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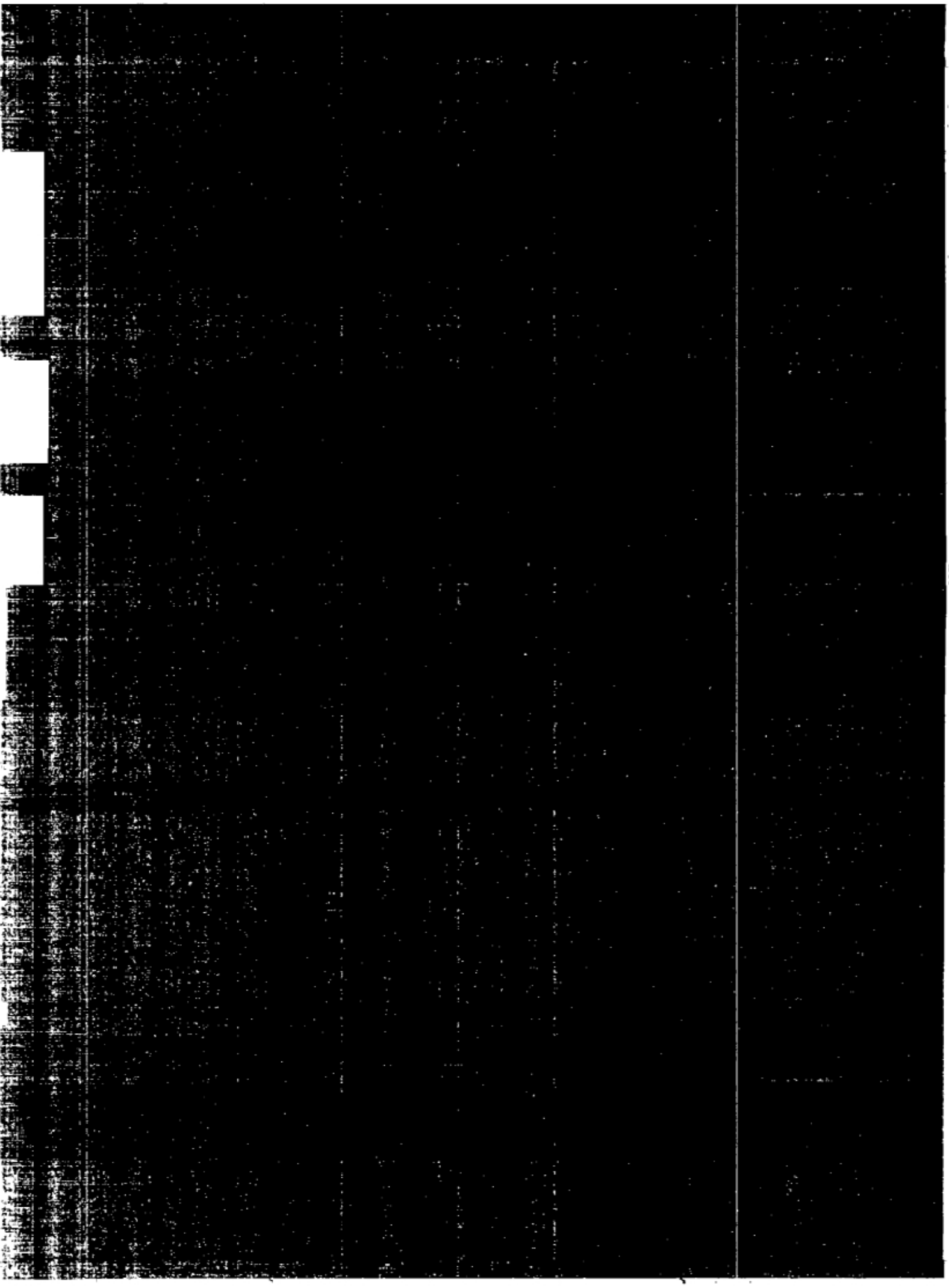
DIARRHOEA AND HYGIENE: WHAT PEOPLE KNOW, BELIEVE AND DO IN A WEST AFRICAN TOWN

INTERNATIONAL RESEARCH CENTRE
FOR COMMUNITY WATER SUPPLY AND
SANITATION (ICRCS)



A report from the Projet Saniya team in Bobo-Dioulasso, Burkina Faso.

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DIARRHOEA AND HYGIENE: WHAT PEOPLE KNOW, BELIEVE AND DO IN A WEST AFRICAN TOWN

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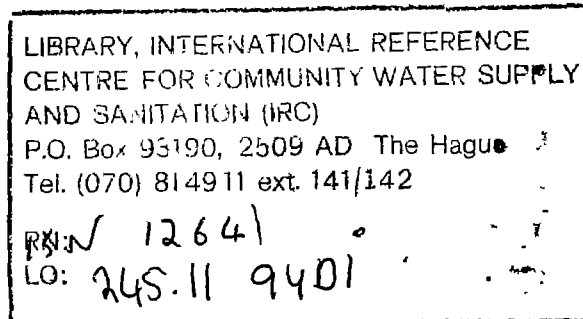
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SUMMARY

DIARRHOEA AND HYGIENE: WHAT PEOPLE KNOW, BELIEVE AND DO IN A WEST AFRICAN TOWN

Diarrhoea remains one of the main causes of illness and death amongst children in Burkina Faso. In 1989 we started a project to look into the causes of the problem and to search for solutions that could be applied on a large scale. Using a variety of different research methods, we were able to come to some practical conclusions about how intestinal infections might be prevented. This document summarises those conclusions and shows how they led to a proposal to carry out a public health communications programme for the promotion of a number of specific hygiene practices amongst mothers and children in the town of Bobo-Dioulasso. The proposal is contained in an accompanying document called “**Saniya- A Public Health Communications Programme for a West African Town.**”

We first set out to find out what puts children at risk of diarrhoea. Two widespread practices related to domestic and personal hygiene emerged from epidemiological analysis and detailed structured observations as likely risk factors. These were the disposal of child stools on the ground or in the open, rather than in a latrine, and the failure by child caretakers to wash their hands with soap after using their hands to clean a child's bottom.

In focus group discussions mothers explained how they felt that latrines were not appropriate for use by small children, and that the stools of small children were not, in any case, noxious. The systematic use of soap for hand washing had generally never been suggested to mothers. Though hygiene was very important to mothers, they saw little in the way of a link between poor hygiene and child diarrhoea.

Indeed, when we investigated mothers perceptions of diarrhoeal illness we found them to be quite different from the medical view. Mothers described ten distinct types of illness which had diarrhoea amongst their symptoms, caused variously by teething, incorrect feeding, fever in the mother or the transgression of certain social rules such as the proscription on post-partum sexual relations. One type of non-severe diarrhoea, called ‘white's diarrhoea’, corresponded more closely to the medical model; being caused by ‘dirty food’ or well water. It seems that current efforts at the promotion of hygiene and oral rehydration may be failing to communicate effectively with mothers because they do not use concepts that mothers recognise. It may be more effective to promote better hygiene as socially acceptable behaviour, rather than as a means of preventing disease.

We asked mothers and children to try out the safe disposal of stools and handwashing with soap. They found these practices to be very acceptable. It took about three days to get used to the new behaviour, after that mothers and children rarely forgot. One mother said “Once you've learned, you don't feel clean if you don't use soap.”

An investigation of the ways in which people communicate in Bobo suggested that the best methods for promoting the new hygiene practices would be through neighbourhood sanitation commissions, women's groups, clinics, primary schools, local radio and theatre.

INTRODUCTION

DIARRHOEA AND HYGIENE: WHAT PEOPLE KNOW, BELIEVE AND DO IN A WEST AFRICAN TOWN

Diarrhoea is one of the biggest killers of children in developing countries throughout the world. In Burkina Faso the Ministry of Health was particularly concerned about the problem and they wanted to know how they could do more to prevent it.

A multidisciplinary research team was therefore put together to search for long term solutions for the prevention of childhood diarrhoea; team members came from the Ministry of Health, the London School of Hygiene and Tropical Medicine, the Centre Muraz and the University of Bordeaux II.

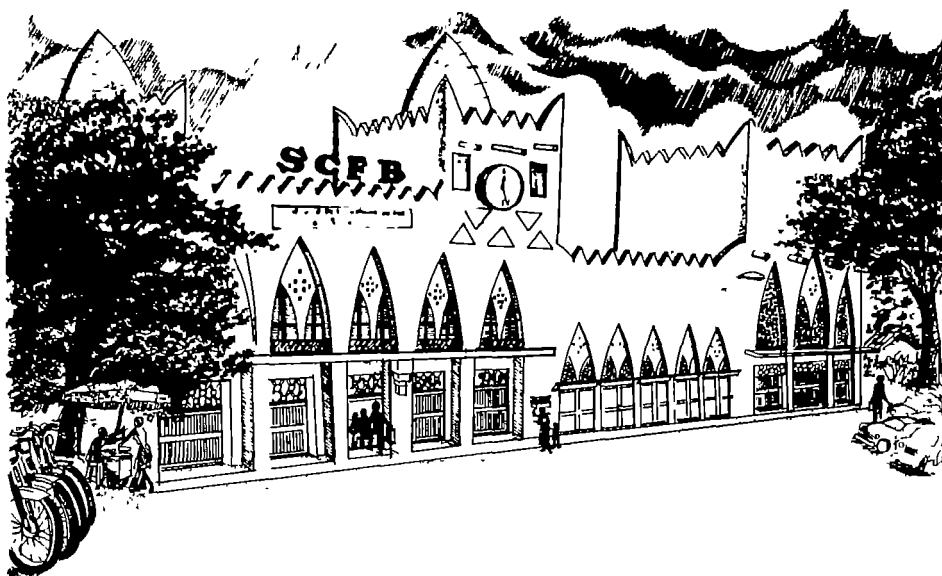
Thus was born the project entitled '**The Identification of Interventions for the Control of Childhood Diarrhoea in Burkina Faso**', or 'Projet Diarrhées' for short.

After five years of research in the town of Bobo-Dioulasso the team has learnt a great deal which can be put to practical use for combating child diarrhoea. The methods that we employed in the research and the findings should be of interest to anybody working in the field of diarrhoea prevention. The idea of this document is to summarise what we did and what we found, in an easily accessible format in French and in English for the use of colleagues in Burkina Faso and elsewhere.

The document sets out to answer to some basic questions about the prevention of childhood diarrhoea. Without the answers to these questions any programme of interventions is likely to be ineffective. These questions include:

- what are the causes of diarrhoea amongst children?
- what are the practices that put children at risk?
- what are the reasons behind these practices?
- are these practices amenable to change?
- what strategies could be used to promote behaviour change?
- how do people communicate, and how can we best communicate with people?

The answers that we found to these questions form the basis for a new project entitled '**Saniya: a public health communications programme for a West African town**' which hopes to reduce the incidence of child diarrhoea in Bobo. In the document accompanying this one is a description of the project.



BOBO-DIOULASSO- 'AT THE CROSS-ROADS OF WEST AFRICA'

Bobo-Dioulasso, the second biggest town in Burkina Faso, has a population of about a third of a million. Like many West African towns, it is growing rapidly; the population is expected to rise to half a million by the year 2000.

At the cross-roads of the great empires of the Mossi, the Bambara and the Peulh; at the cross-roads of the great trading routes for cattle, fish, kola nuts and cereals; at the cross-roads between Côte d'Ivoire, Niger, Mali, Ghana and Ouagadougou: Bobo has often been said to be at the cross-roads of West Africa.

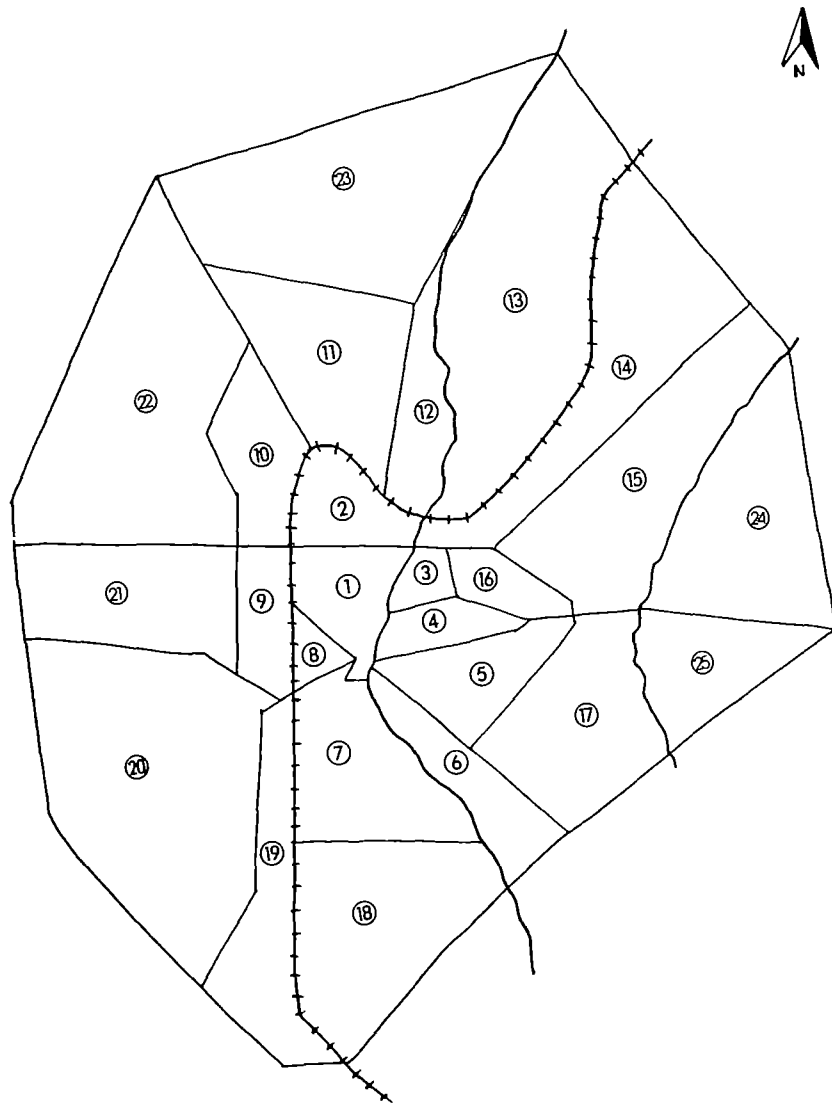


As one might expect with such a location, Bobo is a thriving commercial centre. Large numbers of ethnic groups from all over Africa are present and many languages may be heard. The "lingua franca" of the town is however, Dioula, which is spoken by most women.

While the majority of the population describe themselves as Muslims there is a substantial Christian minority. When asked, few people say that they are animist, but traditional beliefs are still strong among both Muslims and Christians. Officially 27% of the population of Houet can read and write, but the rate for women is much lower.

BOBO-DIOULASSO

Population	in 1985 228 668 by 2000 500 000
Main ethnic groups	Bobo, Bwaba, Senoufo, Dafing, Mossi, Peulh, Bambara
Main languages	Dioula, Moré, Bobo, Fulfulde, French...
Faith	Islam, Christian, Animist
Literacy rate	27%



Bobo is divided into 25 administrative sectors and the streets are neatly laid out on a grid pattern. The town is green and red; the green of the mango and kapok trees lining the wide avenues contrasting with the red of the roads and the mud walled compounds.

WATER, SANITATION AND THE BOBO ENVIRONMENT

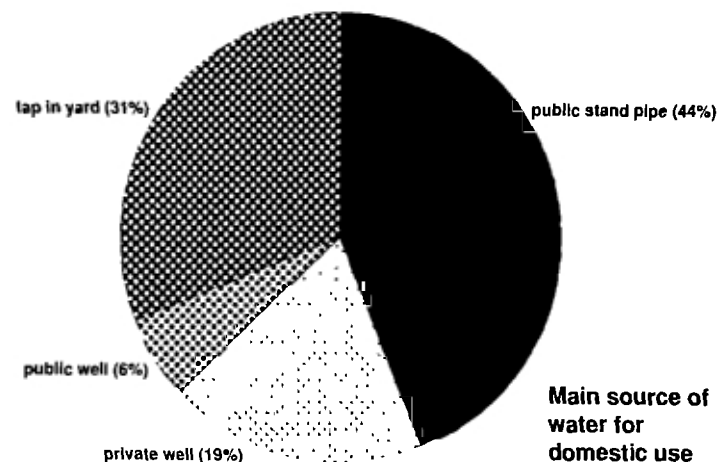
Most houses in Bobo are single-storey buildings made of dried mud-bricks or cement blocks with corrugated metal roofs. The residential areas of the town are made up of compounds which usually have a number of houses grouped around an open central area, where most domestic activity takes place. One compound may contain a single, extended family or, more often, several different families renting buildings or rooms with an average of 13.2 people per compound. The sketch shows a typical compound.

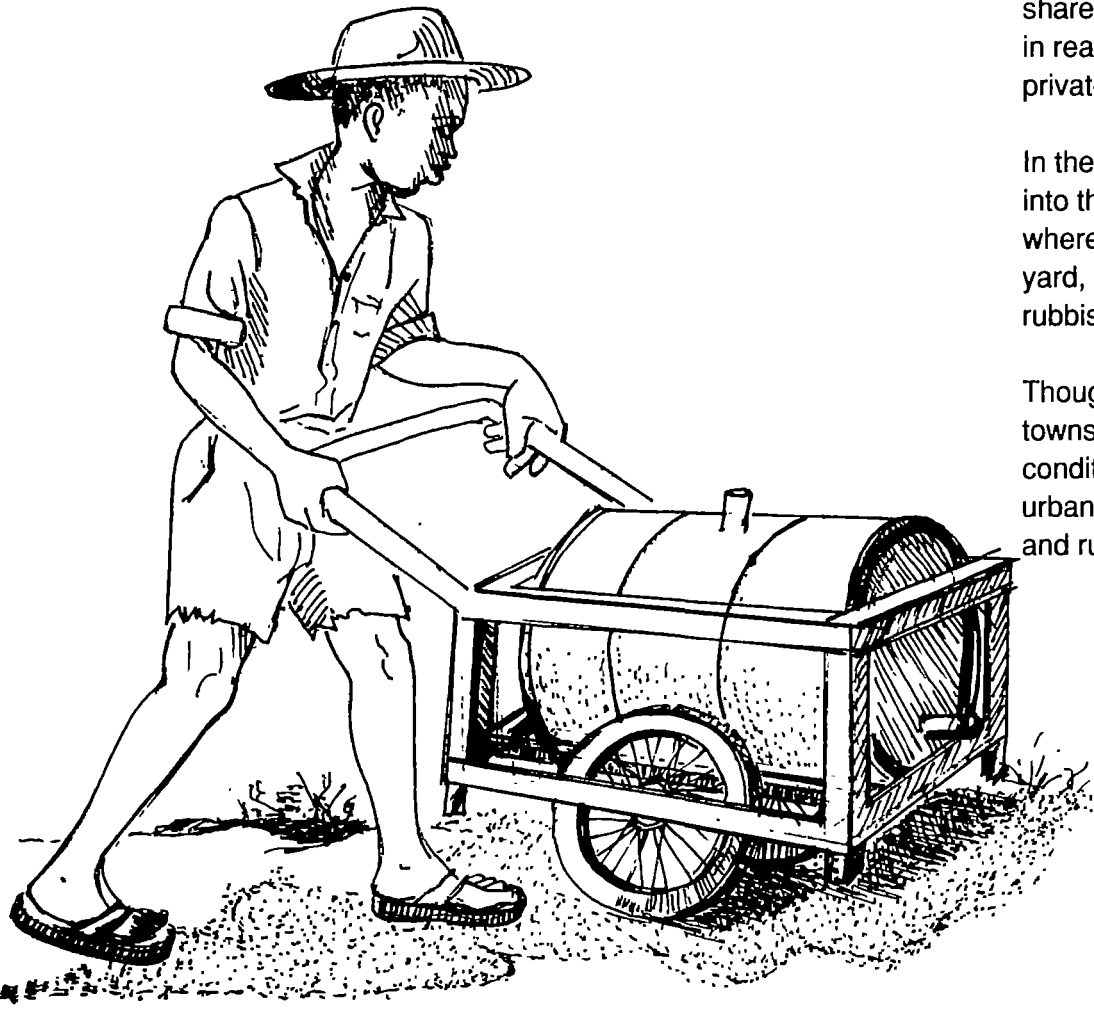


● Water sources

The main domestic water sources are public standpipes, communal taps within compounds and unprotected hand-dug wells inside compounds or in public spaces.

In addition, a few houses have taps inside and some households use water from the seasonal streams which cross the town, although this water is not used for drinking. The chart shows the principal sources of domestic water. Supplies are generally regular and ample in the central zones of the town, it is only in the outlying zones that water has to be carried distances greater than about 500 metres. The cost of water varies from about 100 F CFA/m³ payable monthly, for those who have piped supplies, to up to 250 F CFA for 200 litres charged by vendors selling water from drums on barrows, when the source is distant. Water is often drawn and then stored by each household in a drum just inside or outside the house.





● Sanitation

Nine out of ten compounds contain one or more dry pit latrines, often shared by the different families in the compound. Latrines are mostly kept in reasonable condition; they are cleaned regularly and emptied by private contractors when they are full.

In the absence of a formal drainage system, waste water may be thrown into the yard, or outside the yard - into the street or into rainwater drains where they exist. Household rubbish may be thrown into a corner of the yard, buried in the yard, thrown into rainwater drains, or taken to open rubbish piles, situated throughout the town.

Though Bobo-Dioulasso was once renowned as one of the cleanest towns in West Africa, there has been a marked deterioration in sanitary conditions in recent years. The World Bank is supporting a programme of urban development which aims, among other things, to improve drainage and rubbish disposal throughout the town.

HOW THE RESEARCH WAS CARRIED OUT

The diarrhoea studies carried out in Bobo were perhaps unusual in that they used a variety of approaches. Some produced data in the form of statistics, others used social science techniques to produce qualitative information about beliefs and practices in Bobo. The box gives a brief description of some of the methods that we used.

The largest part of the research was a big case-control study which recruited all children who were hospitalized over a period of more than a year and compared them with the healthy children of neighbours. It took a long time to analyze and produced some interesting results. However, some of the simpler techniques, such as the focus group discussions, produced a lot of very useful information at much lower cost.

PROJET DIARRHEES: RESEARCH METHODS

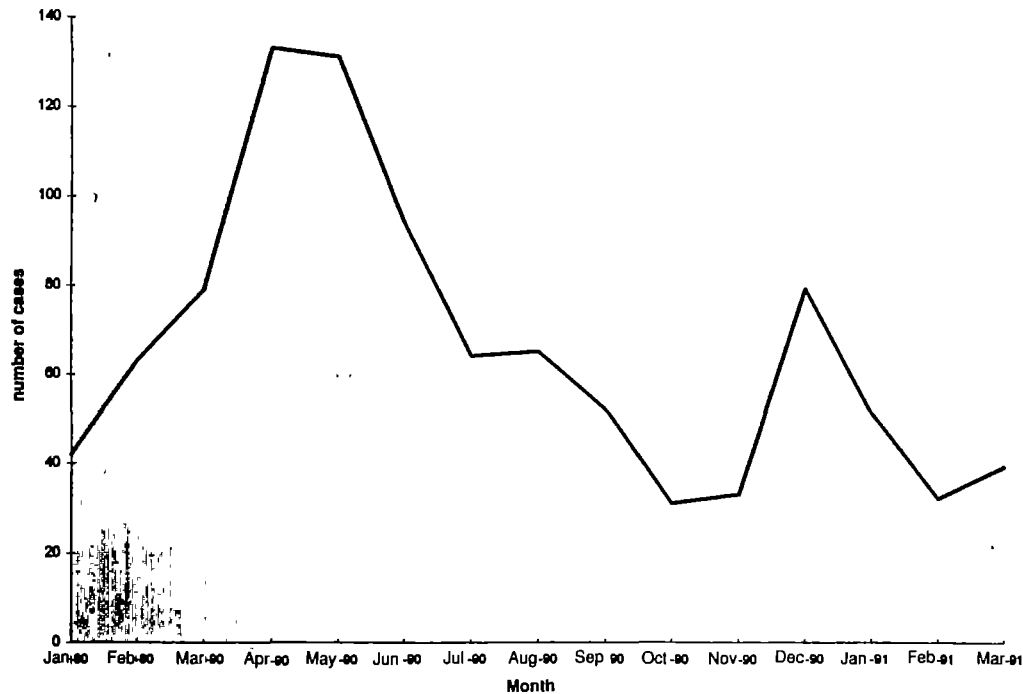
Site study	characterisation of each sector of the town, meetings with authorities and women's groups
Focus group discussions	21 guided discussion meetings with women from different associations, ethnic groups, age groups, socio-economic groups
Case-control study	'cases' who were 1933 children under 3 living in Bobo, hospitalized between January 1990 and March 1991; 1404 'controls' who were children of the same age, neighbours of the cases
Structured observations	549 children's caretakers visited at home to observe hygiene behaviour
Cohort	196 children visited at home each week to record illness and nutrition status
Structured interviews	50 local healers, mothers of 10 malnourished children, 10 mothers with 'safe' hygiene practices
Methodological study	compared different ways of measuring the same hygiene practices for 213 women
Communications study	228 women interviewed about radio and TV habits, meetings with 16 community associations to explore their means of communication
Behaviour micro-trials	40 women asked to adopt 'safe' behaviours over 10 days

DIARRHOEA IN BOBO-DIOULASSO: WHAT IS THE PROBLEM?

In Bobo children under three have an average of four or five episodes of diarrhoea each year. Some children spend 20% of their time with diarrhoea. This is not only life-threatening but expensive: mothers have to give up their time and their revenue-generating activities to care for sick children. With ORS use at very low levels, families spend a significant part of their income on treating diarrhoeal illness.

Diarrhoea incidence varies by season. The peak during the hot season in April and May be due to bacteria multiplying in foods which have been contaminated by faecal material, whilst the smaller peak during the cold season in December is partly due to viruses.

Children 0-36 months admitted to hospital with diarrhoea by month

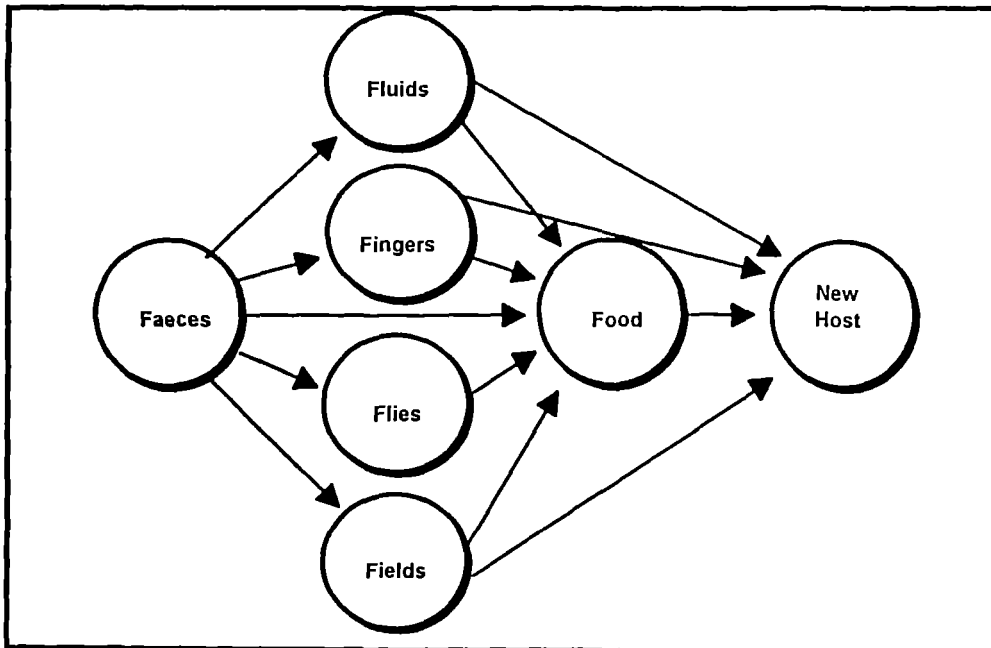


In the study, 55% of children who were admitted to the hospital had diarrhoea and 17% were diagnosed by doctors as having suffered principally from gastro-enteritis.

So why these high levels of diarrhoeal illness in children?

Diarrhoea causing organisms are passed from one host to another via a number of routes as shown in the diagram.

To prevent infectious diarrhoea one must look for the most likely transmission routes and try to block them. For example, if people normally defaecate in the open, the use of latrines will reduce the amount of faecal material getting into the environment; making it harder for the diarrhoea causing organisms to reach a new host.



Faecal-oral transmission of diarrhoeal pathogens

RISK PRACTICES: WHAT PEOPLE DO AND WHY

Our study picked out several practices which are frequent in Bobo which are probable routes for the transmission of stool pathogens.

● Stool disposal

Though 90% of courtyards have latrines, not everybody uses them. Adults prefer latrines because they provide privacy. But for children (who often have the highest load of pathogenic organisms in their stools) latrine use is not so systematic. We found in our observations that the stools of 60% of babies and infants aged from 0-6 months finished up on the ground, either inside or outside the family compound. Between 6 months and three years, most children defaecate in a pot, but in 34% of cases stools still finish up on the ground. Between the ages of 3 and about ten, many children are sent outside to defaecate.

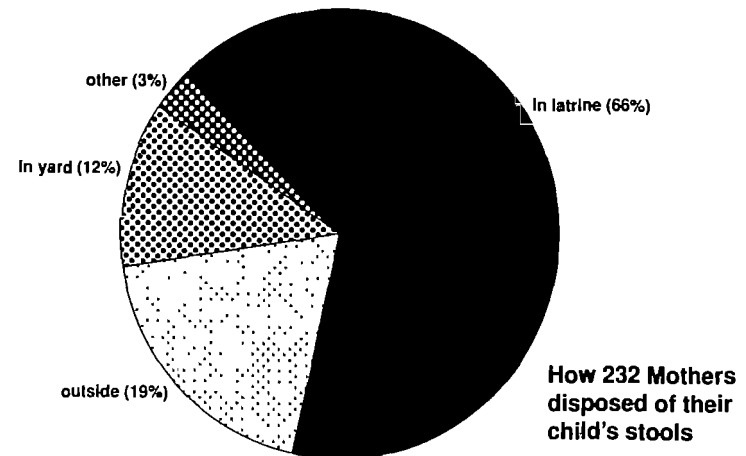
Stool disposal practices vary with the age of the child. Why is this? In focus group discussions we asked mothers to explain. We found that mothers did not regard babies' stools as noxious, and were thus less careful how they were disposed of. Mothers were often not keen for their older children to use the latrine for fear that they would dirty it, or play in it, or even fall in.

This explains the use of the potty and why many children are sent outside to defaecate once they are old enough to manage alone. The box shows what some mothers said about where children should defaecate in the focus group discussions.

Analysis of the case-control study suggested that the poor disposal of infant stools was indeed a factor putting children at risk from diarrhoea. After using statistical techniques to allow for the effects of extraneous factors, we found that **children whose stools were not disposed of in**

a latrine had a 50% increased risk of hospitalisation for diarrhoea (Odds ratio 1.50, 95% confidence interval 1.09, 2.06).

School children are particularly at risk from high concentrations of faecal matter in the environment because the lack of facilities forces many children to defaecate in the open, around school buildings.



What mothers said about where a child should defaecate

“My daughter is only 18 months old but she can go outside to the place where they defaecate”

“In a town a child cannot defaecate just anywhere, you have to sweep up and collect the stools, that’s why a pot is more practical.”

“If it is in the country the child can go outside at any age. But in the town there are problems if you let the child go outside because then you have to go and clear up. That’s why the child needs to be at least 3: he can choose a site where you don’t have to go and collect the stools afterwards.”

“Some children use the latrine at 4-5 years: others at 9-10. If the latrine is not in good condition, with a broken slab or large opening it is risky, that’s why the child should go outside to the rubbish heap.”

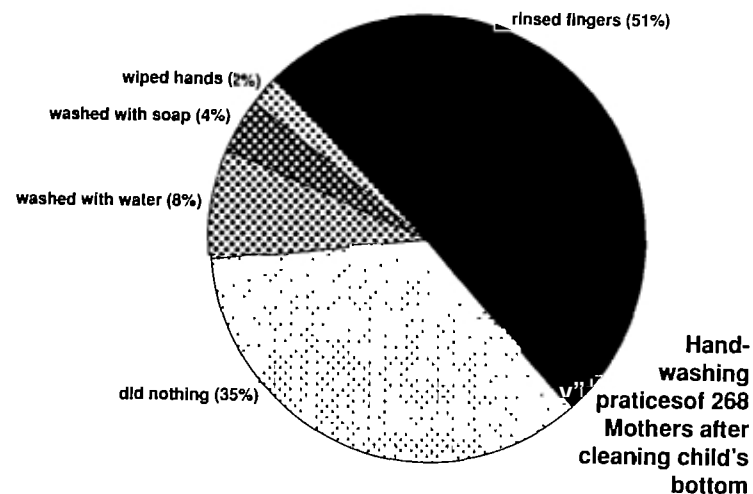
“It’s not good to let children go to the latrine because they don’t know how to use it: they defaecate on the slab and dirty it, that’s why I don’t let a child use a latrine until he is at least 8 or 9.”

● Hand washing

It is common in Bobo to see mothers using their bare hands to clean a the bottom of a child after it has defaecated. If her hands are not carefully cleaned afterwards it is likely that faecal material will be spread, either to another child, to food or to water, thus providing a transmission route for pathogenic organisms.



We observed these practices for 277 mothers, and found that 80% of women used their bare hands to clean up the child. Only 4% used soap to wash their hands after cleaning the child. We found that the children of mothers who did not use soap to wash their hands appeared to have almost twice the risk of severe diarrhoea. However, we were unable to statistically confirm these findings because the numbers observed to use soap were too small.



We asked mothers to explain to us their hand washing practices. We found that though hand washing is an important part of social ritual, for example before eating, the action may be little more than a symbolic finger rinsing. Soap is mainly employed to remove substances from hands which smell bad or are greasy, and for washing cooking and eating utensils and clothes. Many different types of soap are available, ranging from home made soaps such as “soda” “kabakouro” and “safona fima”, through the industrially made soap produced by two factories in Bobo-Dioulasso (CITEC and SOFIB) or in Abidjan, to imported perfumed soap, which is used less widely and is generally reserved for women for bathing. The price of soap has recently increased with the devaluation of the CFA franc, as a result there is a trend to return to using the less expensive, handmade soaps which can be bought for as little as 10F for a ball. Industrially made soaps cost at least 125FCFA for the smallest size.

“Washing hands with soap is not part of our habits”

Mothers explained that the main reason that they did not use soap after cleaning up a child was not lack of soap or lack of time, it was because they had never acquired the habit, or it had never been suggested to them as a good idea.

● Other risk factors for diarrhoea

We looked at a variety of other possible risk factors for severe diarrhoea, such as the source of water and its use. None seemed to have any close relationship with diarrhoea. We plan to further investigate the contamination of food and food storage practices, as the seasonal pattern of diarrhoea suggests that these may be important. Messages about food handling might then be included in a later phase of a communications programme.

● Implications

Our findings which suggest that poor stool disposal and poor hand washing put children at risk of infectious diarrhoea are in concert with recent thinking. A 1993 WHO working group which evaluated the epidemiological evidence, suggested that the promotion of three key hygiene behaviours might have a major impact in preventing child diarrhoea. These were the sanitary disposal of faeces, the cleansing of hands and the maintenance of drinking water free from contamination.

Practices that should be targeted for improvement in a programme to prevent diarrhoeal disease amongst children in Bobo include:

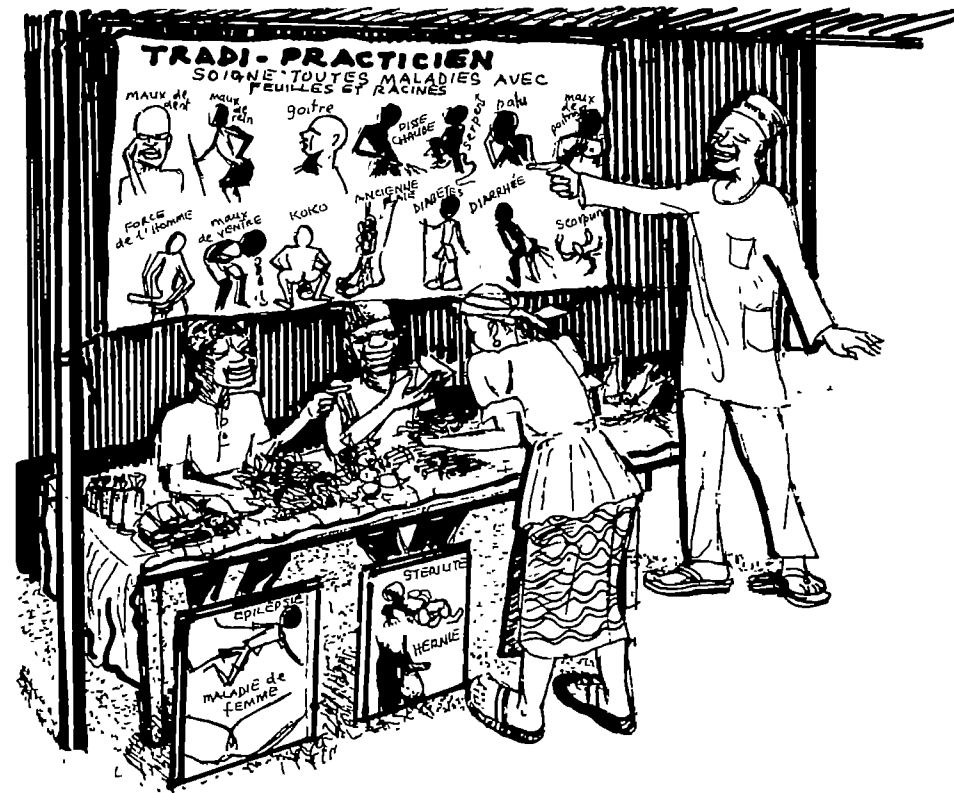
- washing hands with soap after contact with stools,
- disposing of infant and child stools safely.

DIARRHOEA; PEOPLE'S PERCEPTIONS

Mothers in Bobo consider diarrhoea (in Dioula *konoboli*, literally running stomach) as one of the most frequent signs of ill health amongst their children. They know diarrhoea by the runny nature and the increased frequency of the stools, and they recognise several types. However, diarrhoea is not necessarily seen as an illness in itself; mothers will diagnose what the child is likely to be suffering from from a variety of signs. These may include the appearance of the diarrhoea, the condition and age of the child and whether there is fever, anorexia or a fallen fontanelle. Mothers recognise ten illnesses which are associated with diarrhoea, the causes of which range from teething, fever, inappropriate food and the transgression of certain social rules such as the prescription on post-partum sexual intercourse. The chart shows the names, signs causes and recommended treatment for child illnesses related to diarrhoea, as recounted to us by mothers from many different social groups in Bobo.

Kolobo, for example, means literally 'bones coming out' and refers to a type of diarrhoea which is regarded as an almost inevitable accompaniment to teething. *Sere* refers to a persistent state where the child is thin and complaining and often has diarrhoea. According to mothers this is caused by the child's mother resuming sexual relations or getting pregnant before weaning the previous child. A mother will tend not to take this type of diarrhoea to a health centre because she is afraid of being scolded and because she may believe that doctors do not understand this illness. The final four types of diarrhoea in the table are regarded as less serious, having an effect only as long as the transient cause is present, for example, if the mother has a fever and continues breastfeeding. These are the only types of diarrhoeal illness for which oral rehydration was regarded as useful.

Name	Symptomes	Causes	Treatment
Kolobo	Green, frothy frequent stools Vomiting Weight loss Child flaccid Fever Child at age for teething	Teething	Plant infusions for purging and 'gavage'
KOTIGUE	Small, mucoid stools Child flaccid Fever Cough. Fissured anus.	Carrying the child on the back too often Contact with damp ground or pants	Anal bathing with hot infusions Suppositories of ginger. Mentholatum
KOLON	Green, sticky stools Sores in mouth Fever Pale eyes	Many anal fissures Consumption of peanut paste.	Rub dried powdered roots on the inside of the mouth
WOUNA (OR SIERO)	Whitish, liquid stools smelling of rotten eggs Vomiting Sunken fontanelle	Breast feeding mother steps on egg Infection	Purge with water and egg shell Apply a paste to fontanelle Neck amulet
SERE	Thick, whitish bad smelling stools Child thin Child complaining	Breast feeding after having sexual relations Breast feeding while pregnant	See traditional healer who gives pot with plant infusions or waist amulet
TOGO-TOGONI	Bloody, mucous stools Tiredness Loss of appetite	Bad food Dirty water Too much sugar Rotten fruit Badly cooked meat Untreated kotigué	Give infusions of goyava leaves "Intelrix" (a stomach disinfectant)
NENE (COLD)	Green stools	Cold	{ Rice water { Plant infusions { "Ganidan" { "Dialyl" { O R S { Activated Charcoal
FARIGUAN (FEVER)	Liquid, smelly stools	Mother has fever Mothers milk gone sour in breast	
SIIN COUMOUNI (SOUR MILK)	White, milk smelling stools		
DIARRHEE DES BLANCS	Liquid stools Ballooned stomach	Dirt 'Parasites/worms'	Go to the hospital



Though few of these illnesses correspond to bio-medical conceptions of diarrhoea; the final category, *toubabou konoboli*, (literally 'white's diarrhoea) is more recognisable. With perceived causes such as "water from a well", "poorly cooked pap", "dirty food", "food on which flies have sat" and "the child which eats earth", there is some correlation with the idea of faecal-oral transmission which has been promoted by health agents.

● Implications

It seems that there has been a major problem of communication between health agents and mothers. When health agents talk about diarrhoea, mothers may think that they are referring only to the less serious *toubabou konoboli*. Thus all the advice they are given regarding diarrhoea may only be seen as being of limited use in preventing an illness of relative unimportance. Poor hygiene is not regarded as an important cause for the other categories of diarrhoeal illness recognised by mothers. Future programmes to combat diarrhoeal disease or to promote ORT need to take this into account.

“EVERYBODY WANTS TO BE CLEAN”

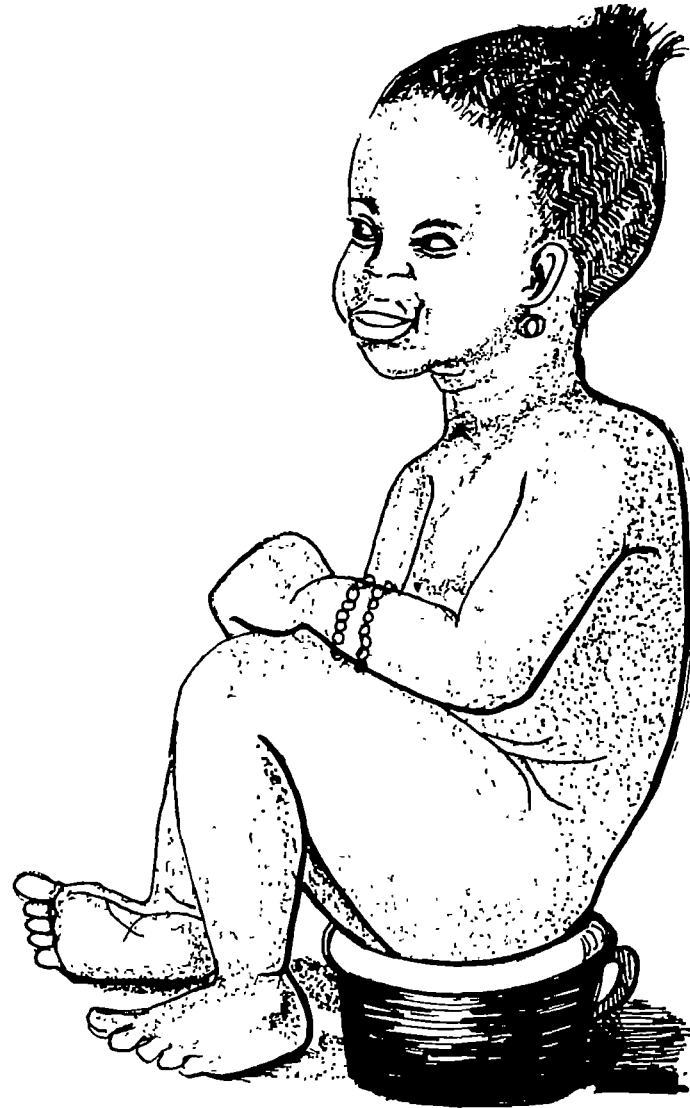
If mothers do not see a direct relationship between hygiene and the diarrhoea suffered by their child, this does not mean that they regard hygiene as unimportant. Mothers described cleanliness as follows:

“When you enter the courtyard of a clean woman, the yard, the house and the kitchen must be well swept; the plates, the water jar and the dipper are thoroughly washed; the children are bathed and clean and the mother herself has bathed and is wearing a clean outfit.”

Mothers avoid stools mostly because of the nuisance; because they are “heavy and ugly to look at”; because of the smell which “stops you breathing” and because they attract flies. Many women complained of having neighbours who allowed children to defecate in the open and described this practice as anti-social. However, direct contact with stools was not regarded as likely to put health at risk. Breathing in the bad odours emanating from fecal matter might give one air in the stomach, or nausea, but very few mothers suggested that there might be a link between having contact with stools and subsequent diarrhoeal illnesses in children.

● Implications

A strategy for the promotion of safer hygiene practices might be effective if based on reinforcing the social desirability of hand washing and safe stool disposal. Promoting these practices by emphasising the risk to health would then be of secondary importance.



“ONCE WE’VE LEARNT WE DON’T FORGET”

Having decided that a programme of public health communications to promote hand washing with soap and safe disposal of stools might be an effective way of preventing diarrhoeal illness in Bobo-Dioulasso, we needed to be sure that the new practices were feasible and realistic. Our next step was thus to ask women to try out the new behaviours. The box shows what we did and the encouraging conclusions that we drew.

MICRO-TRIALS OF THE TARGET PRACTICES

We invited four groups of women (in sectors 3, 13, 14, 24) to meetings where we discussed the problem of hygiene and diarrhoea and then asked for ten volunteers to try out some new practices. Health extension agents (AIS) visited the volunteer women individually on ten consecutive days and asked them to:

- wash hands with soap after every contact with stools,
- ensure that their children used a latrine, or if they were too young, that they use a pot and then dispose of the stools in a latrine.

The AIS returned each day to ask the mother whether she was managing the new practices, what difficulties she was experiencing and what the reaction of family and neighbours had been. She also returned a month later to see if the practices had been maintained.

Results			
<u>Target behaviour</u>	<u>Before trial</u>	<u>After 10 days</u>	<u>40 days later</u>
37 mothers to use soap to wash hands after cleaning	None used soap	All 37 reported using soap (5 had not once or twice because they had briefly runout of soap)	All 35 women who were still available had maintained handwashing
32 children aged from 2 to 7 to no longer defaecate on the ground	32 in total defaecated on the ground	none regulary defaecated on the ground (9 reported forgetting once or twice)	none (except those who had no facilities at school)

The results were very encouraging: all of the participants reported that they had adopted the practices (the only reason that we found for the occasional neglect of hand washing was when some mothers temporarily ran out of soap). In addition, though it was not part of the original message, all of the children who were old enough, took up handwashing with soap as well. In half the households at least one other adult took up soap use.

Some problems:

- the cost of soap for a few of the poorest women,
- how to ensure the child uses soap and a latrine when she is at school,
- how to ensure that the other people who help look after the child when the mother is out, use soap as well.

Some conclusions:

- 1 Once the habit of handwashing has been acquired it is not forgotten, mothers don't feel clean unless they use soap.
- 2 Children can be taught to use the pot or the latrine, it takes about 3 days to learn.
- 3 Children participate with enthusiasm; the intervention needs to be extended to primary schools.
- 4 Hand washing with soap costs an average family about 250F CFA a month extra.

Some comments from mothers:

- "Once you've learned to wash your hands with soap you don't feel clean if you don't use it."
- "I encouraged my child to use his pot by giving him a toy".
- "My child got used to his pot after one day because I smacked him."
- "It took three days to get the child used to the latrine, after that he didn't forget."
- "Normally I use 6 balls of soap in a month, this time it ran out after only 26 days and I had to buy local soap".
- "I frightened my children with the idea of things that make you ill in stools."
- "I taught my cousins in Diarradougou about using soap".



HOW DO PEOPLE COMMUNICATE IN BOBO?

To design an effective programme of communications for a large population, it is important to understand and evaluate the capacity of existing methods of communication to reach and influence the target populations. Effective communications programmes in developing country settings need to be based on existing communications networks, as well as adding new approaches. Below we examine the existing channels of communications in Bobo-Dioulasso.

● Traditional channels

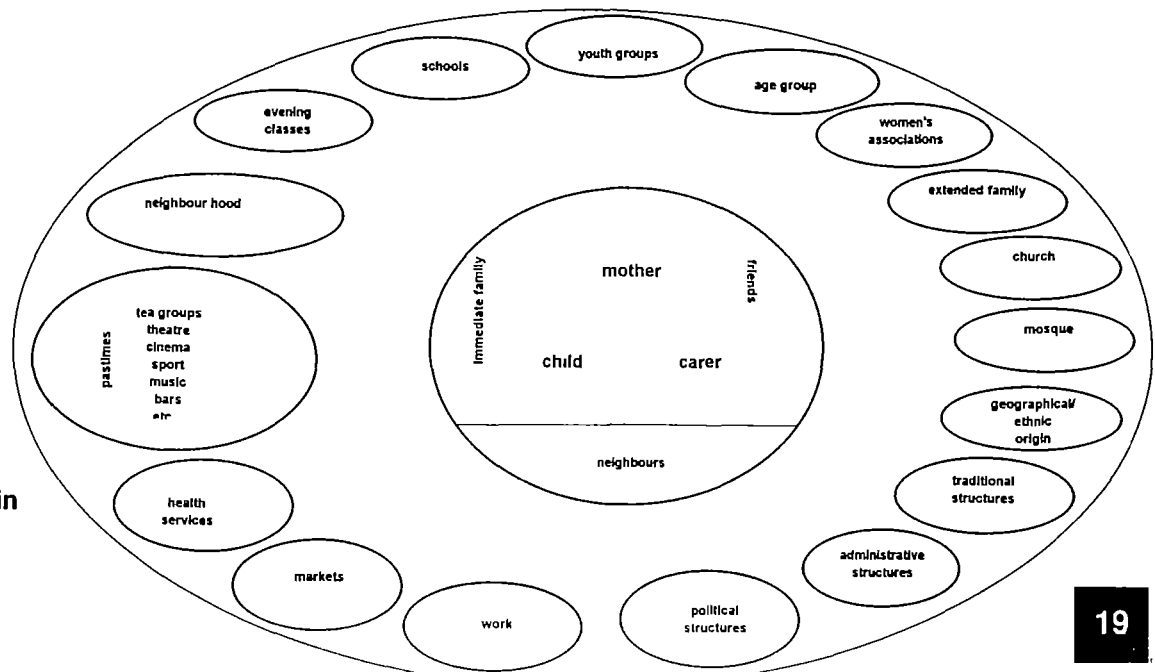
- Social structures, associations, word of mouth

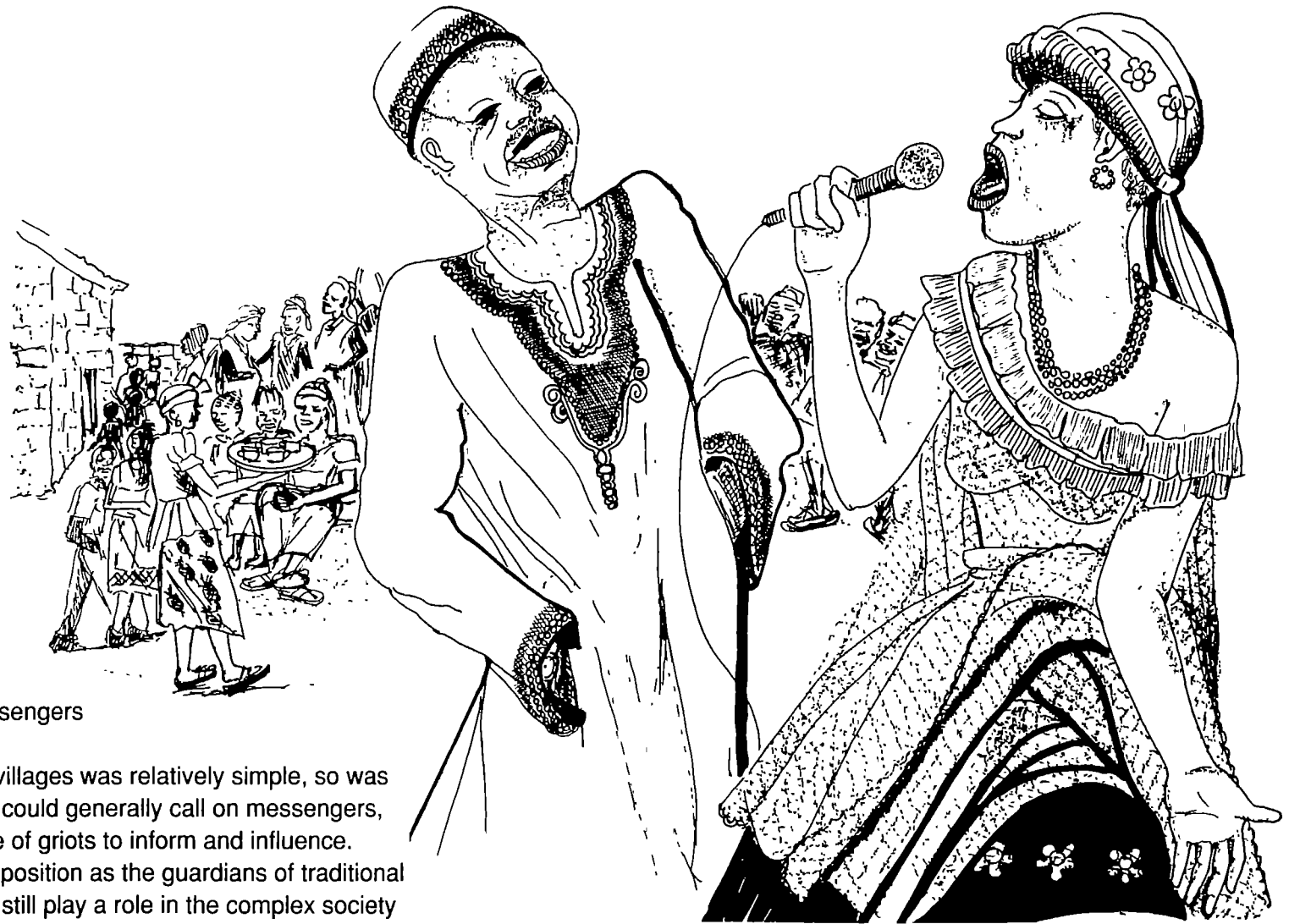
Traditional channels of communication in Burkina Faso are mostly oral and mirror existing social structures. In villages, social structures and lines of communication remain relatively easy to identify. However, towns

have much more complex social structures. Bobo-Dioulasso has an indigenous population with its traditional social organisation, living side-by-side with migrants from Burkina and all over Africa. The town is thus not one community, but rather has a large number of overlapping communities. Each community is based on some sort of affinity such as a common village or region of origin, a religion or a commercial activity.

The chart shows some of these different 'communities': any member of the population may belong to one, several, or none. "Communities" are more or less structured. Whilst about a half of women belong to a formal association, often based on geographical origin or on mutual savings (*tontines*), many more belong to informal social groups which meet in local markets, at baptisms, weddings and funerals, during religious observance, at health centres or at work.

"Communities" in Bobo-Dioulasso





- Griots, public criers and messengers

Whilst the social structure of rural villages was relatively simple, so was the diffusion of information. Chiefs could generally call on messengers, public criers and a hereditary caste of griots to inform and influence. Though griots are now losing their position as the guardians of traditional knowledge and moral values, they still play a role in the complex society of the town thanks to their gift with words. They often make a living through organising and entertaining at baptisms, weddings and funerals. Most women's organisations also involve griottes (female griots) to carry messages and entertain at meetings.

- Religious gatherings, festivals and public meetings

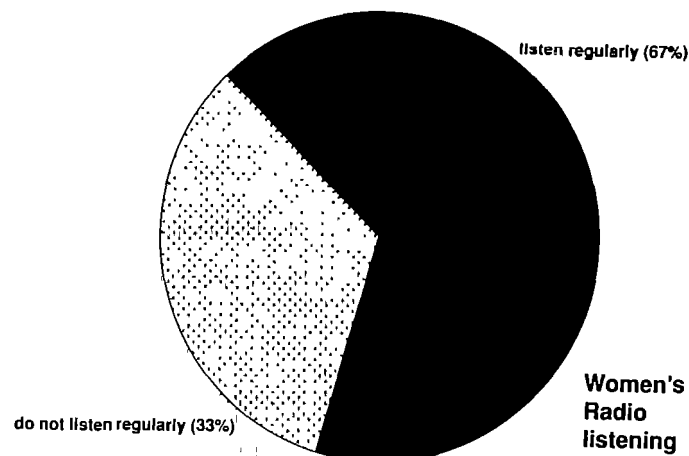
Gatherings for baptisms, marriages, funerals and religious observance form an important part of daily life in Bobo. Because of their extended network of family, ethnic and neighbourhood links, the majority of women will attend at least one such gathering in a week. These occasions provide an opportunity to get up to date on the latest news. When the municipal, administrative or political authorities wish to contact the population of the town, this is often done through public meetings. Politicians sometimes use a traditional type of gathering called a Djanjoba for communications purposes: the important people in a town or neighbourhood are invited to a large gathering to eat, drink, receive gifts, hear music and political speeches.

- 'Modern' channels of communication

- Radio

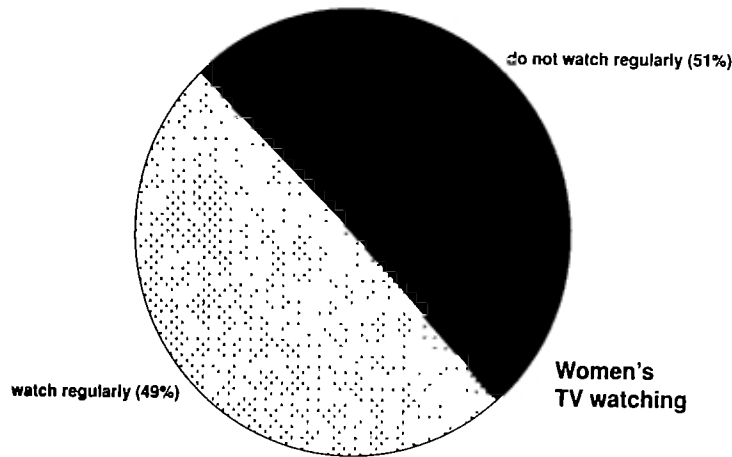
There are two local radio stations, the official 'Radio Bobo' and the private music station 'Horizon FM'. Local radio is an important means of communication in Bobo. Used by the authorities, by work places and by the community as a sort of bulletin board, it can get messages to most of the population of the town directly or indirectly. Programmes are in French and six local languages.

In a survey of 226 women 60% had a radio at home and 67% claimed to have a regular time for radio listening. Most (84%) of the women who listened regularly preferred Radio Bobo, and for over half of these women, the preferred programmes were those targeted specially at women such as *Ton Baro* ('from the women's associations') and *Lou Mina Tchogo* ('Housework to music').



● Television

The one national TV channel covers the main towns of the country including Bobo-Dioulasso. Though the number of television sets in Bobo is still much less than of radios (only 17% of households own one), TV still has a good reach. Half of the women interviewed claimed to watch regularly at home or in the compound of a neighbour or member of the family. A quarter of the women interviewed claimed to have watched TV 'yesterday'. Films and soap operas are the most popular, followed by music videos. The TV is used for health promotion by different agencies, for example; humorous advertisements for family planning have recently provoked much discussion amongst women in Bobo.



● Cinema, video, slide shows, theatre

Bobo has five cinemas patronised mainly by youth, which show mostly Westerns, thrillers, Karate and Indian films. Attendance has dropped following the advent of TV and video. Films, videos and slides are occasionally shown in the open air at public meetings around the town to promote family planning, AIDS prevention, etc. In discussions mothers said how popular such screenings were, especially as they encourage women to come out in the evening, once their chores were finished, to participate in public meetings. A number of private individuals also project video films for a small entry fee in outlying sectors of the town. Whilst theatre has a long tradition in Burkina Faso, in Bobo it is mostly confined to the four formal theatres, where five local theatre groups, and four dance troupes give occasional performances. 'Theatre forum', a type of educative theatre intended to provoke and involve the audience, has been promoted by donors such as UNICEF for communications purposes. Those who have participated in this sort of theatre feel that it is highly effective in putting over messages which are remembered. When put on in public spaces, audiences may reach about 1000. Theatre forum has the advantage of being able to attract children who are not in school and child carers (maids etc). School children also put on theatre productions at the end of the school year. Teachers feel that children retain messages well when theatrical techniques are employed.

● Press

There are now three daily newspapers and about 40 weekly and monthly publications in Burkina Faso. Two weekly papers 'Le Berger' and 'Le Matin' are produced in Bobo. Given the low literacy rates, circulation is largely confined to men in salaried jobs.

● Posters and pamphlets

In a society where few people can read, posters and pamphlets are not widely employed in health promotion. Though used by the health services, posters are rarely tailored to their target populations and health agents doubt their effectiveness. Posters may serve a useful function in schools as reminders of health messages. Billboards are becoming more frequent in Bobo, carrying messages such as 'Fly Air Burkina' or 'Smoke Benson and Hedges'.

● Health education meetings

In the 8 MCH centres of the town, women who are attending for pre-natal checks or post-natal child growth monitoring are invited to participate in discussion meetings known as 'causeries' which cover many health related issues. In our study, a half of women with children under three had attended at least two of these sessions. However, health agents say that attendance is poor and put this down to poor training of the agents and lack of materials which could attract mothers away from their other pressing daily tasks.

● Publicity material

Industries which have active marketing campaigns in Bobo such as tobacco and pharmaceutical companies make use of stickers, t-shirts, caps, beer mats, lighters, pens, notepads, calendars, etc, to promote their products.

Health communications programmes (for EPI, for the social marketing of condoms) also use stickers, t-shirts and calendars. Such publicity material serves as a reminder of the existence of the campaign and of the product but is not a primary vehicle for messages.

● Implications

The selection of communications channels for the public health communications programme was made bearing in mind the following principles:

- An effective channel of communication not only serves to pass messages, but contributes to a change in the social culture which further reinforces the ideas which have been transmitted.
- The more a channel of communication permits a two-way exchange, the more effective it is likely to be. However, there is a trade-off between effectiveness and reach; the larger an audience a channel of communication reaches, the less the impact the messages are likely to have.
- To increase the credibility of the messages the same message should be passed by as many different channels as possible.
- Messages should be limited to a small number, preferably to two or three.

Taking all of this into account we chose a balance of different approaches for our communications plan to promote our chosen hygiene practices: neighbourhood hygiene 'commissions'; local radio; primary schools; meetings with women's associations; meetings in health centres and theatre.

The accompanying document entitled "**Saniya; a public health communications programme for a West African town**" shows how we have used the lessons that we learned from the studies in Bobo to build an intervention aimed at improving hygiene behaviour amongst mothers, children and child caretakers.

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CONTRIBUTORS

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The pictures were drawn by Emmanuel Nkobi.



