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Setting up a sanitation project in urban poor districts in developing countries:

a different approach

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Reflection leads for project leaders

Data sheets (Synthesis)

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The following data sheets are a synthesis of the document **"Setting up a sanitation project in urban poor districts in developing countries: a different approach - Reflection leads for project leaders".** This document is intended for anyone who aims at carrying out an urban sanitation project in an underprivileged district of a developing country's major city. It applies to those who want to implement a non-existent service in a district as well as those who want to improve an inefficient service. Different kinds of persons or entities can carry out a sanitation project: NGOs, inhabitants of poor districts, private companies, municipalities, international organizations, etc.

These data sheets are thus based on a field study, which brought out a number of obstructions and systematic errors but also interesting success factors applying to urban sanitation projects. This study was carried out in 6 major cities of developing countries: New Delhi (India), Hanoi (Vietnam), Phnom Penh (Cambodia), Buenos Aires (Argentina), Santiago de Chile (Chile) and Antananarivo (Madagascar).

Urban sanitation: an integrated approach

Our approach tackles the sanitation issue on the hygiene and sanitary point of view. With this study, we intended to consider solid waste and wastewater management as a whole including the collection, the draining, the treatment and the final disposal of the following sanitary risks: excreta and household wastewater, household solid waste and rainwater. **The real purpose here is to ward off any sanitary danger for the populations in order to improve their health and living conditions as well as their urban environment.**

Besides, issues involving solid waste and stagnant water or wastewater are often connected: what is the advantage of a drainage project if the channels are systematically obstructed by solid waste? What is the advantage of implementing a waste collection system if floods prevent the dump trucks from going about the streets and collect the garbage?

Sanitation is a relatively complex domain. Its specificities, compared to other sectors of development, need to be always kept in mind. Compared to water, populations do not consider sanitation as an immediate need: demand as well as involvement and willingness to pay for this service are not as high as for other services. The demand will then have to be aroused in the population and means will have to be found to convince the inhabitants to invest and participate in sanitation improvement. Sanitation is very often linked to cultural beliefs and traditions. Some regional particularities can constitute obstacles and have to be taken into account for the sake of the project's success. For example, in India, the notion of secretion is synonym with impurity; in Madagascar, defecating on the ground means disrespect to the ancestors.

Why writing data sheets?

The purpose of these sheets is to give project leaders of any nature elements to **ask themselves the questions necessary to carry out a useful and sustainable project**, to give them reflection leads and concrete examples of sanitation projects, problems to overcome and solutions brought about in the six studied cities. They do not pretend to be absolutely complete or either claim to give all the answers to the questions a project leader is confronted to in the matter of urban sanitation.

Data sheets 1 to 3 correspond to the first part – Pre-Project Reflection and Research – and the data sheets 4 to 8 to the second part – Structuring and Implementing a Sanitation Project. The synthetic form of these sheets allows a project leader to use them frequently on the field if necessary. For more details, examples or references, please consult the report, available on our website www.experians.net.

Choosing the District and the Type of Project

Numerous factors to be considered

When a project leader decides to intervene in an underprivileged district, choosing the type of project and the intervention district is a vital phase.

Driven by his intention to carry out a sustainable action – integrated into a larger system of development –, the project leader will base his choices on meetings with city's officials and other actors such as NGOs and associations of the city. These various actors will give him distinct and complementary information about the local policies on sanitation, the priorities of the municipality and the projects carried out or in progress. They will also give him a larger and more extensive vision of the sanitation situation in the city.

During these interviews, the project leader will particularly focus on the problems related to the land property and the authorities' standpoint as to slums.

Once all these elements have been gathered, the project leader can choose the intervention zone – one or several districts – according to the nature of the project – emergency or development, infrastructure building, awareness raising, etc. – and the risks linked to an intervention in the slums, particularly risks related to the land property.

Finally, he will gather the information specific to the concerned intervention zone and population.

On the field: Determination of the districts of intervention in Hanoi (Vietnam) for the organization OVE

NGO OVE (Danish Organization for Renewable Energy) intervened for the urban environment improvement of an underprivileged district of Hanoi (Vietnam) from 2000 to 2003. Therefore, they got to be better acquainted with the Vietnamese interveners in this sector. For the second phase of the project (2004 to 2008), the organization consulted, among others, the DONREH (Hanoi Department of Environment and Housing) and the Women Union in order to determine the high-priority poor districts. In this manner, they identified together three urban sectors located in former industrial parks in the South of the city. These districts experience, among others, flood problems due to the fact that the city's waste and rainwater all flow towards these zones.

Memo

1- **Information research to choose the district:** meetings with public/local authorities, meetings with the civil society.
2- **Land situation of the underprivileged districts:** insecurity, land speculation.
3- **Type of project:** emergency, development, pilot, size of the project.
4- **Information specific to the target district(s).**

Data Sheet 1 | Choosing the District and the Type of Project

1- Information research to choose the district

Meeting the municipal and governmental officials relevant for sanitation and poverty in order to:
- get informed on the government policies on sanitation and on their implementation;
- determine the city's high priority zones on sanitation and poverty grounds;
- integrate these elements to the project to reach a concerted and sustainable development in which the project leader's action is not contrary to these policies and priorities;
- get informed on the standpoint of the public authorities as to slums;
- inform the authorities of the project for a better coordination of the actions.

Meeting civil society to:
- extend one's vision of sanitation and poverty in the city;
- get informed about the other sanitation projects carried out or in progress in the city and gather information on these projects (technical solutions used, chosen management, sustainability, etc.);
- take advantage of the experience of previous projects to optimize the project setting up (identification of mistakes, good practices, efficient structures, intervention risks, cultural obstructions, etc.).

2- Land situation of the underprivileged districts

What is the land situation of the poor districts?
What is the level of securisation? What is the standpoint of the public authorities as to slums:
- Forced eviction?
- Hypocrisy: fires of undetermined origin for example?
- Passivity and non-recognition?
- Rehousing?
- Improvement of the district?
- Supply or not of basic services?

Land insecurity
It is necessary, particularly in the case of infrastructure building, to securise land property in the target area to:
- prevent the risk of seeing these infrastructures destroyed at the same time as an illegal slum, for example;
- prevent the eviction of "fragile" populations, such as tenants, when the land gains in value entailing an increase in the rents.

3- Type of project

The point here is to know if the project leader envisages:
- an emergency or a development project – the emergency project does not aim at sustainability – particularly in the case of infrastructure building;
- a pilot project to test a project before carrying it out on a larger scale.

The scale of the project
The choice of the intervention zone is linked to the choice of the scale of the project. In order to reach sustainability, it is advised to:
- comply with the existing administrative distribution as, in the end, the field offices will be responsible for the sanitation of the area – in the framework of decentralization;
- respect, as far as possible, the traditional links existing between the districts or the groups of people – same employer, same school, same geographical origin, etc.

4- Information specific to the target district(s)

When the district is chosen, information specific to the district have to be collected *from the municipalities and government – within the limits of their availability and accuracy:*
- information on the networks, the topography and the geography of the place;
- information on the theoretical responsibilities as to sanitation and on the reality on the field;
- socio-economic information on the households;
- information on the houses of the district and on the sanitation equipment;
- political information: elections and conflicts of influence;
- information related to the other projects in this district: project leaders, objectives, duration, completed projects still having positive or negative impacts on the district.

The Actors of the Project

Intervention and coordination of the numerous local actors

In the design of the project, the phase of identification of the actors is vital. The first thing to do is to inform all the actors concerned, define the roles and responsibilities of everyone with an objective of sustainable development.

The future beneficiaries of the project, the inhabitants, usually represented by a leader, must imperatively take part and get involved in the implementation of the project and make it their own. This is the key to sustainability.

Municipalities are the new main actors of sanitation following the accelerated decentralization of developing countries. They now have new responsibilities that they are not always able to cope with given the level of human and financial resources they have. Then, they have to be integrated to the project to be supported in their new role.

Numerous projects are carried out with the support of one or several NGOs. They can be project leaders, funding partners or perform social expertise for the project leader.

Finally, other actors are likely to intervene on the scale of the district: the State, the water and sanitation companies (private or public, public or private concessionary company, etc.) and the donors. Usually, their intervention is not direct, but some of these actors can happen to be seriously involved, sometimes even as a project leader, in the sanitation of these poor districts.

As for the organization of the actors, there is no traditional pattern or actors' system warranting the success of a project. However, the chosen system must rely on an accurate distribution of the roles and responsibilities of each actor. It must privilege the establishment of a strong and close relationship with the inhabitants. It must also anticipate the withdrawal of the project leader when the project ends, in an objective of sustainability.

Memo: the actors of the project

1- **The inhabitants**, final beneficiaries of the project, and target groups: leader, women, children, waste pickers.
2- **The municipality** and the responsibility of urban sanitation in general.
3- **The NGOs**: variety and methods of inquiry.
4- **The State, the water and sanitation companies and the donors.**

On the field: **The pre-collection project for household waste in the district of Faami in Antananarivo (Madagascar):**

This project, set up and funded by international solidarity NGO Enda-TM had a double objective: implementing a viable collection system and heightening the population's awareness of cleanness and hygiene problems linked to garbage.

To implement the project socially, Enda concluded a partnership with a local organization, ADH (Assistance for Human Development). ADH conducted surveys on the inhabitants to get their opinion on what would be the best pre-collection system and then implemented awareness campaigns on cleanness. The pre-collection solution was chosen according to the results of the surveys and was implemented in the district.

The financial management (charge collection and collectors' payment) is entrusted to the *fokontany*, the municipality's field office. First, ADH monitors all the payments. Then, the *fokontany* manages the project alone.

Corruption acting as a brake on development projects

Development projects often appeal to considerable amounts of money that can arouse the lust for wealth of many people more or less involved in the project. Indeed, one can come across corruption at every level:

- local authorities and municipal services: corruption can be exercised either directly on the project's team or indirectly, on the population concerned by the project (free services arbitrarily submitted to charges);
- local partners: partners have to be chosen most carefully. For instance, many "local" NGOs are created to lay hands on what is considered a humanitarian "tidy sum" invested in their country;
- district's leaders: as they are connecting the population with the authorities or the project leader, corrupted leaders can decide to charge for their services. The lust for money can bring them to privilege their interests rather than the ones of the community.

Therefore, a project leader has to be aware of these phenomena, particularly to prevent situations where the inhabitants of underprivileged districts would end up being victims of the assistance they benefit from, ill-intentioned persons taking over the project. Finally, a general climate of corruption can bring the inhabitants to develop reluctance to invest in a community.

1- The inhabitants

Get to know the inhabitants:
- Questions on the household: size? Head of household? Employment situation of the members of the family? Income? Precedence in the district? Will to involve in a community project? Available time for this type of project?
- Questions on the dwelling: Size? Infrastructures? Reason for moving in the district? Way of living?
- Questions on sanitation habits: maintenance of the sanitation equipment when there is any (frequency, quality of the cleaning)? Utilization of soap? Solid waste disposal mode?

Questions about their leader:
- Where does the legitimacy of the leader come from? Was he elected? Designated? Is he religious? Recognized? Does he live in the district and in which conditions?
- How long has he been here? What is the actual connexion between him and the community? What are his aspirations and intentions? Are they political?
- What are his personal interests? A better quality of life? Money? Does he inspire confidence?
- What are the leader's faculties? Did he go to school? What language(s) can he speak?

The target populations in sanitation:
- The women are in charge of the hygiene of the household and the education of the young children: they are major actors in sanitation.
- The children can be provided with an education on personal and communal hygiene in school.
- The waste pickers can be associated to the project (social benefit).

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2- The municipality

Local organization of the field office(s) in charge of sanitation
- Is liquid and solid sanitation the responsibility of one field office or is this responsibility split into several offices?
- Do these offices have sufficient human and financial resources to accomplish their mission?

The level and the state of decentralization of the concerned country
- Are the municipalities elected and how? Are the field offices designated or elected? What is the frequency of the elections and when is the next one supposed to take place?

- In the case of decentralization, were resources assigned to the municipalities for them to fulfill their new functions? If it is the case, what are they?

The will to get involved
- Are the field offices willing to involve in a sanitation project? If no, is there any way to motivate them (staff training, pressure via higher authorities, etc.)?
- Are the municipalities ready to cope with their sanitation responsibilities?

3- The NGO

Questions on the NGO:
- Its nature: what is the own purpose of the NGO – social work, infrastructure building, human rights, religious cause, etc.?
- Its origin: local or international?
- Its presence in the country or even in the district: precedence and steadiness.
- Its financial stability (funding mode, financial volume).
- Its reliability (in particular, avoid the NGOs created to take advantage from international funding for their own interest).
- Its human resources (knowledge of local idioms, local team in an NGO if it is international, available tools, etc.).

Local context of the civil society
- Is the local context hostile to NGOs, particularly international ones? Is there a right of association that is clearly defined?
- Is the number of NGOs present on field significant? How does it vary? Why?

4- The State, the water and sanitation companies and the donors

The State
Was a national sanitation programme carried out? What are the contents? Is it compatible with the project considered for the district?

The water and sanitation companies
Are they acting in the framework of their concession only aiming at profitability or are they developing social programmes?

The donors
Are they acting in the framework of a specific programme with objectives? What are they asking for as a guarantee? What is their influence on the project?

The Sanitation Demand: Identification and Social Marketing

Determining the real local needs and working on local awareness of the importance of sanitation

Populations do not consider sanitation as a high priority need, except in special cases as when drainage is needed after floods.

In order to better know the populations concerned by the project and assess their willingness to involve their time and money, a door-to-door survey can come out very useful.

This phase will allow identify financial, social and cultural obstructions causing a lack of motivation on the matter of sanitation.

When sanitation is only a secondary concern for the inhabitants, in spite of the obvious presence of serious sanitary risks, the project leader can implement social marketing. He will bring up the inhabitants' demand by arousing awareness of the populations and show them simply the personal and communal benefits of sanitation. An argumentation adapted to their concerns will help motivate the inhabitants of the district.

On the field: **NGO Sulabh International: a marketing strategy for urban sanitation**

Since 1970, NGO Sulabh International has been fighting against manual scavenging, a widespread practice in India, by promoting double-pit latrines that can be emptied safely when the sludge is dry. The organization has led a large campaign to equip several regions with latrines. 1.2 million of toilets and more than 5,500 public toilet facilities have been built.

Sulabh International owes its incredible expansion to a convincing marketing approach. The organization approaches the families by offering them not only the building of toilets and latrines but also a pack of upstream services – identification of their needs in order to choose the more adequate technical solution, according to their financial means, and connection with a funding system – and downstream services – two-years guarantee and first latrine pit emptying for free.

Memo
1- **Survey** on the inhabitants, on their sanitation habits and on their demand for sanitation
2- **Consideration of the local cultural aspects:** obstructions and levers for the project.
3- **Social marketing.**

Data Sheet 3 | The Sanitation Demand: Identification and Social Marketing

1- Survey on the inhabitants, on their sanitation habits and on their demand for sanitation

Several useful pieces of information to be collected from the inhabitants in order to carry out the project:
- Socio-economic information on the households;
- Concerns and high priority needs of the inhabitants as to the improvement of their living conditions;
- Types of dwelling
- Reasons for their presence in the district and possible mobility;
- Existing individual and communal sanitation equipment and their location;
- Willingness to pay for a better sanitation.

The survey methods:
- Door-to-door survey to obtain information on the households or at the municipality for communal equipment.
- Possible use of participatory tools to help the inhabitants classify their needs by order of priority (documents in the local idiom, pictures, etc.).

2- Consideration of the local cultural aspects

Identify local obstructions to the future project:
- in the traditional culture, the recent history, the recent economic and social crises. Fatalism, refusal to pay bills, passivity, fear of the government, etc. can have a negative impact on the project.
- in the representation of waste in the country: for example, the habits of former rural inhabitants who came to live in the district (throw the garbage behind the house, defecate in the open air in a hidden place) or the cultural relationship to the earth (where the ancestors rest) and the water can obstruct the project.

Identify possible levers to promote sanitation:
The traditional conception of cleanness is often linked to local beliefs. Using the religious and cultural aspects linked to cleanness can be an efficient means to arouse awareness within the inhabitants and make them take part in the project.

3- Social marketing

What is social marketing in a sanitation project?
In a sanitation project, social marketing consists in bringing up the sanitation demand by offering the households a method of improvement of their sanitation adapted to their personal and financial means.

A few leads to use social marketing in sanitation:
- Convince the population that a better sanitation will benefit the family and the district. An argumentation based on hygiene is rarely the best solution. Nowadays, it is more often advised to use arguments linked to honour, dignity and social status.
- Offer simple and affordable solutions to the inhabitants, using a commercial approach. The household is a customer and sanitation is a product (latrines for example) presented as attractive (just like a TV or a mobile phone, which are often already present in the slums).

Choice of the Technical Solution

Adequate and sustainable technical solutions

The approach chosen here is to consider sanitation as a whole aiming at the withdrawal of the sanitary risks altogether: wastewater, excreta, rainwater and solid waste.

However, the technical solutions to get rid of these risks are often different according to the risk concerned. For each risk, a particular solution is needed and it will have to be chosen according to local particularities: physical layout of the district, aspects related to the land, financial means and types of solutions chosen among the low-cost solutions (technological solutions adapted to developing countries: low acquisition and maintenance costs, easy maintenance, climatic wear tolerance, etc.).

When choosing the solution, the project leader must also take into consideration the current needs of the poor populations without omitting those of future generations: mechanical strength of the equipment, consideration of the maintenance and consideration of the urban growth.

Memo
1- **Choosing a solution adapted to the inhabitants' needs and the constraints of the district:** physical layout of the district, aspects related to the land, financial means, etc.
2- **Choosing a solution adapted to the needs of future generations:** mechanical strength, maintenance, urban growth.

On the field: **Warding off sanitary dangers in poor districts: the project of the French Association of Volunteers of Progress (AFVP) on main road 1 (RN1) in the south-west of Antananarivo (Madagascar)**

Following the renovation works on Main Road 1, the AFVP chose to improve nine districts located around the road. These "lower districts" are situated in the easily flooded valley of Antananarivo. Initiated in 2003, the project covers several points specified notably from the results of a survey on the population and the local authorities:
- refurbishment or construction of standpipes in order to improve the drinking water supply and the draining of close stagnant waters;
- construction of public toilet facilities (latrines, showers) and wash-houses;
- implementation of a cleaning system of the district and of an improved household waste collection system – awareness strengthening of the inhabitants, increase of the number of garbage bins, pre-collection system.

This approach tackles at the same time several aspects of sanitation and cleanness – in this case, water management, waste management, construction of latrines and showers – with the purpose to improve the hygiene conditions of the nine districts concerned. This way, it offers a global response to the all the encountered problems.

1- Choosing a solution adapted to the inhabitants' needs and the constraints of the district

The solution must be adapted to the physical layout of the district and thus take into consideration:
- the physical layout and the topography of the district: depth of the ground water, slope and local gradient, flood liability of the area, access to drinking water, etc.;
- the existing sanitary infrastructures: dimensions and dilapidation of the sanitation infrastructures, current maintenance of the facilities, nature of the network (separated or combined), connection possibilities, equipment used;
- the consequences of urban pressure: lack of space for construction and narrowness of the streets, decrease in the efficiency of existing means (natural waste stabilization ponds filled for example).

The technical solution depends on the land situation of the district:
- The construction of an infrastructure requires the securisation of the land on which it is supposed to be built.
- The land insecurity of some areas endangers the sustainability of the solution adopted: risk of eviction or destruction.

The technical solution must be adapted to the local financial means:
The local financial resources are often limited, so the technical solutions must be chosen bearing in mind these limits, during the infrastructure building or the service's implementation financing or during the maintenance financing.

The low-cost solution:
The technological solutions (in particular the high-tech solutions) imported as they are from developed countries are very often doomed to failure. There are low cost solutions, appealing to low cost technologies, adapted to the reality and needs of poor urban districts of developing countries. They have already proven efficient in conditions specific to developing countries. Ventilated double-pit latrines, simplified sewers, pre-collection with carts: these are local solutions which are most of the time far more appropriate.

2- Choosing a solution adapted to the needs of future generations

The choice of the technical solution must take into account the mechanical strength of the equipment:
- The future construction and maintenance materials must be available in the area and appeal to a savoir-faire also existing in the area.
- The recourse to a low cost solution does not mean that its sustainability will be inferior. This technical solution must be designed for the long term.

The choice of the technical solution must take into account the future repairs' cost, which has to be affordable for the inhabitants.

The choice of the technical solution must take the urban growth into account:
The estimations about the choice, the dimensions and the implementation of the technical solution must take into consideration the forecasts on urban population. If the urban growth is omitted, the facilities could be under-dimensioned, inefficient or even useless.

Social Support

Awareness and appropriation

The success of a development project very often depends on the social support of the populations.

The latter consists in arousing awareness of the inhabitants on the sanitation problems, their origin and their causes. The next step is to inform them on a better sanitation, on the necessary changes to reach it and to provide them with a project in which they can take part, in particular at the level of its design and implementation.

This way, the future beneficiaries of the project – the inhabitants – can get organized to express a need and participate in the research of ways to answer this need. This internal social strengthening can notably give them the opportunity to claim for services they are entitled to.

The involvement of the inhabitants is often a guarantee of the project's sustainability as it allows them to make the project and its objectives theirs. Appropriating a project entails a feeling of ownership and responsibility as to the infrastructures built and their future maintenance. It also entails a feeling of responsibility as to all the common areas the inhabitants share, learn to respect and even improve together.

On the field: A few arguments developed by organization Famonjena in order to change mentalities about hygiene and sanitation in Madagascar…

According to organization Famonjena, it can be interesting to use the pride of the Malagasy to convey messages on the social status and cause a commotion in the mentalities. For example, when the children say that 'people defecating in the open air are savages', the impact on adults is considerable. Likewise, you can use the fact that the Malagasy often want to prove that their life standards are higher than the others'. For example, a small contest of interior decoration of the houses was implemented by organization Famonjena in a rehabilitation village and all the families engaged in a race for interior furniture. The same process is envisaged for building latrines.

In some rehabilitation districts where poor populations live, another initiative consisted in making folk music bands – composed of young members of the community – stand out and convey messages about sanitation in their songs – as well as about other awareness programs on Aids and illiteracy alleviation.

Memo
1- **Social support – What is it?**
   awareness, education, information.
2- **Social strengthening,** internal and external.
3- **Appropriation of the project,**
   infrastructures, common areas.

Participation of the inhabitants in a development project

Nowadays, the organization of the inhabitants of a district in communities and their participation in the different phases of a development project are often brought forward as aspects essential to the success of a project and the sustainability of the implemented solution. However, contrarily to what is commonly assumed by many organizations, these two notions of community and participation are rarely inborn in poor urban districts of developing countries. The participation of the inhabitants must therefore be encouraged and developed by the project leader.

Participation is a crosswise notion related to numerous aspects of the project that are tackled in this document. Indeed, there can be many ways for the inhabitants to take part in the project:

- they can take part in the design of the project: with claims, description of the main local sanitation issues, ideas about possible technical solutions, they can contribute to the examination of the many directions the project can take;
- they can physically work in with the construction of sanitation infrastructures and the regular cleaning of the district (waste collection);
- they can bring their financial support for a part of the construction costs for example and/or contribute to the operational costs of a sanitation or cleanness service.

Data Sheet 5 | Social Support

1- Social support – what is it?

Arouse awareness of the existing sanitary problems in the district
- Arguments based on health and hygiene are rarely appropriate: it is better to use arguments based on honour, dignity and social status.
- The level of awareness may already be high in some cases (floods or epidemics – cholera for example) but most of the time, this awareness has to be aroused.
- The population has to make the link between the sanitary problems it is confronted to and its inadequate behaviour and habits.

Awareness and education of the population:

Awareness for whom?
- A good hygiene is a learning process: it is important to teach personal and communal hygiene to the children in school, as early as possible.
- The women, in charge of the household's hygiene, are major targets of the awareness process.
- The local authorities, even if they display sanitation as a priority, do not always act accordingly: they have to be made aware of the sanitation problems, their socio-economic cost and the existing solutions.

Awareness – how to
- Awareness actions can be manifold: demonstrations, sanitation and cleanness festivals, cleaning and awareness campaigns, film screenings, flyers distribution, pop music bands singing the benefits of sanitation, discussion groups, etc.
- The information channels can be varied: radio, television, newspapers, flyers, etc. It is imperative to identify the information channels that are really efficient.
- An awareness action on a door-to-door basis remains the most efficient means but it results costly.
- Among the inhabitants, social animators can be trained. They will regularly transmit messages on sanitation to their neighbours.

Informing on the project and its objectives
The inhabitants have to be gathered and an idea of project submitted to them. This is a good way to make them communicate with each other and restart the dialogue between neighbours.

2- Social strengthening

Internal strengthening
- Let us not forget that for the inhabitants, dedicating time to the community means less time for personal occupations or family.
- Similarly, the community spirit is just as unnatural in a slum as it is in a well-off district. It must be stimulated and strengthened.

External strengthening
- Structuring the inhabitants – internal strengthening – enables them to voice their needs strongly and united and to claim their rights.

3- Appropriation of the project

Appropriation of the infrastructures
The new "owners" will take care of them and maintain them as if they were personal estate.

Appropriation of the common areas
- Common areas are usually used for private (commercial) purposes or as dumps.
- One must focus on the appropriation of these areas by organizing public discussion groups to determine their arrangement.
- In the case of the improvement of a common area – cleaning an unauthorized dump, improvement of a piece of land following a rehousing operation –, the land has to be "healed" by finding it a new purpose benefiting the whole population: park, playground, etc.

Participation of the inhabitants (part 2): The objective of this participation of the inhabitants is double. On the project's point of view, the involvement of the population during the different phases will make the inhabitants feel they own the project and then they will feel responsible for the maintenance of the infrastructures and the efficiency of the service. On the more general point of view of the fight against poverty in the district concerned, the social cohesion created by the community momentum will allow the poorer – often rejected by society – to get some kind of social recognition and be able to voice their opinion on urban development matters which concern them.
When it is effective, the participation of the inhabitants is a very efficient tool for the project leader. However, its implementation is synonymous with numerous challenges: it requires a lot of time as well as an appropriate part of the budget.

Costs, external funding and participation of the inhabitants

The financial arrangement is the search for a balance between the financial implications of the different actors to cover the costs of the project.

One must first of all define all the budget items of the project: cost of the technical solution, of the social support, cost of the monitoring and mid-way and post-project assessments, etc. One must also define the available financial resources: municipality, inhabitants, donors, NGOs, etc. As for these resources, the financial participation of the inhabitants is very often a key to the success of the project. Even if it is rarely sufficient to pay for the entireness of the costs, this participation is very often achievable. In the case of infrastructure building, it is a compulsory condition to a good appropriation of the infrastructures by the inhabitants. This way, they feel they own the infrastructure and thus feel responsible for the good maintenance and durability of the construction.

If, once it is implemented, the service (linked or not to the infrastructure built) implies a cost, the payment of this service must be anticipated as soon as the setting up phase of the project: amount, frequency, collection mode, etc. The optimal management mode must also be determined in advance.

When the inhabitants already pay rates for the urban services, the municipality must provide them with a service corresponding to their means and the inhabitants have a right to claim it.

Memo
1- **Costs of the project.**
2- **Financial participation of the inhabitants**, local taxation, infrastructure building, payment of the service, financial management of the service.

On the field: Social charge reduction in Buenos Aires (Argentina) and Santiago de Chile (Chile)

In the context of the Participatory Management System in Buenos Aires, Aguas Argentinas S.A. implemented a social charge reduction in the districts where the inhabitants acted as the work force for the projects of connection to the network: the inhabitants of these districts pay half price for the draining of wastewater.

In Santiago de Chile, the Chilean government pays a subsidy ("subsidio") to households that declare themselves as poor – after having filled the CAS[1] form and undergone a survey at home. This way, the government pays up to half of the first $15m^3$ of a household's drinking water. This amount is directly billed by Aguas Andinas – private concessionary company for water and sanitation in Santiago de Chile (Chile) – to the government. As the tax for wastewater is included in the drinking water bill, the government then also pays half of the first $15m^3$ of the wastewater of these households (draining and treatment).

[1] questionnaire to determine which are the poorer households in Chile based, among others, on employment, housing and schooling criteria.

Data Sheet 6 | Financial Arrangement

1- Costs of the project

The cost of the technical solution depends on the chosen solution. It can be chosen among the low cost solutions, and must take into account the maintenance costs.

The social support can sometimes be costly and it must not be under-estimated as it is indispensable. It is the binder allowing the project to be successful.

The monitoring and assessments of a project must be anticipated. The mid-way assessment enables the correction of setting up mistakes early enough. If the project leader wants his project to participate in a collective reflection on sanitation in poor urban areas, he has to allocate a budget to the post-project assessment.

Offering the inhabitants to work as labour force can reduce the total cost. The inhabitants have to realize the cost by dedicating their time – and thus losing potential income – to the improvement of the district.

2- Financial participation of the inhabitants

Local taxation
- If the inhabitants pay rates, the municipality must provide them with services.
- The limited resources of municipal offices of poor districts do not always allow them to provide an adequate service, even less frequently a quality service.
- Even if the inhabitants of poor districts do not pay taxes, they can get informed on their rights for services and possibly claim them.

In the case of infrastructure building
- The financial participation of the inhabitants is always achievable but rarely covers the entireness of the project's costs.
- It is necessary to a good appropriation of the infrastructure by the inhabitants who will not refer to it as the "NGO's latrine" but as their own.
- The financial participation of the inhabitants can be determined through a prior survey on the willingness to pay of the inhabitants.
- This willingness to pay can be stimulated by using a social marketing adapted to sanitation.

- The adapted funding modes have to be identified for the contribution of poor households: microcredit, loans, work as a labour force, equipment supply. The families have to be able to support the chosen system.

Payment of the service
- The poor households and the managing entity have to be able to support the price scale. A subsidy or an adapted social reduction can come out necessary to balance these two constraints.
- The billing system must be adapted to the way of living of the poor households: the frequency and the payment mode must be discussed with the households during the project's early phase.
- The charge collection must be carried out by a trustworthy person and at a reasonable frequency: a frequent collection is more adapted to the management modes of poor households but it is more expensive so a compromise has to be found.

Financial management of the service
- It can be confided to a trustworthy person chosen among the inhabitants, the municipality's field office or a private managing entity.
- This choice has to be specified on a written contract signed by all the concerned actors.
- The choice of the managing entity must privilege management efficiency, closeness to the inhabitants and sustainability of the managing system and facilities.
- A system to control the managing entity must be elaborated and implemented in order to avoid any breach of trust – which would have a particularly negative impact on the social strengthening.

Coordinating and Planning

Defining the roles and responsibilities of everyone

This is the last phase in the design of the project: once the phases of technical solution identification, social support definition and financial arrangement are completed, the coordinating and planning of the project aim at specifying the progress of the project according to a detailed calendar (see below).

First, the roles and responsibilities of each actor have to be defined, then the actions subdivided in minor actions, each under the responsibility of one actor, with a fixed deadline and a specific budget.

The commitments of the different actors can be specified in a written contract, signed by all the actors. This formal phase allows the responsibilisation of the persons concerned and involved in the project and prevents any misunderstanding.

Memo
1- **Distribution of the roles.**
2- **Planning.**
3- **Formal distribution of the responsibilities.**

Example of the distribution of the planning tasks

Phases of the construction of a public toilet facility in the district D (excluding social support)	Responsibility	Deadline	Planned Budget
- Acquisition of the land	Municipality	11/21/2000	400 euros
- Write an invitation to tender for the public toilet facility according to available technical data	NGO X	Between 11/21/2000 and 12/24/2000	-
Note: the expiration date to answer the invitation to tender is set on 02/15/2001			
- Examine the answers to the invitation to tender and choose the more adapted solution	NGO X	Between 02/15/2001 and 03/01/2001	-
- Build the public toilets facility	CompanyY	Between 03/01/2001 and 09/01/2001	3,000 euros
- Check on the sanitary standards of the public toilet facility	Sanitary check organization S	Before 10/01/2001	50 euros

Calendar of the project's progress

Date → / Action ↓	Nov. 2000	Dec. 2000	Jan. 2001	Feb. 2001	Mar. 2001	April 2001	May 2001	June 2001	July 2001	Aug 2001	Sept. 2001
Acquisition of the land	—										
Writing invitation to tender for the facility		—	—								
Examination of the answers and choice of the more adapted solution				—							
Building of the public toilet facility						—	—	—	—	—	—
Checking the sanitary standards of the unit											—

Legend: (— = municipality, — = NGO X, — = Company Y, — = Sanitary check organization S)

1- Distribution of the roles

In the case of infrastructure building

- The responsibility of the infrastructure building can be entrusted to the municipality. This is a good way to involve local authorities, assuming that they have sufficient human and material resources to face this responsibility.
- This responsibility can be entrusted to a private company. This is the most reasonable solution in terms of efficiency, savoir-faire and maintenance. But this solution is also more expensive.

The inhabitants are a useful potential workforce, allowing cost saving.

- They can take part in the works (for example, carry the materials to the construction site when the place is difficult to reach with a vehicle).
- If they accept to take part physically in the construction, they may need a specific training from the constructor (for pipe lying for example).
- The time dedicated to the works means a shortfall in earnings for the households. The inhabitants then have to be consulted on their willingness to pay a workforce for the construction of the infrastructure or if they want to do it by themselves.
- Finally, if the project generates work in the district, it is better to choose inhabitants of the district (among the unemployed people for example) to do it: better knowledge of local problems, better integration, etc.

2- Planning

The project is a sum of actions to be carried out in order to improve the sanitation of the district. A good organization consists in designating a person in charge of each one of these actions, of the implementation and the good progress of the action. This action will be planned according to a detailed calendar and will comply with a determined budget.

All the minor actions can be put down on a calendar (see previous page) so that the progress of the project is clear and consistent (when several minor actions are carried out simultaneously). This calendar will allow the project leader to check the logic of the actions and monitor their succession.

3- Formal distribution of the responsibilities

The distribution of responsibilities cannot stem from friendly agreements based on mutual trust as it would only rely on the goodwill and energy of a few persons and could disappear with the departure or lack of free time of these very persons.

The role and responsibility of each stakeholder has to be accurately defined with a written agreement. This contract between the actors will be the testimony of each actor's commitment and the signature of such a contract will tend to make them feel more responsible.

Control and Monitoring; Post-Project Phase

Responsiveness and adaptation to possible changes

Once the project is initiated, the project leader has to control and monitor the good progress of the interventions of each actor and of the different actions determined during the planning phase according to the calendar and budget.

The control can be carried out by the inhabitants themselves if they have been appropriately informed on the project, by the project leader, who regularly monitors the actions of the project, by the municipality – if it is part of the project to involve local authorities – or by the appropriate control organization, if the project leader wants to privilege technical and financial savoir-faire.

Throughout the project, the monitoring of the internal changes of the community (change of leader, relocations, decrease in participation, etc.) or external changes (arrival of NGOs and/or new projects, new dwellings, etc.) is necessary to integrate these new data to the project and possibly adapt it to them. To do this, a particular attention must be brought to the monitoring, which has to be carried out by district animators that are close to the populations and prone to discuss and react quickly to any of these changes.

Similarly, a mid-way assessment by an independent intervener can enable to correct mistakes in the project that the actors cannot notice because they are too involved in it.

Finally, the monitoring should be implemented on a long term and a very long term basis to assess the durability of the project.

Concerning the post-project phase, the project leader still has numerous steps to go through (assessment, information of the partners, etc.). On the district's scale, it is most of all about helping the motivated inhabitants have access to other basic services.

On the field: **Control by the inhabitants in New Delhi (India)**

In New Delhi, the project of organization Jeet consisted notably in organizing the inhabitants of a (constructed) slum to claim their rights for urban services to the municipality. This way, the community obtained the return of the municipal road sweepers in their district. When they came back, the road sweepers demanded money in exchange for their services.

Thanks to the good knowledge they had on the project, their control on the work of the municipal road sweepers and their dialogue with the project leader, the inhabitants managed to cut short the claims of the sweepers (employed by the municipality) to get a second unfounded wage. The road sweepers then got back to work normally.

Memo

1- **Control.**
2- **Monitoring during the project:** internal changes, external changes, mid-way assessment.
3- **Monitoring on the long term:** durability of the project, mobility of the inhabitants.
4- **Post-project phase:** help to access other basic services, global reflection on local sanitation.

Data Sheet 8 | Control and Monitoring; Post-Project Phase

1- Control

A regular control of the implementation of the projects (accomplishment of the works, social support, etc.) can be carried out by:
- The population: the presence of the inhabitants in the vicinity of the works, their watchfulness and their good knowledge of the project can allow them to exercise a positive pressure on the achievement of the commitment of each actor.
- The project leader: he knows precisely the roles, responsibilities and commitments of each actor and he must monitor the good progress of the operations according to the pre-determined calendar.
- An independent control organization concerning the technical and sanitary control of the facilities. Nevertheless, the cost of such a control has to be taken into account.

2- Monitoring during the project

Monitoring a project means first of all monitoring the changes linked to the district.

The internal changes in the district are the ones that modify the structure of the community: change of leader, lack of interest and decrease in participation, arrivals and departures of inhabitants, etc.
- The project leader must, as far as possible, anticipate these future changes during the pre-project phase. If these changes occur during the project, one has to adapt to them as best as possible, for example by readjusting and strengthening the social support and social marketing.
- The responsiveness of the social animators and other local partners carrying out the monitoring on the field is essential to the success of the project at this point.

The external changes in the district are the ones that are caused by factors external to the community but which have an impact on the project: emergence of a new project in the district, elections, construction of new infrastructures independently from the project, etc.
- Keeping informed on the changes enables to determine those that will have an impact on the project and integrate them to it.
- The monitoring of these external changes must be carried out regularly.

An interesting mode of control consists in having an independent person or organization carry out a mid-way assessment of the project.
- It will allow identify mistakes in the setting up of the project in order to correct them early enough.
- The cost of this phase can come out hardly affordable. In this case, the project leader can reduce this cost by appealing to a student or a local academician specialized in sanitation rather than to a private assessment intervener.
- The assessment process can be double: internal and external. On the one hand, the inhabitants discuss the objectives of the project and the project leader can assess their level of participation. On the other hand, the external analysis brings out a more analytic vision of the project.

3- Monitoring on the long term

Once the project is brought to an end, it can be worthwhile to carry out a long term monitoring on top of the traditional assessment.
This monitoring allows to measure the long term consequences of the sanitary solution and to check the real durability of the project.
This monitoring will focus on the durability of the infrastructures, of the management system of the service, on the subsequent mobility of the inhabitants (which can provoke, for example, some speculation on the rents), on the adaptation to the urban growth and on the access to property for the inhabitants (which represents a growing priority for them).

4- Post-project phase

A post-project action, directly benefiting the inhabitants of the district, can consist, if they are motivated, in helping them continue improving their living conditions in other sectors that concern them: water supply, connexion to an electrical network, paving of the streets, education, etc. The point is to connect the inhabitants and/or the municipality with interveners specialized in this sector.

Taking part to the reflection initiated by the development partners in the city or in the country on solutions to sanitation problems: post-project assessments, reproducibility and scaling up studies, circulation of information, etc.