and open spaces for the area.

**Three-Story Structures**
This third analysis shows a three-storey building for six households and as shown this creates more space for infrastructure and open spaces. Although, even this might not be enough to make a good environment.

**Four-Story Structures**
In this last analysis a balcony house with four floors has been used. This solution provides enough space for both the infrastructure and other facilities.
The density analysis shows that there is no possibility to build only one-, two- or three-storey buildings. Just using four-storey buildings will create enough space left for infrastructure and other functions but also tends to create a monotonous environment.

The conclusion made from this analysis therefore is that the best thing is to try to combine all the different typehouses except the ground floor house and then mostly use the three- and four-storey buildings.

**Typehouses in Adibasi Gaon**

In our plan proposal for Adibasi Gaon we have used six different types of houses. The reason for using different types of houses and also different heights is to create a more varied cityscape. All of the houses are built with balcony in some way, creating an outdoor space for each household close to the dwelling. Every dwelling unit is 35 m² and has separate bathroom and kitchen as well as windows in two directions creating good possibilities for ventilation. These typehouses were primarily drawn so we could investigate how the number of floors would affect the aerial footprint for each dwelling unit, when for example staircases and balconies are taken into account.

In Appendix A there is a more thoroughly presentation of these different housetypes which we used in our development plan for Adibasi Gaon.

Typehouses used in the density analysis. From left, four-story, three-story, two-story and single-story buildings all with both ground- and upper-floor layouts.
4.6.2 Development Plan for Adibasi Gaon

In order to create a pleasant living environment for current and new dwellers of Adibasi Gaon, we have tried to use varying heights and layouts of the houses to construct an area less monotonous than other redevelopment projects we have seen on field trips in India. In our suggested plan (see map 4.6) we work with two-storey row houses, three-storey houses with private balcony entrance, and four-storey houses with entrances from a communal balcony, all of which can be seen in detail in appendix A.

By building structures with different layouts and heights there is a difference of costs for the different dwelling units. But learning from our experiences we draw the conclusion that there is no such thing as a typical slum dweller. Many of them are poor, but we believe that even amongst slum dwellers there are differences in income and hence opportunity to invest in a new dwelling. With the purpose of making such an investment more attractive we have also designed the dwelling unit to be flexible, in the sense that they can expand, of which more is written in the following section. This is done so that the built environment of Adibasi Gaon is able to change in accordance to its population. By not building only one type of houses it will also be easier to orientate within the area, and different streetscapes can be provided.

In the development plan there is space allocated for temples, community centres, and schools, although the final usage of these places we leave to the inhabitants to decide themselves (see example map 4.8).

The sports field east of Adibasi Gaon is to be kept, which is shown in the land-use plan for Salia Sahi, and will continue to be beneficial for all inhabitants in its proximity. Larger squares locally known as open-air mandaps, can still be situated in the southern part of the area. Commerce is placed at a variety of localities within Adibasi Gaon. There are many open spaces where small shops or workshops can be placed (see map 4.8), and the ground floor dwellings can also be combined with business opportunities.

Infrastructure like roads, water, sewerage, and street lighting is also included in this plan, see map 4.7. To make the most efficient use of the space available, we decided to put big roads next to the power lines that cut through the area. This will also provide easy access for maintenance of the power lines, and avoid households living right underneath one. Big roads in the plan are suggested to have a five meter wide driving lane with sidewalks or other open space surrounding it. Pipes for water and sewerage is to be put next to the road for easy access for maintenance and storm water drainage is also placed next to the big roads. Trees and other vegetation is to be kept wherever possible to provide shadow and shelter when being outdoors in Adibasi Gaon, and new trees can be planted. This is beneficial for keeping the soil from eroding, as well as to take care of rain water.

The proposed plan consists of 1,696 dwelling units dispersed as shown in table below, and the Built Total Area (BTA) is 40,776 m$^2$ resulting in a Floor Space Index (FSI) of 0.7 for the redeveloped part of Adibasi Gaon.

<table>
<thead>
<tr>
<th>No. of floors</th>
<th>Type of House</th>
<th>DU/building</th>
<th>No. of Buildings</th>
<th>Total DU in this type</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Row House</td>
<td>1</td>
<td>8</td>
<td>8</td>
<td>0.5%</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>6</td>
<td>22</td>
<td>132</td>
<td>7.8%</td>
</tr>
<tr>
<td>4</td>
<td>Short w Balcony</td>
<td>24</td>
<td>2</td>
<td>48</td>
<td>2.8%</td>
</tr>
<tr>
<td>4</td>
<td>Long w Balcony</td>
<td>32</td>
<td>4</td>
<td>128</td>
<td>7.5%</td>
</tr>
<tr>
<td>4</td>
<td>Angle</td>
<td>35</td>
<td>4</td>
<td>140</td>
<td>8.3%</td>
</tr>
<tr>
<td>4</td>
<td>Block</td>
<td>124</td>
<td>10</td>
<td>1,240</td>
<td>73.1%</td>
</tr>
</tbody>
</table>

**Total DU:** 1,696 100%

Figure 4.4 displays the disposition of the different typehouses in Adibasi Gaon. DU stands for dwelling units.
Map 4.6, the development plan for Adibasi Gaon.
Map 4.7 shows the outline of water and sewerage systems in Adibasi Gaon. All pipes are put next to the main road running through the area which makes it easier for maintenance to locate and adjust problems. Individual connections to buildings are not shown.

Map 4.8 shows alternative locations for shops and workshops or for example temples, schools and squares. The main road is expected to be the main path where people will move in the area, and hence a good place for businesses. A larger square is found in the south-east of the area where big markets can be held periodically. Dwellings on the bottom floor in attractive areas can also be converted into shops or small offices if the household so wishes.
Section A-A
Section illustrating the relation between new buildings and the wall enclosing the Ekamra Gardens, and how trees can be kept to add qualities to the courtyards in the block houses.

Section B-B
Here it is shown how vegetation can be integrated in the area, providing shade for people working, walking or biking on or along the streets. Streetlights are placed along major roads and balconies and verandas will help to contain outdoor life between the buildings.

Section C-C
Due to the power line houses here are placed with balconies facing the street so the dwellings will be another metre further away from both the power line and the main road.

Section D-D
An example on how along the smaller roads the balconies are turned from the street. The street feels narrower and adds variation to the areas street pattern. An example of the location of a temple is also shown.
3d-illustrations of how the new Adibasi Gaon can look in the future with two-, three- and four-story buildings. As shown, there is enough room between the houses for people to continue working, cooking, playing and vending outdoors and the roads are wide enough for the increased population to travel on. The area is not adjusted to every dweller getting a car, since this is most unlikely to happen and would demand a lot of space for even wider roads and parking. The block houses’ courtyards give residents a semi-private space and other houses have a semi-private space on their balcony or veranda. We have as much as possible tried to avoid undefined space, or space “left over” when planning.
4.6.3 Flexible Buildings

One important issue which we have been thinking about while planning the redevelopment of Adibasi Gaon, is how long the timeframe will be. For how many years are these people going to live on only 35 m² and should the buildings always have just these apartments? For now, this might be the best solution for slum dwellers to have both kitchen and bathroom, and maybe they want to live like this always. Though, an even better solution is if the apartments are flexible, so that in the future they can expand and change without all the residents having to move away to a bigger apartment in another area. This also gives the area of Adibasi Gaon a better opportunity to sustain its social complexion. The flexibility which is demonstrated on a few examples beneath is made possible by having a non-carrying wall between two apartments so that the wall can be removed and create a bigger apartment. It is also possible to put in elevators in all the balcony houses, which means floors can be added to the buildings.

In a two-story row-house another floor can be added, providing extra space for the household.

Two dwelling units in a three-story house can be converted into one larger unit by taking down the wall separating the two. The toilet becomes bigger and the household can choose to have two entrances, or one entrance and one private balcony/veranda.

The same principle as above, but in the four-story buildings, where two dwelling units are converted into one twice the size. Here the kitchen is expanded and has its own entrance and a private balcony is added.
4.7 Assessment

After our six weeks in Bhubaneswar it was time to present our plan proposal to get feedback from the different organisations and our local tutors. The first presentation was with UDRC and Mahila Milan at UDRC’s office in Bhubaneswar and Mahila Milan partially consisted of women who actually live in the area. During the meeting one of the employees at UDRC acted interpreter between us and the Mahila Milan women. Throughout the presentation there was a discussion on different issues whenever someone had an opinion about our proposal.

Most of the opinions came from the Mahila Milan women who thought the proposed apartments were too small, they wanted bigger ones. They also thought it would be easier to expand the houses if they would have their own ground plot, then they could add another floor whenever they needed. One of the main reasons to why they wanted bigger apartments was because of their sons, since they have to accommodate their son and his family in the future when their sons get married. Another issue which they also discussed was parking lots for their vehicles. Apparently the Salia Sahi dwellers’ opinion about the redevelopment was not in coherence with what Ms Singh told us in the beginning with our work.

After our meeting with UDRC and Mahila Milan we had another meeting with Ms Mohanty (head of UDRC) in New Delhi who had a few other points of view regarding the proposal. Ms Mohanty thought that all the buildings should be of the same height and maximum three floors and that all the apartments should have the same area. She further proposed that ground structures should be avoided since the people do not own the land, and might not be given entitlement to the land in the future either. It could be hard to argue for the slum dwellers getting entitlement to the land since it is now forest land which they at present have no legal right to. If an external developer were to develop the land, presumably they would not find it economically beneficial building only ground structures. For flexible housing Ms Mohanty also mentioned that the houses should have external staircases so that each floor could be one apartment. The most important thing of all that we discussed was the feasibility and economical issues for the whole project. Without a good proposal on how to solve the economical issues the municipality will not, according to Ms Mohanty, accept the proposal.

Our next meeting was at the SPARC office in Mumbai where Ms Patel, Ms Kunte and a few others attended our presentation. Ms Patel, who is the founder of SPARC and has worked many years with slum upgrading, had many opinions on the work we had done. Her opinion was that it was too big scale of the buildings and not an upgrading of the area. There should be smaller rooms within the apartments and everything should be mixed more both in scale and use. By rebuilding on the foot print it would mean minimum intrusion to improve people’s life. In our proposal we suggested flexible apartments so the area could develop in the future but such gentrification of the area was unwanted and something one should protect the slum dwellers from. Though our hope was that the slum dwellers will be able to increase their income in the future this is something that rarely happens, according to Ms Patel.

We also received some opinions from our Swedish tutors and also here the opinions differed. Whereas one of our tutors considered our plan to be quite well performed in view of how Swedish planning is carried out, our other tutor considered it to be a typical provider model and wanted to see more of a supporter model solution. There were also a few thoughts about the buildings where one suggested a few modifications of the housetypes and the other one wanted more organic patterns since it would be too expensive to build the presented housetypes.

After taking these opinions into consideration and after some time we can understand and agree with many of the viewpoints presented above. When coming to India we were open-
minded about how the work would evolve and had no initial ambition to present a modernistic solution. After talking to our local tutor and the Deputy Mayor (who lived in the area we were going to plan) we had a few prerequisites to work from. According to the mayor they wanted the whole area to be demolished and rebuilt with proper houses containing running water, sewerage and other basic amenities. Our time was limited and we did not have any maps to proceed from so we had to use Google Maps trying to find out the outline of our case area. Our ambition was to make proposals which we could discuss to find out how and what they wanted from developing Salia Sahi. With our plans we tried to take a holistic approach trying to take all the different aspects we were given into account.

Before we came to Bhubaneswar we had visited Mumbai and seen resettlement projects for slum dwellers that had been moved from the railway track area into new housing. These areas were according to us no good; they were monotonous, crowded, densely built and had aged a lot for only being standing there a few years. Therefore when planning for our area we wanted to create more of a city with different kinds of buildings, different heights, more public space, open areas and more greenery since the areas in Mumbai were barren. Still we had to consider the prerequisites we had been given which meant that we had to plan for three times as many families as were living in Adibasi Gaon today and apartments of 35 m².

During our work we struggled with the aspects of equality; should a household of two persons get the same living space as a household of five? Should there be possibilities for those with a little higher income of the slum dwellers to invest in a bigger house, since as mentioned in the Informality chapter people do not have to be equally poor to live in a slum area. We have also discussed whether the elderly and people with disabilities should have precedence for the apartments on ground floor, as this would simplify their life distinctively. These questions are just a few issues concerning equality that are very hard to answer. Planning in a developing country has also been a challenge since we are used to having thorough map material and knowledge about how different systems work.

From what we learned our proposals were not the wished for solution for Salia Sahi and they might have raised more questions than they answered. Acknowledging this we can also say that this was one of our intentions before we executed the plans, though we did have a few clear thoughts about how we did not want it to turn out. As mentioned before we had seen many monotonous and very dense areas during our field trips and by planning for different heights and different kinds of buildings we wanted to create a varying area that was more exciting than the ones we had already seen. Also considering the location in the city Salia Sahi is a place with great potential of becoming a part of the city where a mixed population could live. These thoughts were clearly criticised by Ms Patel who meant that this could turn out to attract the middle-income group who eventually would crowd out the slum dwellers and therefore the area would not remain a redevelopment area. Since if the area becomes too attractive the slum dwellers might not be able to resist the temptation of selling (or being forced to sell due to misfortune) the apartment for market price and then move back into another slum area which they are already used to live in. Whereas our hope was to create an area which could develop along with the slum dwellers (who we hope will be able to get a higher income in time) such gentrification was not desirable according to Ms Patel. If we do not plan for something that possibly could develop in time this also means that we might be planning slums of the future, which is not according to our believes of how to redevelop any area.

Another issue is of course how to handle the financial problems. We believed that people with different income would have different preferences of how their new housing would be executed. This was also one of the big reasons to why we thought it was important to offer different kinds of houses at different cost levels and then it would be up to each household to decide how much they wanted to spend on their new home. We still think that this is an important matter that needs to be taken into consideration
when planning an area.

Throughout our work in India we have seen wonderful work with the slum dwellers everywhere we have gone. It is very inspiring to see how the work starts from grassroots organisations and goes all the way up to the government. Most remarkable is how much every single slum dweller gets to affect the work that is going to be done. Although it is a nice standpoint to let every citizen influence their future life, there is also a question about how many demands you should be able to put when you do not have any money. Meeting halfway is often a good solution to most problems when that is possible.

At first our intention for our continuous work was to plan one part each of the rest of ward 16. Our ambition was to use the knowledge gained during our work with and assessment of Adibasi Gaon and present more suitable development plans in coherence with the opinions presented during the assessment phase. However, we found it very hard to continue since there were many questions left unanswered and the different actors had varying goals. Ms Mohanty and Ms Singh suggested that three- to four-storey housing would be appropriate and that all houses should be equal both in size and construction cost. On the other hand, the Mahila Milan women wanted their own plot with ground floor structures and possibilities to expand upwards and Ms Patel had also preferred a smaller scale upgrading. In order for us to continue making development plans we felt that we needed either answers to whose goals we should adhere to or new and more detailed maps. Without new maps we would not be able to create small scale plans and by continuing in the same manner no actor would be satisfied, not even ourselves. Therefore we chose to focus more on the underlying theories and principles of slum-upgrading in developing countries, of which you can read more in the following chapter.
5. From Different Perspectives

In the beginning of our thesis we stated that our aim was to learn about the difficulties and possibilities with slums and slum-upgrading. One of the most prominent difficulties is posed by the different desires and goals deriving from all actors involved in such a process. There are many ways on looking at slums and slum-upgrading and they do not always correspond or converge. Differences in financial, organisational and social assets also create various prerequisites for people to involve.

In the first part Lena Johansson will investigate the notions of the supporter and provider model and present an alternative plan for how Adibasi Gaon can be upgraded. Focus is on the supporter model and the ideas behind an incremental self-help strategy as an alternative proposal for the upgrading process compared to the proposals already presented for Salia Sahi and Adibasi Gaon.

In the second part Emma Josefson will continue on the subject of different perspectives but look further into how the planner her-/himself can justify her/his points of view when proposing and promoting a specific solution. Theories on post-colonialism and planning perspectives from the Enlightenment and onwards are presented and connected to values in order to see the reasons behind different planning decisions, and whether the visiting planner from a developed country can be seen as part of the problem or part of the solution to slums in the developing world.

5.1 Two Contradictory Models of Slum-Upgrading

During our field study in Bhubaneswar we learned about the present conditions of the slum area called Salia Sahi. In order to learn more about how the upgrading process of this and other slum areas could be implemented we presented our own development proposal. Our intention was to propose a development plan for Adibasi Gaon which then later could be criticised by the inhabitants and the experts around us working with these issues. From this, we hoped to gain knowledge about which ideas that were working and which were not. In our assessment it is clear that our proposals were not the right solution for either Salia Sahi or Adibasi Gaon, according to the inhabitants and the other evaluators.

In the Slum chapter we discussed two different models on how to work with the upgrading process of slum areas, the supporter and the provider model. In the following section I will further investigate the development of these two models and then focus on the supporter model as this is the model which stands in contradiction to the provider model which is more similar to the way we worked with the development of Adibasi Gaon. I will investigate how the supporter model works, if it has been successful and finally give suggestions on how the supporter model can be implemented in Adibasi Gaon.

Coming from a country where the provider model is the general model in the housing department, this also became our approach on how
to look at the problem. As we wanted to create a proposal which they could use we also followed a few conditions information from the Deputy Mayor of BMC and UDRC who we collaborated with. These different conditions are discussed in the Salia Sahi chapter and were essential features that influenced our work in a special direction. At first we were a bit surprised that they wanted to redevelop the whole area and demolish all houses and whether or not this has been a misunderstanding, those were the conditions as we understood it. Our approach was to create proposals that we could discuss later, so that we would learn and benefit from the evaluations we were able to make during our work there. Looking in the rear-view mirror, we now understand that the different conditions from different persons did not correspond to the same goal, as we discussed in our assessment. Whereas one thought we should suggest three- to four-storey houses another wanted ground floor structures to be able to expand. We have also understood that there is not enough knowledge or capability to organise such a project as we proposed. Instead their approach must be to find out the most essential needs within the society and then incrementally improve those conditions.

5.1.1 The Provider Model
In the search of a model on how to solve the housing problems that appear in the developing world as a result of the urbanisation process, many models have been tested and evaluated. During the past century models used in the developing world have been based on a top-down approach (Muraya, 2006), called “provider model” (Vestbro, 2008), which is the term I will use from here on.

The provider model derives from the modern urban planning which emerged in the latter part of the 19th century (UN-HABITAT, 2009). This planning model evolved as a response to the rapidly growing and industrialising world. Characteristic thoughts within this approach was that it dealt with the physical planning and design of human settlements and did not correlate with social, economic or political matters. Planning was a technical activity that could only be performed by experts. This planning approach often presented ideals for how to create a well composed neighbourhood, for example Ebenezer Howard’s garden city and Le Corbusier’s total makeover for the modern man. The ideas about this planning strategy spread among the world through processes like colonialism. It has later been subject to massive critique and has in many places been replaced with processes that are more participatory, flexible and strategic (ibid.).

The provider model, which was successful in western countries, has also been adopted in the developing world in an attempt to ease the shortages of housing. Here the approach meant that the informal settlements were demolished and then replaced with new houses that were mass produced in permanent materials with low standards (Vestbro, 2008). Clearly, as many have discovered, this has not been an appropriate solution for the majority of housing problems in the developing world, it may have served the better classes but needs extraordinary expenditure. UN-HABITAT (2009) has claimed that this planning form directly have contributed to the increasing poverty and spatial marginalisation.

During the 1980s the United Nations (UNCHS, 1987 in Muraya, 2006) reviewed their human settlements policies presented in the 1970s, which was based on the provider model. In the review they acknowledged that the 1970s policies had been better than previous policies but the settlement problems still remained. Displacement, affordability, cost-recovery and replicability were just a few of the problems that the policies had failed to address. According to various sources, one of the main reasons to why this approach was not successful was because it excluded the community in the planning, decision-making and implementation process (Turner, 1976; Muraya, 2006).
5.1.2 The Self-Help Model

In order to overcome these problems, the United Nations adopted a new approach that was based on an enabling or bottom-up strategy (Muraya, 2006), also known as the supporter model (Hamdi, 1991 in Vestbro, 2008). In contradic-
tion to the former, this model focused more on several micro-level strategies in the housing development engaging the community to involve in projects (Muraya, 2006). In short, it is based on a process where the government’s role is to provide conditions that enable the inha-
bilants to build their own homes through self-help or with the help of local construction companies incrementally (Vestbro, 2008). This also meant that the success of the housing development depended significantly on the community-based organisations.

Reading the literature on the supporter model or self-help, as some also call it, it is easy to as-
sume that the ideas were first developed during the 1960s by John F.C. Turner and that they did not make an impact until the World Bank adopted the ideas during the 1970s (Harris, 1998). This is true to some extent, as Turner did make a great impact on the subject during that time but there had been others before him and whether or not the ideas had made an impact before they were adopted by the World Bank is also something that is debated. According to Vest-
bro (2008), it was not until 1996 that Turner’s ideas were to become an actual part of official documents from the Habitat II conference in Istanbul.

While there are many who believe that Turner was the developer of the ideas about self-help, there are also those who state that the ideas were well developed before Turner during the 1940s and 1950s (Harris, 1998). According to Harris it was a man named Jacob L. Crane who actually coined the term “self-help” and as self-help is the term used by both Crane and Turner this is also the term which I will refer to from here on.

The idea that the government might actually help people to build their own houses was according to Harris (1998) first established in Sweden in 1904. A program that involved these ideas was enacted in the city of Stockholm in 1926, but the ideas never got a continuing role in the Swedish housing policies. A more con-
sistent self-help model emerged in the 1940s, where contemporaries argued that it was chiefly significant for the development of housing and economy in the developing world. At that time the first steps were taken in Puerto Rico which also became the first jurisdiction that made self-
help a central part of the country’s housing policy (ibid.). Crane who worked as Assistant Di-
rector of the US Public Housing Administration where he elaborated (with) the ideas about self-
help, helped initiate the Ponce project in Puerto Rico. Crane continued his work at the Housing and Home Finance Agency where he promoted the self-help model worldwide throughout his career and as he retired in 1954 the ideas had been established as one of the major ideas about housing policy in the developing world. Ac-
cording to Crane the ideas about self-help made sense, as he meant they were both financially adequate and an element of indigenous economy and cultural development (Harris, 1998).

It is argued by Harris (1998, 2001) that even though Turner was not the first to develop ideas about self-help, he still concedes to the fact that he has been the most influential in the subject. At the same time he points out that Turner and other writers’ downplayed precedents like Crane since, although acknowledging their work, they never cared to mention this in print.

Regardless of by whom and when the ideas about self-help evolved, it was Turner that became the most influential writer about self-
help for upgrading housing in the developing world during the last quarter of the 20th century (Harris, 2001). Between 1957 and 1965 Turner worked several periods in Peru and based on his experiences there he started to develop the ideas about self-help (Bromley, 2003). During his work in Peru he was able to study and participa-
te in many of the reconstruction and upgrading programmes that was progressing in the infor-
mal settlements, also called “barriadas”. This was also the place where he started to advise and promote self-help ideas as he had learned that the slum dwellers had sufficient skills to construct their own houses (Vestbro, 2008).
In his book *Housing by People* Turner (1976) stresses many arguments for why self-help is a better housing solution than the provider model. Turner (1976) argues for his opinions by presenting how diverse and complex the different needs and demands are between different households. According to Turner, the value of a house lies within what it does for the people rather than how it looks and what it is made of. From his research, Turner found that many households, especially younger, with a median income were prepared to consider living in a slum if that meant that they could save money for marriage, children, school and university, a home of their own or even a car. At the same time another household could have totally different preferences. It was these variations between investment capacity and priorities that, according to Turner, should not be ignored since there could be a mismatch between the housing supply and demand. Also the fact that many centralised decision making systems are tied to produce standardised products and often at a large scale, means that human values must be substituted for material values. Instead Turner (1976) argued that those in power should help the people to do what they can do locally for themselves by both guaranteeing and providing, wherever necessary, their fair share of available resources and complementary infrastructure that cannot be installed locally but that can be provided for all. Turner states in his book that,

> housing problems only arise when housing processes, that is housing goods and services and the ways and means by which they are provided, cease to be vehicles for the fulfilment of their users’ lives and hopes, (1976:64)

but as with most policies and models, there are those who do not agree with the thoughts of Turner and the self-help model.

The main criticism is about the reallocation of responsibilities from governmental to local governments, where Burgess, Carmona and Kolstee (1997) argues that although the responsibilities have been transferred the resources required to exercise them have not. According to them there is a suspicion

> that the enthusiasm for decentralisation derives more from adjustment requirements to relieve national public deficits and manage the debt crisis than it does from broader democratic goals (1997:147).

There have also been speculations that this transfer of powers can lead to a lack of regulation as it shifts from regulatory competence to local authorities with weak enforcement capacity, within a general climate of strengthened private sectors interest (ibid. 1997:148). This is also in accordance with other criticism from Rod Burgess and Peter Marcuse (Vestbro, 2010b) as they state that the self-help model has several issues that require centralised decisions and that self-help can relieve the state from its obligations. Economical and political conflicts of interest is another speculated reason to why the government is reluctant to enable communities as they believe that the expansion of participation leads to the intensification of these conflicts of interest along the path of social transformation (Burgess, Carmona & Kolstee 1997:157).

It is also argued that in order to correspond to spatial and environmental realities, planning is something that needs to be organised (Burgess, Carmona & Kolstee, 1997), and in that sense incremental construction is something that will prevent proper planning (Vestbro, 2010b). Other criticism against the ideas about self-help expressed by Burgess and Marcuse (Vestbro, 2010b) is that self-help will only lead to temporary solutions with lowered standards.

Nevertheless, different examples from real life show that there is not one solution that will fit all cases as they all have different prerequisites. Apart from self-help there are other policies on how to solve the housing problems for the poor. Security of tenure, which is one strategy in line with the self-help model has long been a part of different slum upgrading policies (Mukhija, 2001) and forms of this is discussed later in the Secure Tenure section.

There are, however, also many who have questioned the legal and economic wisdom
behind this strategy. Critics argue that security in low-income housing do not depend on legal status as much as the occupants perceptions of an eventual eviction, legal tenure does also not directly lead to higher investments as there is no finance available and finally critics argue that tenure legislation might hurt the most vulnerable namely the poor tenants, as tenure legislation collateral means raised value of the property and its rents. Mukhija sends critique both against the tenure legislation process and Turner’s self-help ideas as he put the question; under what circumstances? (2001: 215).

Mukhija (2001) states, that the literature about upgrading strategies often underplays the physical impact by making a few assumptions. According to him there are four main assumptions about the physical attribute of slums, namely; they are situated in peripheral locations; the settlements have very mixed land use; the settlements have clear and regular structures; and that lot-sizes are fairly large. Clearly, not all slums comprise to these assumptions and according to Mukhija this also means that not all slums have the opportunity to improve their housing through an incremental, self-help model. In his text, Upgrading Housing Settlements in Developing Countries (2001), he writes about a case of redevelopment in Mumbai where the beneficiaries could choose between tenure legislation or a redevelopment project which involved the demolition of the existing slum and construction of new housing. As the second alternative would be much more expensive it included private developers that were allowed to make additional floors to sell on the free market to cross-subsidise the project. The beneficiaries chose to go with the redevelopment project because then they received both tenure rights and a larger and more valuable house.

The conclusions Mukhija (2001) made in his report was that slum-upgrading should not always focus on either slum redevelopment or self-help but look at the local context and physical conditions within each different settlements. According to Vestbro (2008), Hamdi also argues that the self-help model has not been very successful and he suggests a combination from the best elements of the different models discussed.

According to me, it seems that the most important thing is for governments to be very flexible about which strategies to use, as I believe that one must look thoroughly on each settlement to perceive its special needs. It is not only about the prerequisites for the settlements but about what the people involved are able and willing to do. Today many international organisations and many countries have adopted and promote the ideas about self-help in an effort to solve the housing problems worldwide (Muraya, 2006). Turner (1976) presented many core ideas about why this model should be used and I will now further discuss how the self-help model can be implemented.

The self-help model is based on the idea that the people build their own houses with the help of some outside support. This outside support can take many various forms depending on the special needs in each settlement (Bredenoord & Van Lindert, 2010). Various needs mean that the self-help housing often comes in different sizes and shapes as they depend on environmental, socio-economic, technical and cultural factors. The building style also depends on material assets, architectural traditions and the climatic conditions. When providing for self-help, Bredenoord and Van Lindert (2010) means that it is very important to recognise the different economic possibilities and limitations for each household in order to determine the housing demand. Different forms of assistance can be labelled as either basic or additional where the basic assistance is concerning the plot, the house and the neighbourhood and the additional is for the construction of the house.

In the text by Bredenoord and Van Lindert (2010) they have issued a list (see below) which displays the different parts that the governments, NGOs or other worldwide organisations like the United Nations can contribute with, in the self-help process. These can be seen as different strategies within the self-help model where the basic assistance is to be provided by either the national or local government and the additional assistance could be provided by NGOs or local entrepreneurs.
Basic assistance:
- A plot in adequate urban land development, at affordable price and pay-off conditions.
- A legal land title.
- An access road and main infrastructure, including drinking water, electricity and sewage solution.

Additional assistance:
- Technical assistance such as advice and building permit.
- The provision of good quality building materials.
- The promotion of micro-finance solutions.
- The support of housing cooperatives (legal and intellectual matters rather than economical).

Source: Bredenoord and Van Lindert (2010:285)

Further Bredenoord and Van Lindert (2010) also discuss the technical aspects in the building process, as it is likely that most self-builders do not have any skills within this area. This means they have to hire the construction workers, get building permit and at the same time provide the required building material which probably leads to a long and expensive building process. In this process the self-builders would benefit if either NGOs or the government provided a small advisory bureau giving technical or legal assistance that would help them with building permits, technical building solutions or even provide small loans for dwelling improvement (ibid.). Other proposals on how to work with self-help builders is to provide a building material bank, teach construction skills and provide type houses for construction.

In the text by Vestbro (2008) a proposal on how to implement self-help is also presented. Ugandan architect, Assumpta Nnaggenda-Musana, has found that physical densities in informal settlements, contrary to the normal assumptions, actually are quite low. As most houses are detached ground floor buildings this also contributes to an urban sprawl pattern giving long distances to work and excessively expensive lengths of infrastructure. By building denser and in some cases higher this could be avoided and by developing different house types she also ensured that spatial qualities such as cross ventilation, daylight as well as semi-private and communal spaces would be remained.

5.1.3 Five Aspects of Self-Help in Adibasi Gaon

Lack of durable housing, sufficient living area, access to improved water, access to sanitation and secure tenure were the five conditions that defined a slum household according to UN-HABITAT (2006), as mentioned in the slum chapter. With these five conditions and Adibasi Gaon as a starting-point I will now discuss different alternatives on how to overcome and improve these elements. I have ranked them from which I find the most important and downwards. The reason behind this is that some of them are directly related to the health and well being of the inhabitants which is indispensable in order to be able to work and make a living. Using the self-help model means that the work will proceed with what they have and incrementally improve the situation.

1. Access to Sanitation

Only a few of the inhabitants in Adibasi Gaon have access to a toilet which is connected to a septic tank. For those who do not have a toilet this means they have to defecate in the open. Apart from creating an odour, it affects the whole environment and further it is also and insult to their dignity. The most convenient solution is of course for everyone to be provided with their own individual toilet, but if assets are short and the government will not be able to provide this, other solutions have to be found. The next step from not having an individual toilet is to build community toilets which should be shared between reasonable amounts of people. In Adibasi Gaon there was an ongoing toilet project during our visit but due to lack of money there had not been very much work done during the last months (see below).

This could be a situation where the government steps in and help the community to finish the toilet block either by providing money or assistance in any other kind of way as this would improve their lives significantly.
It is a black container of ten litres which uses heat (from the sun), UV radiation and a built-in filter to clean contaminated water. Instead of boiling the water, as many do to make it drinkable, the container cleanses and warms up the water in a few hours (Solvatten, 2010). The benefits with using sunwater is that there is no need to make smoky fires, which is bad for the lungs, to boil the water and it also reduces diseases and mortality by providing safe drinking water (ibid.).

Another very new invention is a low-cost disposable water filter (“Nanofilter kan rena”, 2010). Professor Eugene Cloete, a microbiologist and Dean at the Faculty of Science at
Stellenbosch University in South Africa, has together with researchers recently patented the water filter that looks like a tea bag. According to Cloete the tea bag can clean the most polluted water and make it 100 percent safe to drink. The bag which is filled with active carbon granules to remove harmful chemicals should be disposed after use. The filter is currently being tested and the first attempts for mass production are being performed. If the filter can be mass produced the cost will be distinctively reduced and could be a great resource in the countries where access to improved water is scarce. Provision of any of these inventions should be provided by the government for all slum dwellers who do not have access to improved water.

3. Durable Housing
Most dwellers in Adibasi Gaon own their houses although not the land, only a few rents, but many of the houses are of the type kachha which we described in the slum chapter. The houses are in very different conditions as some are only mud houses whereas others are made out of concrete. Problems with the houses can be asbestos, non-durable materials, thatched roofs or an unsustainable construction, like mud, that needs lots of maintenance which not only costs money but takes time. Considering the humid climate which they live in, mud houses are not necessarily a bad solution but because of the maintenance it requires many prefer concrete and households also cannot receive money from different missions to build mud houses.

As self-help builders the inhabitants need building skills, material and saved money, which most of them do not have. Here, self-help can be provided as mentioned before through establishing an advisory bureau, providing a material bank or helping them with savings and loans which can be done either by the local NGO or through some help by the government. Mahila Milan is one of the NGOs which already have started to help with savings and loans. It is also important that the dwellers help each other if someone has the knowledge about how to build a house or what material to use.

4. Secure Tenure
None of the households in Adibasi Gaon have secure tenure as the land belongs to the Ministry of Forest and Environment. As mentioned in the Salia Sahi chapter there is an ongoing process of trying to convert the land from forest to residential but the outcome is still unclear. For most slums it is first a process of becoming notified in order to be a part of any upgrading projects. Evictions and demolitions are not that usual but still many fear this as they do not own the land. Many upgrading projects have been about giving land to slum dwellers so that they are ensured security of tenure, but as mentioned before many critics believe that this will not lead to any upgrading as there is no finance.

In the case of Adibasi Gaon this is a little different as many of the households already have built a house and getting a title or security of tenure would only create a greater safety. It would also increase the value of their house if they also own the land it occupies. Many households are not willing to invest that much money in their households unless they know that they have security of tenure. So by clearing out the different plots and providing security of tenure will most likely lead to more investments in the housing according to Fernández-Maldonado (2007) in her research about Turner and De Soto. She also meant that security of tenure
would give access to the financial system as there would be a guarantee for mortgage availability, but as banks eligibility criteria are based on incomes rather than legal titles this was not the case. Still, land titling or security of tenure means one step in the right direction as although it might not mean higher investments in their houses, for some it means that they can increase working hours as they do not have to stay home and protect their homes.

Security of tenure does not only have to be the provision of freehold land titles or (more rarely) leaseholds, but can also be protective administrative legal arrangement against forced evictions (Durand-Lasserve & Royston, 2002). This could be the first step in an incremental process towards the provision of legal rights as unlike complicated, expensive and time-consuming tenure regularisation programmes, security of tenure can be provided through simple regulatory and normative measures (2002:14).

Unauthorised settlements can also be resolved through a few other solutions (Satterthwaite, 2010). If the households can be assisted with a loan from the government or other mortgage institution they will be able to purchase the land from the owner, otherwise they might be able to work out a lease or agree to be relocated to another location provided by the government leaving the land they are squatting in return for secure tenure on the new site (relocation model). In the case of Adibasi Gaon it is now up to the NGO and the government in trying to convert the land into residential in order to secure tenure for the inhabitants.

5. Sufficient Living Area

For a house to be considered a sufficient living area there should not be more than three persons sharing the same room (UN-HABITAT, 2006). Without knowing the exact proportions, it is clear by looking at the household survey conducted by UDRC (2010b) that many of the households in Adibasi Gaon consist of more than three people. From our field visits it is also clear that most of the houses consist of only one room and a kitchen. This means that most households are living with insufficient living area. This also creates a problem when the family expands as it is the parents’ responsibility to house their son’s new family as he marries, according to their customs.

In an incremental self-help upgrading process it is important to investigate different possibilities of expanding houses either vertical or horizontal. By building dense and vertically it is possible to resist the process of urban sprawl which occurs when everyone only build ground floor structures. Other qualities that are important to preserve are cross-ventilation of the houses, the provision of daylight, semi-private spaces as well as communal spaces.

In some places the only way to expand the houses is to build vertically, which requires a solid foundation that most houses do not have. Therefore this also includes demolition of the existing house in order to build a more solid one at the same location. In order to solve this economically the governments can either provide loans or contribute with finances. Another solution is relocation within the vicinity where a private developer works with a small block and builds new houses for the slum dwellers in exchange for some land on which the developer can build apartments to be sold on the market. Communities can also work together in a cooperative where they develop the most urgent houses and then continue house to house. Our vision for Salia Sahi and Adibasi Gaon was that the whole area could be developed with the help of cross-subsidisation, but as this was not the appropriate proposal other alternatives have to be found. One alternative could be to try and work with cross-subsidisation block by block as the organisation issues behind that might be easier than for the whole area at once. If it is not possible to organise for an entire block at the same time each household has to be responsible for their own development which can be helped with by either getting a loan or if the government can provide the area with construction builders and material.

5.1.4 Assessment

The provider and self-help models present two different directions to go when searching for the “most suitable” approach to handle the issues of
slum-upgrading. As presented, some argue that the provider model is not an alternative as it is not financially feasible and instead the self-help model provides different strategies for people with different resources. Hamdi (1991:28) argues that self-help, or the supporter model as he refers to it, has been a blessing in disguise for countries that are too poor to match supply with demand as is necessary in the provider model. In our search for suitable approaches we first presented two plan proposals more according to the provider model point of view. In this last part I have presented a few ideas on how the ideas about self-help could be implemented in the work for slum-upgrading of Adibasi Gaon. It is not easy to give actual suggestions on how this could be implemented as many different aspects matter; instead the important thing is to see it as an incremental process where the conditions will improve in time.

Throughout the developing world there are many examples of upgrading models but almost none on a scale that actually have reduced the problems, though one of the places where this has worked is in Thailand. There the upgrading was a part of a programme where funds from the government came as infrastructure subsidies and housing loans to poor communities which plan and carry out the improvement work of housing and basic services themselves (Boonyabancha, 2005). The main idea was to support people’s capacity to manage their own needs collectively (2005:25), and then they also built on what the communities already had developed. The key behind success was probably also the biggest challenge, which was to support upgrading in ways that allow urban poor communities to lead the process and generate local partnerships, so that the whole city contributes to the solution (2005:25).

The case in Thailand shows how important it is that all people work together, and in the process to empower the poor communities it is even more important that they are being an actual part leading the development process forward. There will probably never be one model that solves all the problems for each slum area, instead each community and city has to work together and investigate their needs in order to find out a way to improve them.
5.2 Provider or Enabler? – Swedish Planners in Developing Countries

In the previous section Lena Johansson investigated how modernistic providing planning strategies differed from more recent strategies of self-help. Here I am to make a theoretical investigation of how planners as individuals are guided by values and ethics as well as their professionalism when planning, in order to answer to the last sub-question of the second research question: ‘What obstacles are there to different improvement processes?’ I will here look further into if the planner her-/himself is a part of such a problem. Focus will be on whether planners should be seen, or see themselves, as providers or enablers based on different planning theories and parallels will be drawn to the work we carried out during our time in India. Since I do not perceive planners as value-neutral rationalists and since this thesis has its base in a developing country I will also look into theory of post-colonialism. This to see if there are further factors to take into consideration regarding on what ground a planner acts and decides in a foreign country.

There is an ongoing debate whether planners and architects from the North at all should try to involve in developing schemes in developing countries, since they might rather be part of the problem than of the solution (Payne, 2008). According to Payne architects and planners of today are more interested in designing new iconic buildings than helping slum dwellers or other vulnerable groups, and that they suffer from arrogance and an “I know best” syndrome. Underlying reasons for this is according to the author that professionals do not cooperate for the benefit of the poor, nor do they work for a change towards more suitable policies and planning regulations, and lastly; architects and planners need to change attitudes (Payne, 2008). I would argue that such a change is already underway where there are current trends showing architects’ and planners’ awakening conscience where a counter-movement to the trade-mark buildings is surfacing as a response to old perspectives and new challenges such as climate crisis, segregation and growing slums (see for example Andersson, 2011). At the Museum of Modern Art (MoMA) in New York an exhibition in 2010 showed socially engaged architecture for the first time since the 1940’s, called “Small Scale, Big Change” (curator Andres Lepik in Andersson, 2011). Furthermore, young architects Alfredo Brillembourg and Hubert Klummen received the Ralph Erskine Award 2010 for their dedicated work aiming at improving living and social conditions for ever growing billions of poor people that inhabit the slum areas of the world’s megacities (Sveriges Arkitekter, 2011).

However, Payne (2008) is stuck in his views of architects and planners as technicians just wanting to be the next star on the architecture sky, without interest in the people they are building for. Maybe he is right, because this can be seen as a post-modernism view of planning and planners where the embedded societal reforms of the modernism movement are left behind due to hard criticism on how the reforms were delivered, but the MoMA exhibition shows examples of a new radical pragmatism where professionals try to improve the lives of the poor through urban acupuncture (Andersson, 2011). Whether architects and planners are part of the solution or the part of the problem I argue depends on how one regards the planning professional and from which perspective her/his work is evaluated, and also how one perceives the notions of right, wrong and truth.
5.2.1 Planning, Truth and Values

The act of planning and planning theories move within the realms of both social and natural sciences, which often poses difficulties and clashes since the later focuses on and promotes logic and objective truths meanwhile the sooner highlights it is not immune from influence of power and its social context (Allmendinger, 2009). That ideas or theories could be an objective view on reality has been questioned and rejected by philosophers for centuries, but still logical positivism influence social sciences through the focus on empiricism (Allmendinger, 2009). The different views of planning theory also reflect on how the professional planner is to be perceived. S/he could either be a technocrat stemming from the Enlightenment with focus on finding the technical solution to a given problem, or a reflective practitioner aware of the many possible solutions and her/his own values, who is also involved in defining the problem (Schön, 1983).

Normative Planning

No matter how you twist and turn, planning is in some way always normative since it focuses on how something should or could be developed, hence telling us what to do (see for example Allmendinger, 2009). If a planner perceives her-/himself as a rational technician the way forward is simple and straightforward; there is one solution (the solution) to the given problem, which can be found if you work by the book and survey chosen preconditions carefully. For a reflective practitioner it is not as simple (Schön, 1983). There can be several ways of solving the problem and the question of whose norms which are to be included in the proposed solution. Furthermore the problem-setting might be asking the wrong questions and overall there is a more relativistic view on planning where different theories can exist side by side each claiming with equal validity that their view is just as correct or legitimate as the next (Allmendinger, 2009:8).

As mentioned before in this thesis, there is no such thing as a value-free description of one’s environment (Hillier, 1999:179), and these values stem from different things such as past experiences, upbringing and the environment one is living and working within. Hillier (1999) uses a definition where values are seen as standards or criteria which guide action as well as other psychological phenomena such as attitudes, judgments, and attributions (Axelrod, 1994 in Hillier, 1999:181) to start off her reasoning on the subject. She continues by saying that values change over time and adapt and adopt as we face shifting demands of our existence and that values are contestable where one actor can find others’ values to be wrong, ill-founded or inappropriate. For planning this poses difficulties since plans are usually made with a time-span of several years, and even if no one is value-free, the professional’s values might change over time due to new experiences and knowledge and hence see a plan s/he once considered ‘good’ and ‘right’ later on to be both ‘bad’ and ‘wrong’.

No matter how carefully we scrutinise or investigate something there are always things left out, and by leaving things out there is an act of evaluation of what is important or not to take into consideration. This evaluation gives the planner power to shape both the problem and the outcome, and also to shape the ‘truth’. According to Allmendinger, power is legitimized in the name of scientific ‘truth’, which is valued above other forms of knowledge because the discourse around science has granted it a valuable status (2009:17), but this truth is always in coherence with its time and context and not value-free. This power to create and define knowledge gives planners their status as professional practitioners and for planners there might be self-interest in preserving this power which keeps planning from moving towards more collaborative planning theories.
Loyalty
Planners are under the influence of many aspects and wishes, of which Allmendinger (2009) identifies three main sources: their own personal and professional feelings, their employers’ objectives, and the code and ethics of their professional institute. In contrast, Tait and Campbell (2000) talk about three types of loyalty that a planner is facing when to choose whose values to speak up for, namely; loyalty to one’s self, loyalty to the employer or loyalty to the common good. Here the employer can be anyone from a boss in a consulting firm wanting to maximise profit to an elected politician wanting to create a better society and/or stay in power. It is not always the case that a planner is working in a position where her/his values correspond to the employer’s, and sometimes the planner might be ‘forced’ to propose plans which s/he believes is disadvantageous for the common good. Here the planner can, according to Hillier (2009), choose to act either as a chameleon who adjusts to the situation and plans by the book to keep her/his back free from criticism (only doing one’s job) or to be a missionary who by different means of manipulation affects the task to suit her/his values. One last option for a planner with strong values would be not to take on the task at all, thus risking a loss of power, credibility and eventually one’s job.

5.2.2 The Post-Positivist Planner
Around the world town planning is not a new occurrence, for thousands of years societies have planned their land-use and infrastructure provision. An example already mentioned is the Harappa Culture providing its towns with one of the first forms of sewerage systems in the world already in 3000 BC (Ståhl, 2006). But European planning as we know it today can be seen as based on principles stemming from the Enlightenment in the 18th century (Schön, 1983) and utilitarian philosophy (Hillier, 1999).

Positivism
During the Enlightenment focus was on science and technology, and how nature could be described and understood through classification and objective truths. Carl von Linné classified flowers, insects and ethnic groups (Eriksson, Eriksson Baaz & Thörn, 1999), colonialist classified ‘savages’ it the new world, and progress in science and technology was through positivism applied on social movements to improve the well-being of mankind.

Positivism can be described by its three principal doctrines where the first is the conviction that empirical science is the only source of positive knowledge of the world. Second is an intention to cleanse out all form of pseudo-knowledge such as mysticism and superstition, and thirdly a program of extending scientific knowledge and technical control to human society (Comte in Schön, 1983:32). Positivism sought to systematise human life based on real (positive) knowledge and tried to find a set of general methodological rules which would be the same in both natural and social sciences (Allmendinger, 2009:32). Within positivism values or politics were only valid to provide objectives or goals and then a value-free investigation was undertaken to find the means towards the wanted end, and the positivist perspective peaked during the modernist era of the 1960s when planners were seen as technocrats delivering solutions to problems set by politicians or others. The planner held no values her-/himself and it was easy for planners to regard themselves as part of a profession since they could claim they held specialist knowledge, based on planning theories stemming from positivism and science (Allmendinger, 2009). This is what Donald Schö̈n in his book The Reflective Practitioner (1983) calls Technical Rationality – professional activity [consisting] in instrumental problem solving made rigorous by the application of scientific theory and technique (Schön, 1983:21).

Utilitarianism
With the utilitarian philosophy the notion of ‘the public good’ was included in theories of planning and added another dimension to the aims and loyalties of a planner (Hillier, 1999; Campbell & Marshall, 1999). Before the Enlightenment town-planning did not necessarily focus on ‘the public good’, but rather on ‘good
for the wealthy or powerful’. However, with the French (and other) Revolution(s) in the late 18th and early 19th century along with communism spreading through Europe planning came to handle problems where the wanted end was to benefit as many people as possible. Planners were then to improve lives of people living in poor and unhealthy areas too, since the ones setting the ends were affected by communist and utilitarian philosophies.

During the 19th century the Industrial Revolution spurred a never preceded urbanism in England and slum settlements grew in London, as places for the immigrant workers to dwell in. Plans to handle these new problems existed, but the modern technical planner had not yet seen daylight. Instead architects, social workers and economists proposed solutions on how not only the physical environment could be improved, but the whole society. One of the most famous examples of this is Ebenezer Howard and his publication Garden Cities of To-Morrow (1902), in which not only land-use is proposed but also how economics, administration and enterprises in the garden city is to be executed (Howard, 1902). Also great modernist thinkers as Le Corbusier in Europe and Moses in New York wanted to change society for the better with focus on ‘the public good’, to really extend scientific knowledge and technical control to human society. In Le Corbusier’s case with new houses where everything was constructed so the inhabitants could lead a healthy life with light, space and order, and in Moses’s case with motorways cutting through run-down parts of New York so people could move around faster, which was supposed to give them freedom (Berman, 1988).

Post-Positivism
As mentioned above, the positivist practical application peaked during the 1960s when modernism and positivism took shape in technical rationality in planning (Schön, 1983) and systems and rational theories of planning (Allmendinger, 2009). According to Schön this was a consequence of how technologists drew upon scientific research as never before in World War II, and the lesson seemed to be that if only a great social objective could be clearly defined, and if unlimited commitment and resources could be laid on research and development, than any such objective could be achieved (Schön, 1983:38). However, this objective could not be defined and positivism suffered from the lack of ability to separate facts from values, since it became evident that problems with observation and the social context of the theory could not be ignored (Allmendinger, 2009). The delivered solutions did not either seem to work as planned and had many drawbacks due to unforeseen occurrences where people became aware that complexity, uncertainty, instability, uniqueness, and value-conflict which did not fit into technical models actually were of importance to practice of phenomena (Schön, 1983).

As a consequence, other alternative approaches to planning and practice were searched for where values were not to be suppressed but recognised and exposed, and post-positivism emphasises a rejection of positivist understandings and puts theories and disciplines in larger social and historical context. It emphasises criteria as normative, that there can be variance in explanations, values and theories and sees the individual as a self-interpreting autonomous subject (Allmendinger, 2009). With this ascending of post-positivism follows a new view on planners, who are no longer value-free technical experts planning by the book, but fallible advisors who operate, like everybody else, in a complex world where there are no ‘answers’, only diverse and indeterminate options (Allmendinger, 2009:33). Schön finds another advantage in this change and that is a move from the perspective of Technical Rationality, where professional practice is a process of problem solving (Schön, 1983:39) where ends are given, towards a professional practice of problem setting. Schön further states that in real-world practice, problems do not present themselves to the practitioner as givens (Schön, 1983:40) but must be constructed from complex, uncertain and unstable problematic situations where the planner, in order to convert the problematic situation into a problem, must make sense of an uncertain situation that initially makes no sense (Schön, 1983:40). Here professionals can come to recognise that although problem setting is a
necessary condition for technical problem solving, it is not itself a technical problem (ibid.).

Speaking from my own experience on site in Bhubaneswar, it was exactly like this. We had a very vague problem to solve (work with and investigate Salia Sahi) and it took some time until we could define a more specific problem (how can the area be redeveloped). Because at first we did not know whether the inhabitants wanted an upgrading, a redevelopment or a resettlement scheme, nor did we have any basic knowledge of our site. Hence the first weeks were spent surveying both the area itself and peoples’ wants and needs in order to set a problem that could be solved technically, a traditional planning problem (redeveloping an area). In a Swedish context there is more often an elected body deciding how matters like these are to be handled, i.e. what form of development is preferred, but here there were no such decisions to guide us.

It has often been hard for critics to criticise modernism and positivism. There is an imminent risk of being dismissed as a reactionary conservative not wanting to embrace new knowledge, and no progressive professional would like to be accused of such a thing (Berman, 1988). There are however post-positivist and post-modernist theory building within planning and Allmendinger (2009) presents one positivist and six post-positivist schools of thought in his book Planning Theory in order to find ways of looking at the planning practitioner. One thing to keep in mind though with these different post-modernistic views is that the difficulty is that postmodern critiques leave planning in an ethical vacuum with neither the procedural justification for right actions nor any foundations on which to judge good outcomes (Campbell & Marshall, 1999:476).

However, as Allmendinger (2009) emphasises, there has not been a clear shift from positivist based practice to post-positivism. Rather there is a cluttered landscape of theories and ideas which gives the planning practitioner a freedom of choice to use the theory or idea s/he finds best suited for the situation for setting a problem or solving it in practice (Schön, 1983).

5.2.3 Post-Colonialism and Planning

Here I will only touch briefly upon the subject and contents of post-colonialism, the theory handling among other things how traces of colonialism still influence the power relation between the West/North and former colonies (Mc Eachrane & Faye, 2001). The subject is far too vast to include in its full in this thesis but it would feel unfinished not to include post-colonialism in a thesis concerning development in a country once colonised, the same country which cultural and historical research post-colonial theory has one of its most important starting points in (Eriksson, Eriksson Baaz & Thörn, 1999).

Post-colonialism gathers a number of issues or questions regarding connections between culture and imperialism, and relations and dependence between colonies and colonisers. The prefix ‘post’ can be misleading; post-colonialism do not propose a definite shift from colonialism to post-colonialism, rather it suggests that this after-colonialism to a great degree still affects both colonised and colonising countries and mindsets (Eriksson et al., 1999). Or as Hall puts it;

"on one hand Australia and Canada, on the other Nigeria, India and Jamaica cannot be said to be 'post-colonial' in the same way. But this does not mean that they can not be 'post-colonial' in any way" (free translation of Hall, 1999:85).

Even though Sweden never has been a great colonial power we have been, according to Mc Eachrane and Faye (2001), part of a historical situation where Europe is a global centre from where power and knowledge emanate, and the Enlightenment, modernity, capitalism and industrialisation can no longer be seen as occurrences only affecting Europe. Thus post-colonialist ideas are valid for Sweden too.
The Rise of Post-Colonialism

Early post-colonial thinkers started to challenge the self-understanding of the western countries, and later thinkers have continued to dismantle the imaginary world of colonialism and to trace its aftermaths (free translation of Mc Eachrane & Faye, 2001:8). With the Enlightenment and social evolutionism of the 19th century, colonial rule took a new expansive and violent turn culminating in USA and five European countries claiming rights to one quarter of the world’s surface (Eriksson et al., 1999). Planning in these areas usually focused on creating transport routes so that goods could be shipped out of the colonised country.

Within post-colonialism identity and language are important factors, where language is seen to shape and enhance discourses and identities. According to post-colonial theory the world is structured through speech and language, as it is practiced, incessantly continues to produce and reproduce the world as we know and perceive it (Eriksson et al., 1999). Furthermore, language is to be seen as a system of signs getting their meanings from relations of differences and contrasts. In this way language is structured around binary oppositions such as man/woman, black/white, formal/informal and so on, and the concept ‘man’ is given its meaning through its contrast – ‘woman’. It is the difference that gives meaning. One of the two concepts in this dichotomy is dominating the other, which is seen as weaker and dependant of the first. Hence, binary oppositions are reproducing social hierarchies when ‘man’ is dominating ‘woman’, and ‘white’ is superior to ‘black’ (ibid.), due to a normative interpretation of the discourses of ‘man’ and ‘white’ assigned positive qualities to them by tradition (Mc Eachrane & Faye, 2001). In the creation of identity these oppositions play a great part, and according to post-colonialism we define ourselves in the meeting with others, we create groups of Us compared to the Others. During the colonial era colonialists created a homogenous and superior Us of white, strong, rational, sensible, intellectual and cultural people, compared to the ‘effeminised’ Others, characterised by their irrationality, sensibility, and physical and natural nature. This shaping of the Others as our binary opposition often results in stereotyping. Stereotypes are simplified identities usually applied onto the Others, which are hard to break free from. There are many examples of this, amongst others the Dangerous Savage living a life of chaos and anarchy and the Noble Savage, the idealised indigent but hard-worker living a simple life in colonised jungles (Eriksson Baaz, 2001), which are argued to linger on into our days.

Post-Colonialism and Planning

When it comes to contemporary slums and slum upgrading I believe traces of post-colonialism affect some planning theories, and how some western planners see themselves when going to a foreign country in order to ‘help’. Eriksson (et al., 1999, free translation) states that the colonisers’ and the colonised peoples’ identities are defined by each other and reproduce, modify and change in relation to each other, to which I draw parallels to the relationship between western planner and the one s/he is out to help, and

the civilised enlightened, rational European’s identity cannot be considered without the barbarian, unenlightened, irrational Others, in other words the Non-European, colonised people. And since these Others are constituted for the European’s identity, each questioning of the binary oppositions on which the identity is built becomes a fundamental threat to the colonial symbolic order (free translation of Eriksson et al., 1999:34).

Drawing parallels to current slum-upgrading, this would suggest planners seeing themselves as technical experts or providers actually are afraid of sharing power over the situation. Meanwhile the enablers promoting self-help are more willing to let go of power since they believe that is the best solution.

13 Evolutionism: the process of seeing progress of civilization as a one way street that each group of people must follow, from the simple and primitive to the modern western society (Eriksson Baaz, 2001).
Post-Colonialism and Foreign Aid

Post-colonist theorists claim that post-colonial perspectives influence the distribution of foreign aid from wealthy nations to poorer (see for example Eriksson Baaz, 2001). The stereotypes of foreign aid, the “donor” and the “recipient”, must be seen in the light of their economic inequality which has put the donor in a privileged power position, and that it is the donor that is setting the agenda (ibid.). Development is an important discourse for foreign aid activities, and in some ways this need for development makes it justified to believe that the ‘white’ man can and knows how to help the ‘black’ develop. This because colonialism was contemporary with both the Enlightenment and the evolutionism, and then the white man was seen as norm and development of societies was evolutionary, where the white man already had reached a higher degree of development. To help these black people develop is usually referred to as ‘the white man’s burden’, after a poem by Rudyard Kipling in 1899 (see box), suggesting that the ‘backwardness’ of the colonised people was the colonisers’ burden to bear and tend to due to their position at the top of the evolutionary latter (Eriksson Baaz, 2001). In short, the white man’s burden during the colonist era was to civilise and develop the underdeveloped (Eriksson Baaz, 2001:168).

Post-colonial theory suggests it is the same today where the modernisation ideas take the shape of transmission of capital, technical know-how and modern values from the developed to the developing countries. Thus, Europe creates the normative discourse of how things ought to be, and to which direction society ought to evolve to become like the superior Europe. Here come the binary oppositions in handy to justify and legitimise such thoughts since the ‘white’ man is considered ‘active’, and thus his counterpart ‘passive’, and it was only through the care of the white man that the lazy colonised could be woken up and gain work-moral (Eriksson Baaz, 2001) which in time would improve the lives of the activated.

This view of foreign aid resulted in modernist projects in developing countries as shown in the previous chapter, there called planning for slum-upgrading from a provider model (see for example Eriksson et al., 1999 and Eriksson Baaz, 2001). As mentioned in chapter 5.1 this model was strongly contested and now alternatives are investigated and in use, promoting models for self-help, and the same change of perspective occurred at the same time regarding foreign aid. Many people working with foreign aid have tried to reform relations between donor and recipient countries trying to implement participation, empowerment, ownership and ‘on the recipient’s conditions’, and according to Eriksson Baaz (2001) now the Swedish Sida and even the World Bank have changed their language and are using words such as ‘partnership’, ‘partner in South’ and ‘development cooperation’. The foreign aid worker is no longer to be the decision maker, work leader nor inspector, but to be advisor or mentor supporting the locals. This is very much in accordance with how the models for self-help hope to function, but to create such an equal relation has proven difficult. Eriksson Baaz (2001) gives one example of this where the aid worker from a partnership

The White Man’s Burden

Take up the White Man’s burden--
Send forth the best ye breed--
Go bind your sons to exile
To serve your captives’ need;
To wait in heavy harness,
On fluttered folk and wild--
Your new-caught, sullen peoples,
Half-devil and half-child.

Take up the White Man’s burden--
The savage wars of peace--
Fill full the mouth of Famine
And bid the sickness cease;
And when your goal is nearest
The end for others sought,
Watch sloth and heathen Folly
Bring all your hopes to nought.

- Rudyard Kipling, 1899
point of view is to keep a low profile and not do the work on her/his own but still s/he is responsible to show exact results of her/his work. There is another issue questioning the donors’ authority or mandate to be in the foreign country at all, reflected in questions such as ‘do we even have anything to contribute?’ and ‘what right do we have to be here?’ (ibid.). These questions do not only concern a critique of how foreign aid has been delivered previously but also reflect the notion that there has been and is a critique ‘at home’ against the form of modernity which we export to ‘developing’ countries.

5.2.4 Swedish Planners Working with Adibasi Gaon and Salia Sahi

When we first came to Bhubaneswar we did not know everything as we know today. As mentioned above it took both time and effort to find a case to work with. There was no one to set the problem for us, more than that Salia Sahi was the area we were asked to work with. This put us in a difficult situation since we were not exactly sure of whom we were planning for and from what values and objectives. On one hand we were out to perform our thesis work, which implied the usage of Swedish planning norms as taught in school. On the other hand we were in a foreign country and we were aware of that things might not work in the same way; hence we tried to be more adaptive without drifting too far from our own values and ideas. The planning process faced us with several issues, of which I will discuss three; who were we planning for, at what time in the process did we enter, and if we focused on ends or means.

The first issue to consider was then whom we were planning for. Was it for the UDRC, the inhabitants of Salia Sahi or us? We landed in planning for something we considered a balanced proposal where we tried to identify as many opinions, values and objectives as possible. What was wanted from our local tutor was some form of advocacy or collaborative planning, where we would propose an alternative to forestall the municipal plans, which then would better serve the needs of Salia Sahi’s inhabitants. We entered the planning process at an early stage. The municipality was aware of the slum’s existence but there had been no previous inventory or mapping of the area, so the problem was still to be formulated as well as the wished for solution. If we here would have been to perceive ourselves as technical rationalists we would not have come far. There was no outspoken problem, more than it was a slum settlement and the wished for solution was contestant. A technical rationalist would have torn everything down and provided Salia Sahi with new dwellings, based on ‘nature-given’ or empirical objectives such as bad living conditions and the passion for large-scale solutions. We tried to work in a more reflective kind of way and investigate how different actors wanted the result to be; hence it is very interesting our proposal in the end came to remind so much of a modernistic provider solution. We were also torn between focusing on the final outcome or on the process leading towards the final outcome, which also have an ethical aspect to it. As Campbell and Marshall put it:

One of the most important themes running through ethical debates is the distinction between teleological and deontological frames of reference. The former focuses attention on whether the outcomes of action are in themselves good or bad while the latter concentrates on the rightness of the action taken (Campbell & Marshall, 1999:466).

The focus of outcomes has made teleological ways of thinking known as consequentialist, and utilitarianism, which can be described as the greatest good for the greatest number. Here it is easy to draw parallels to provider models of slum-upgrading; the end is good and hence the process must be good, or is unimportant. For a planner with a deontological point of view the importance lies in that the processes leading towards the outcome are just, no matter what the outcome might be. This is more in line with models for self-help and enabling models of slum-upgrading. We tried to be somewhere in between, regarding the final outcome and the process leading there as equally important. This
also put us in difficult situations since it sometimes made it hard to justify even to ourselves why we preferred one specific solution in our proposals in front of others. If a planner is a reflective one, it can be very hard to know how to ‘help’. There are many issues to take into consideration and the work may not lead forward, thus lacking pragmatism. For us as students there was also a need to find the balance between knowing and not wanting to know more, since it would have been too much information to handle in order to create our thesis. It was easy to justify our plan proposals from a rational point of view, although they have been proven to contain negative or unwanted effects. In one way we were ‘experts’ since we knew a lot about (mainly Swedish) planning but we also felt we were still learning and that India and slums posed so many new prerequisites we could not be experts on that.

Moving into theories of post-colonialism it was sometimes hard not to feel superior to the people we worked with. We were the ones that knew “development”, hence trapped in post-colonial patterns of thought. However, we did not want to fall into the trap of the white man’s burden, but wanted to learn too and after our project in Salia Sahi we knew so much more. Maybe we all need to make the same mistakes in order to progress and to be successful when working in a foreign country. To include post-colonialism in a thesis like this might to some be to over-elaborate and to look for long-shot interpretations, but I believe that even if planners are not actively or consciously promoting colonialist ideals it is important to be aware of notions presented. In our ambition to help we may actually damage more than we help if not considering that ‘we’ do not always know what is best for the Others.

As well as we as Swedish planners can teach the people we work with new things, there is a mutual learning process and they can also teach us things as long as we are willing to learn. Payne (2008) for example highlights that slum dwellers are used to take care of all available space and reuse and recycle all kinds of material and hence these dwellers are better placed to face the future than middle income groups in the West (Payne, 2008:20). The same theme has been elaborated by many more (see for example Andersson, 2011) but one must also keep in mind not to glorify the life of ‘Noble Savages’ fighting for survival.

Finally I would like to summarise by referring to Schön saying that Technical Rationality depends on agreement about ends (Schön, 1983:41). Ours was not a provider model project since there was no such agreement, which became all too clear when we presented and assessed our proposals. Regarding the provider or self-help models; to move from provider to self-help implies the planner is giving up power. Provider models, modernism, technology, knowledge, and rationality stand for all that is normative and considered ‘good’ of the West/North. Enabling strategies for self-help show and highlight what have through history been perceived as weaknesses; local know-how, small-scale, and step-by-step which historically been seen as backwardness. To give slum dwellers a value of their own and for the knowledge they hold is a first step towards more self-help solutions. The second step would be to let go of power and control and trust the slum dwellers to know best on how they want to lead their lives. Planners can be both obstacles and solutions to issues of slum-upgrading, but they are always a product of surrounding values and the context they are working in. Payne (2008) is right when he says planners and architects are part of the problem, but I would say I am also right when I claim that planners are part of the solution as long as they are humble and prestigeless, and willing to learn and to give up power.
A prestigeless meeting? Photo: Gunnar Nyström.
Our aim with this thesis was to gain a greater understanding about slums, a subject that in most aspects is a very complex issue. Slums are not present in all of the world’s countries, but where it is present it is quite widespread and in attending. In order to learn more about slums we have read literature on the subject and also performed our case study in India, a country where the “problems” with slums has been present for many years and where the work in trying to help and upgrade conditions for slum dwellers has been longstanding. Worldwide organisations such as the United Nations and the World Bank together with local NGOs are just a few participants in the struggle to create better living conditions for slum dwellers worldwide which is also expressed by the United Nations in the Millennium Development Goals.

After carrying out this thesis we believe that we have accomplished our aim in gaining a greater understanding about slums both in theory and practice. Our literature studies have helped us to find the answer to the first fundamental question about the notions of slums. We conform to the definition of slums made by the UN-HABITAT which strives to focus on the living conditions more than whether or not the slum dwellers are poor, as access to basic amenities should be a part of living conditions for the whole world’s population. In our second chapter we discuss urbanisation, informality and poverty and how these can be linked to slums. All three are in the highest sense linked to slums both considering living conditions and the growth of slums. The urbanisation that has occurred all over the world the last century has created great problems in developing countries where the process has been rapid and uncontrolled. Both informality and poverty are in some sense a reaction and consequence of the urbanisation process, as society has not been able to keep up providing housing and services for the immigrants, thus creating both informal settlements and informal economies, as well as bad conditions for people to earn a living.

Our experiences have taught us that no slum is like the other and although lacking one or all of the conditions for being defined as a slum, each has different prerequisites. Our case area Salia Sahi lacked all of the five conditions to a greater or lesser extent. Salia Sahi was an effect of the urbanisation process where people from rural areas moved to the city in hope of finding a job. The informal part of Salia Sahi is that all inhabitants reside on unauthorised land as they do not own the land and it is also likely that some of the inhabitants are a part of the informal economy in the city. Most of the inhabitants of Salia Sahi live beneath the poverty line of one dollar a day both because they started from scratch coming to the city and because possibilities to find work without education are scarce. We believe this could also be an effect of the inhabitants belonging to scheduled tribes/casts of low status since these traditional ideas are hard to break even though they are illegal.

In our thesis we have further investigated how the physical conditions of slums can be improved. We found two main contradictory points of view, one focusing on providing slum dwellers with houses and infrastructure (top-down), another focusing on supporting slum dwellers to help them help themselves to better housing and infrastructure (bottom-up). The first point of view is where the state or government provides new housing for dwellers to move into, which is also the view-point closest to planning as we have been taught in scale and organisation. Hence our case area development proposals were in this spirit, which was not appreciated by most actors involved.

The implementation of development ideas can be made in several different ways and this has to be investigated for each area deriving from prerequisites such as financial possibilities. The physical conditions of Salia Sahi today are far from fulfilled and there are many improvements that can and need to be made. Again this can only be done when there is a plan which all actors and inhabitants comply with and the
financial issues are solved either with funding from the government or foreign aid agencies, other help from the government or private developers through cross-subsidisation and always together with the inhabitants. During our case study we came in contact with several different actors, ranging from the grass-root organisation of Mahila Milan to the well-established NGO SPARC, and through official documents we were influenced by worldwide institutions such as the United Nations and the World Bank. Unfortunately we did not come in touch personally with the municipality of Bhubaneswar or private developers, but these actors also have an important role to play in slum-upgrading. One of the biggest obstacles to slum-upgrading as we perceive it apart from financial issues is to get all these actors to strive towards the same goal. Our experience from presenting our proposals was that none of the remarks from the different groups were on the same track. Within groups reactions were consistent but between groups they criticised our proposals from different angles and wanted different solutions. According to us this is where the planner could have the intermediate role and try to gather all the different ideas and thoughts to one proposal that is accepted by everyone involved. This would take a great amount of time which we unfortunately did not have.

Apart from achieving our aim with this thesis the work has evoked many thoughts and issues concerning slums and slum-upgrading. Here we have summarised all these thoughts, gained knowledge and experiences in six bullet points:

• It is of great importance to build relations between actors, to let it take time and to nurture it for a long term perspective. The work with soft and solid matters are equally important, so upgrading not only provides new houses but also teaches the inhabitants means to take care of their new dwelling and can afford to keep it. Mahila Milan works from this model and can be an inspiration to planners; prestigeless and capacity building aiming for the dwellers to be self-providing eventually.

• Owning land and dwelling is a very big issue and often an opted for solution, but we did not always understand why. Maybe focus could be shifted from owning to other forms of secure tenure such as lease-hold and cooperative housing associations.

• Justice and equality are important notions in working with slum-upgrading. Is it fair that people settling unauthorised in a good location should receive hold of the land and a new dwelling at 10 percent of the market-value? We have no answer to this, but the question is well worth to keep in mind.

• The provider and self-help models have been tested and evaluated in all kinds of ways but there has never really been one model more successful than the other concerning the issues of slum-upgrading. Instead all the different slum-upgrading projects have reached their own solution, often by gathering the best suited ideas from both models to solve their special needs. Often a combination between self-help and aid from the government encourages the whole society to work together towards a better future.

• The importance about time-frames, meaning how long a newly-produced house should last before it is categorised as slum again, cannot be underestimated. As many newly-produced houses were not maintained they degraded rapidly. Another aspect is the possibility to stay in the same area as a household becomes richer and wants to expand or develop their housing. Is the work with slum-upgrading only about working reactively or is it possible that the slum dwellers will improve their lives and income?

• The issues of slums will not be “solved” unless they start to be handled proactively on several levels.
8 fam/fam
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Appendix A: Typehouses used in the Development Plan for Adibasi Gaon

**Typehouses in Adibasi Gaon**
In our plan proposal for Adibasi Gaon we have used six different types of houses. The reason for using different types of houses and also different heights is to create a more varied cityscape. All of the houses are built with balcony in some way, creating an outdoor space for each household close to the dwelling. Every dwelling unit is 35 m² and has separate bathroom and kitchen. Each dwelling also has windows in two directions creating good possibilities for ventilation.
G+3 Angle House

G+3 Block House

<table>
<thead>
<tr>
<th>No. of floors</th>
<th>Type of House</th>
<th>DU/building</th>
</tr>
</thead>
<tbody>
<tr>
<td>G + 1</td>
<td>Row House</td>
<td>1</td>
</tr>
<tr>
<td>G + 2</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>G + 3</td>
<td>Short w Balcony</td>
<td>24</td>
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<tr>
<td>G + 3</td>
<td>Long w Balcony</td>
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