STRATEGIC REPORT 5

ENVIRONMENTAL HEALTH PROJECT

The GESCOME Difference

Lessons Learned From Gestion Communautaire de Santé Environnementale (GESCOME)

The Environmental Health Project II

CESH Benin Activity

Laurie Krieger, Sheldon Gellar,
Salifou Yallou, Pascal Zinzindohoue.

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by

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About the Authors

Laurie Krieger earned her Ph.D. in anthropology from the University of North Carolina at Chapel Hill, where she also studied epidemiology. Her positions have included researching and authoring chapters on environment, health and culture in Yemen and Afghanistan for the U.S. government country study books, teaching at universities, and serving as an independent consultant and on the staff of international health groups. She began working in health communication in 1986. Dr. Krieger served as program officer in a communication department and has been a staff member of the Manoff Group, where she is senior technical advisor, since 1999. She also has served as women's health liaison to the USAID Population, Health and Nutrition Office through a Child Survival Fellowship in the Women in Development Office. Dr. Krieger's specialties include community participation, gender, qualitative research and child and reproductive health. As a Manoff staff member, Dr. Krieger served as the activity manager of the CESH Benin Activity, *Gestion Communautaire de Santé Environnementale*, GESCOME II.

Sheldon Gellar, Ph.D., is a political scientist and specialist in institutional analysis, decentralization and Francophone Africa. Since 1976, he has consulted extensively for USAID, the Club du Sahel and other international aid organizations in several African countries. He served as democracy advisor to USAID/Senegal from 1998–1999. Dr. Gellar is currently a Visiting Scholar at Indiana University's Workshop in Political Philosophy and Public Policy.

Salifou Yallou, MBA, has spent a decade in the development world after serving as a petroleum engineer on offshore platforms. As the project officer of the Belgian NGO, World Solidarity, he organized and assisted project management teams for over 60 organizations in 25 African countries. He helped them design their own work plans, apply for funding and follow up on the projects' implementation. Mr. Yallou joined the USAID-funded Environmental Health Project (EHP) in 1997. As country project coordinator and later as EHP country representative, he served the EHP activity, GESCOME (Gestion Communautaire de Santé Environnementale), as the local administrative coordinator, trainer and local manager. Currently, Mr. Yallou is international Project Officer for the Center for International Business Studies of the *Ecole des Hautes Etudes Commerciales* (HEC) Montréal. In this position, he assists in developing international projects in research, training and other consulting areas.

Pascal Zinzindohoue holds an advanced degree in applied social sciences from the Ethno-sociology Institute of the University of Abidjan, *Côte d'Ivoire*. He also hold certificates in a number of subjects, including management (from Bournemouth Underwood Management College), administrative science studies (from the High Management Studies Institute of Lucien Cooremans in Brussels) and others. Mr. Zinzindohoue served for ten years in the Beninois civil service in the ministries of Education, Planning and the Presidency. While serving in the Ministry of Foreign Affairs, he held the post of First Secretary to the Benin Embassy in Côte d'Ivoire. Mr.

Zinzindohoue has been a USAID/Cotonou staff member since 1994, originally serving as a public participation specialist for basic education reform, then as a member of both Family Health and Governance teams. During his membership in the Family Health Team, Mr. Zinzindohoue designed and managed the EHP GESCOME activity for USAID. Currently, he is responsible for decentralization and microfinance programs for the Governance Team.

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Laurie Krieger Sheldon Gellar

Salifou Yallou Pascal Zinzindohoue

GESCOME II Features

- Neighborhoods, NGOs and the local and state-level governments were united in implementing community-based prevention of diarrheal disease in young children

- An emphasis on social change including gender equity

- GESCOME structures comprised: departmental environmental health committee (CDSE), expanded municipal team (EME), micro-project management committee (CGMP), neighborhood environmental health committee, and water users' committee with mechanisms for transparency throughout and decision-making only at the highest (CDSE) and lowest, i.e., neighborhood, levels

- GESCOME's highly participatory and transparent process included: PRA, community identification of environmental health problems, problem analysis, and solution finding through identification and implementation of micro-projects, and PCHC

- The community contributed financially and managed micro-projects

Acronyms

CDSE	*Comité Départmentale de Santé Environnementale* (Departmental Environmental Health Committee
CESH	Community-based Environmental Sanitation and Hygiene
CFA	*Communauté Financière Africaine (Franc)* (African Financial Community)
CGMP	*Comité de Gestion des Micro-projets* (Micro-project Management Committee)
CIMEP	Community Involvement in the Management of Environmental Pollution
COGEC	*Comité de Gestion du Centre de Santé Communautaire* (Community Health Center Management Committee)
COSA	*Composante Sanitaire*
CREPA	*Centre de Reseau pour l'Eau Potable et L'Assainissement à Faible Coût (*Center for Potable Water and Low-Cost Sanitation)
DDS	*Directeur Départemental de la Santé Publique* (*Départemental* Director of Public Health)
DHS	Demographic and Health Survey
EHP	Environmental Health Project
EME	*Equipe Municipale Elargie* (Expanded Municipal Team)
GESCOME	*Gestion Communautaire de Santé Environnementale*— Community Management of Environmental Health
GV	*groupement villageoise*
MCDI	Medical Care Development, Inc.
NGO	non-governmental organization
PADEAR	*Programme D'appui au Développement de l'alimentation en Eau potable et Assainissement en Milieu Rural*
PCHC	participatory community health communication

PROSAF	*Programme Integrée pour la Promotion de la Santé Familiale au Borgou* (Integrated Program for the Promotion of Family Health in Borgou)
SBEE	*Société Beninoise d'Electricité et d'Eau* (Beninois Society of Electricity and Water)
SNV	*Schweizerische Normen-Vereinigung* (a Netherlands Development Organization)
USAID	United States Agency for International Development

Executive Summary

This report highlights Benin GESCOME (Gestion Communautaire de Santé Environnementale—Community Management of Environmental Health) activities and results to draw lessons learned. GESCOME was based on respect for local context and knowledge and emphasized the importance of local level decision making. The Benin experience produced valuable general lessons about implementation, which are summarized here.

1. The Benin GESCOME approach is an effective instrument for stimulating community changes in health understanding, and probably health practices, as well as building and maintaining physical infrastructure (hardware) for diarrheal disease prevention in rural towns.

   GESCOME's approach:

   - Combines participatory problem identification and analysis, solution finding and health communication with a good governance component, and

   - Stresses coalition building between local government, civil society and communities.

   GESCOME has:

   - Enabled local communities to generate and communicate vital health information rapidly by relying on the community's own modes of generating and transmitting knowledge at the group level

   - Ensured that many different groups that reflect multiple sectors of the local society were included in all aspects of the participatory GESCOME process

   - Built broad support and trust among local administrative officials, technical service agents, civil society leaders and communities to mobilize resources to construct and maintain latrines and water resource points.

2. GESCOME showed that, with minimum external supervision, local communities can successfully establish and manage effective, decentralized, autonomous decision-making structures. To attain these results, communities must employ and master low-cost simple technologies that provide a desirable public service sustained and financed by public support.

Key elements in the decision-making structures included:

- Effective linking of community groups, e.g., non-governmental organizations (NGOs) and women's groups, and informal neighborhood groups, e.g., neighbors using the same water source, with local elected officials (*chefs de quartier* and mayors), municipal/commune-level government and the departmental administration[1]

- Delegation of decision-making powers to local communities to organize and manage as they see fit the micro-projects they chose

- Establishment, application and enforcement of rules designed to ensure transparency and accountability.

GESCOME has:

- Given local communities a strong sense of ownership by giving them full responsibility to choose and manage their micro-projects

- Provided appropriate low-cost technologies easily managed by people with relatively little formal education

- Reduced the need for using expensive external technical assistance to supervise and manage local environmental health interventions.

3. Key elements that facilitate the GESCOME approach include:

   - Strong support at the departmental and municipal levels

   - A tradition of community level participatory decision making

   - Presence of an enthusiastic development champion

   - Perceived or easily perceptible advantages of adopting practices to decrease children's risk of diarrheal disease

   - Local beliefs about diarrheal disease causation that do not have important symbolic or social meaning in local cultures

   - Presence of reliable local resources to finance construction and maintenance of infrastructure (latrines, water resource points, etc.).

4. Participatory projects should be designed to take into account seasonality factors that could affect participation and resource mobilization. The projects should be

[1] In Benin, the "department" is the administration unit immediately below the region and above the commune.

of sufficient duration (four to five years) to ensure that sustainable institutions and knowledge generation and communication methods are developed.

Key elements affecting the amount of time needed include:

- Reliance exclusively on voluntary non-compensated participation at all levels limits the amount of free time that decision-makers and infrastructure managers can contribute.

- In rural towns with a strong reliance on agricultural production income, the agricultural calendar and seasonal needs sharply decrease the availability of large population segments to fully participate in GESCOME at certain times. Their capacity to pay for the use and maintenance of environmental health facilities is also affected.

- Considerable time is needed to introduce and institutionalize new structures, and to decide on organizational procedure and to modify structures to suit local priorities and conditions.

- While the adoption of new practices may initially proceed rapidly, new health-related practices require a much longer time to be fully integrated into the fabric of dailylife.

5. The GESCOME approach/process may be scaled-up to an entire region. The team felt that it might also be scaled up to an entire country. Key elements in successful scale up are:

   - Begin on a small-scale with three to five towns to test and adapt the approach under new local conditions and learn from the process.

   - Add new towns each year.

   - First select towns with different local conditions and problems encountered as learning centers to facilitate scale-up (e.g., Banikoara).

   - Select enthusiastic, talented participants in the GESCOME process to be trainers and train them to train participants in other towns/regions.

   - Build on and contribute to the synergistic effect with other actors in environmental health.

   - Ensure that institutions and communities are linked at all levels, from neighborhoods to the highest level of government at the largest unit of scale (e.g., if scale up is national, links should encompass all levels, including national government).

- Maintain maximum flexibility, participation and ownership in the neighborhoods and towns.

- Ensure that all participants understand that decision making is decentralized and autonomous; consequently, GESCOME structures will vary by neighborhood.

- Hire paid, project staff or second government staff but maintain a management policy based on facilitation and mentoring to support completely the finding of local solutions to problems.

- Create a GESCOME esprit de corps, collaboration and knowledge sharing among the staff, rather than developing project bureaucracy with a large office.

1. Introduction and Background

1.1. Introduction

In Benin, the Environmental Health Project (EHP) II CESH[2] Benin Activity was known as Gestion Communautaire de Santé Environnementale, or GESCOME II. GESCOME II was a continuation, refinement and expansion of the earlier EHP I GESCOME activity (GESCOME I). Both GESCOME activities were an unusual integration of health and governance leading to improvements in both areas. The project was designed to prevent diarrheal disease transmission to children under five, as well as to help support decentralization by fostering participation and linking government officials at different levels with the community.[3]

The first lessons learned activity (June 2001–February 2002) examined the GESCOME II experience through interviews with the Prefect of Borgou, EMEs and CGMPs. It also tested the immediate sustainability of some aspects of GESCOME, as well as developing and applying a new tool for community monitoring of hygiene behavior and use of micro-projects.

The second lessons learned activity consisted of qualitative data collection and analysis of lessons by a Lessons Learned Team, which worked in Benin from January 9–24, 2002. The Lessons Learned Team consisted of the authors of this document.

The objective of the team was to answer two major questions, each with sub questions, that address GESCOME's joint democracy and governance and health goals:

1. To what extent did GESCOME II prepare the groundwork for USAID to support decentralization by preparing communities to assume a role in local decision making and management; specifically, what is now known regarding how a coalition of local government, civil society and communities can work together to plan and carry out effective environmental health actions focused on diarrhea reduction?

2. Have these actions resulted in a decrease of high-risk behaviors (as measured through qualitative methods) and in improvements in communities' environmental sanitation?

This report is the result of the team's investigation.

[2] CESH, or Community-based Environmental Sanitation and Hygiene, is a major EHP II component.

[3] When GESCOME is not followed by either I or II, the statement refers to both GESCOME activities.

While in Benin, the team was struck by reactions indicating that GESCOME was somehow different from other projects. They therefore asked and answered the question:

What made GESCOME different?

- **Inclusiveness**: GESCOME built coalitions between the community, formal community groups, different sectors of neighborhood, municipal, sub-prefecture and departmental level governments and NGOs. GESCOME II stressed women's participation.

- **Participatory Process**: The GESCOME process included community input at every level through a community process of problem identification, problem analysis, solution finding, micro-project development, funding and construction, and in GESCOME II, health communication for diarrheal disease prevention.

- **Multi-sectoral Solutions**: Communities and GESCOME structure members devised multi-sectoral solutions to address challenges in implementing micro-projects and participatory community health communication (PCHC). GESCOME's multi-sectoral structure made both the concept of the solution and its implementation possible; several ministries collaborated at the departmental and municipal levels.

- **Focus on the Group as the Unit for Health Change**: The basis for the activity was that, in many parts of the world, community change occurs at the group rather than individual level; GESCOME II worked in participatory ways with groups.

- **Reliance on Traditional Community Means and Radio to Generate Health Knowledge**: In the Borgou Department communities where GESCOME was located, information traditionally spreads from household to household and among formal and informal groups; GESCOME II facilitated this process. In addition, local radio stations provided health and hygiene information directly and through GESCOME, other projects, and on their own.

- **Institutional Linkages between the Community and Local Governance Structures**: GESCOME's inclusive approach strengthened linkages and fostered greater collaboration between municipal officials (mayors and chefs de quartier), traditional community religious authorities and local community groups.

- **Creation of Autonomous Decentralized Community Decision-making Structures**: GESCOME established local community structures to manage micro-projects. These structures showed considerable initiative in finding different ways to mobilize resources, set user fees and organize monitoring activities without referring to other governance institutions.

- **Unobtrusive Facilitation Approach to Project Management**: The GESCOME Benin Coordinator[4] intervened at the community level only to help monitor or resolve financial matters. He allowed communities, municipal teams and the Department Environmental Health Committee to find their own solutions to problems. Building on the training and tools that GESCOME I developed, GESCOME II included little outside technical assistance.

- **Spontaneous Local Level Adaptation and Integration of GESCOME Structures**: GESCOME developed committees and teams from the department to neighborhood level. Many neighborhoods took these structures and expanded their mandate to fill other community needs and/or created other neighborhood committees and integrated them into GESCOME.

1.2. Background

The EHP CESH Benin Activity began on the ground in September 1999 and ended on May 31, 2001. It encompassed three rural towns in the Borgou/Alibori Department in the northern part of Benin: Banikoara, Sinendé and Bembéréké/Beroubouay. USAID/Benin funded the Activity. GESCOME II was a joint programming activity by the USAID/Benin Family Health Team and the Democracy and Governance Office.

GESCOME I worked in three neighborhoods or *quartiers*[5] of Banikoara, Bembéréké and Parakou. All are rural towns, except for Parakou, the regional capital, which has become far more urban (e.g., access to electricity and running water, availability of trucks to collect garbage, heterogeneity of the occupations of residents). GESCOME II expanded to the remaining two neighborhoods in Banikoara—plus an additional neighborhood adjacent to Banikoara, three Sinendé neighborhoods, and the sole non-GESCOME I neighborhood in Bembéréké. Since Bembéréké hand only one non-GESCOME I neighborhood, a very small two-*quartier* town in the Bembéréké sub-prefecture, Beroubouay, was added to achieve three neighborhoods. Beroubouay's two neighborhoods and Bembéréké's one neighborhood were considered Bembéréké. GESCOME II was supposed to work in an additional three neighborhoods in Parakou as well, but found it impossible to implement the GESCOME structure in Parakou due to lack of political will and an inability to find willing volunteers in two of the three neighborhoods.

GESCOME I introduced an inclusive structure to link departmental, municipal and quartier government structures with each other, with communities at the neighborhood level and with NGOs. The structure was constructed of horizontal and vertical coalitions between sectors and levels of government, community members

[4] Salifou Yallou

[5] *Quartiers* are a government administrative unit, but also have some social reality and correspond to neighborhoods. When referring primarily to the administrative unit, the term *quartier* will be employed.

and groups. All groups were united in an effort to prevent diarrheal disease in young children.

The GESCOME II structure included:

1. The CDSE or Comité Départmentale de Santé Environnementale (Departmental Environmental Health Committee) chaired by the department prefect (*préfet*). CDSE members included:

    - The préfet
    - Departmental directors of the housing service (environment), public health (DDS), planning and statistics and social affairs service
    - Sub-prefects (*sous-préfets*) of GESCOME II towns
    - Mayors of GESCOME II towns
    - Parakou municipal government representative
    - Coordinators of the Expanded Municipal Teams (Equipe Municipale Elargie) or EMEs of each GESCOME town.

The CDSE responsibilities are:

- Policy formulation
- Decision making
- EME supervision and support.

2. The EME is the municipal-level GESCOME structure. The EME includes:

    - A sous-préfet administration representative
    - A Rural Development Ministry representative (at the municipal level)
    - A local NGO representative
    - Four representatives from each GESCOME II neighborhood (at least two of whom are women)
    - A representative from each GESCOME I neighborhood (where relevant).

    EME responsibilities are:

- Community organization/social mobilization, including facilitation of community problem identification, problem analysis, solution finding and micro-project proposal preparation

- Organization of community elections for Comité de Gestion des Micro-projets or CGMP (Micro-project Management Committee) members

- PCHC facilitation

- Supervision of latrine monitors (i.e., community secondary school students hired by EHP II to conduct behavior observations at GESCOME II latrines).

The CGMP was designed to be a quartier-level structure that was composed of three neighborhood residents whom community members (i.e., neighborhood) elected at a neighborhood meeting.

CGMP responsibilities are:

- With community leaders such as the chef de quartier, mayor, sous-préfet, and others, to collect each neighborhood's 15% contribution to fund their micro-projects[6]

- Contract for the construction of micro-projects

- Supervise construction and manage funds for construction and maintenance

- Ensure that the micro-projects are well maintained.

The Sinendé EME

The Quartier Environmental Health Committee is a structure that GESCOME II added to assist the EME with its community organizing functions. The community

[6] The amount of 15% was arrived at during GESCOME I, the previous project, through a process of negotiation between EHP and the CDSE. Negotiations occurred before any other level of the GESCOME structure had been put in place.

was supposed to elect this committee, however, EHP II did not follow up with this committee because the GESCOME Benin Coordinator did not intervene at the community level, except in budget oversight. GESCOME II did not provide any funds to this committee.

In both GESCOME I and II, when the micro-project was a water point resource, the water point resource's immediate neighbors elected a water users' committee from their group. The committee collected the users' fees and maintained the water point resource.

The GESCOME participatory process depended on the collaboration of all these groups with the community. The GESCOME process was as follows:

1. **Problem Identification**: Facilitated by EME members, the community (neighborhood) used participatory rapid appraisal tools and techniques to identify environmental health problems in the neighborhood, especially those related to diarrheal disease transmission.

2. **Problem Analysis**: Facilitated by EME members, the community used participatory rapid appraisal tools and techniques to analyze the problems identified in the first step.

3. **Solution Finding**: Facilitated by EME members, the community used participatory rapid appraisal tools and techniques to develop solutions, i.e., micro-projects, to address the problems and plan micro-project development, including proposal development. With the community's help, the EME wrote the proposals. The community elected a CGMP for each micro-project. CGMPs collected funds from the community for a 15% contribution of the approximate total financing cost for three rounds of micro-projects. Micro-projects are infrastructures such as community latrines. The CDSE had to approve each micro-project proposal. The CDSE could request modification in micro-project plans and approve or disapprove the proposals.

4. **Community participatory health communication (PCHC)**: Using photographs that they took of neighborhood situations and activities, the EME facilitated meetings among formal and informal community groups. The EME elicited community understandings of diarrheal disease and its causes in the community, assisted the community to discuss their understandings, presented public health understanding and facilitated community public negotiations between differing perspectives.

5. **Community monitoring of latrine micro-projects**: Although not formally part of GESCOME II, this step was added in during the lessons learned period. EME members supervised selected neighborhood secondary school students who conducted structured behavior observations outside GESCOME II micro-project latrines, noting the number and characteristics of users and their handwashing behavior.

6. **CDSE oversight**: The CDSE served as GESCOME's policy and overall decision-making body. The CDSE held periodic meetings, called "Round Tables." Problems that arose in implementing any facet of GESCOME were brought before the CDSE Round Table, often by the EME representative. At the Round Table, the CDSE discussed and resolved problems and made policy decisions.

The Banikoara EME

When GESCOME wanted to work in a new quartier, it first approached chefs de quartier (local elected leaders at the neighborhood level). GESCOME solicited their interest and, if they agreed, their help in organizing a community meeting to explain GESCOME to the quartier residents and explore whether the community wanted to participate in the activity.

The GESCOME participatory approach was created in EHP I as part of the CIMEP (community involvement in the management of environmental pollution) approach. EHP I adapted and applied the approach in Benin as GESCOME I. GESCOME II expanded the area where GESCOME worked and explicitly addressed the CIMEP approach's weaknesses as identified by those involved in GESCOME I in Benin (i.e., EMEs, the CDSE, and the Benin GESCOME Coordinator and the EHP II GESCOME II Activity Manager.[7] In addition to refining the GESCOME I approach, GESCOME II further elaborated the approach to increase community inclusiveness and stimulate community change to prevent diarrheal disease transmission.

GESCOME I and II were important applications of the EHP participatory approach. Both EHP II and USAID/Washington were interested in how the approach worked in Benin, what lessons could be learned from its application to rural towns in the Borgou Department, and whether the GESCOME approach would be applicable elsewhere. Therefore, at the conclusion of GESCOME II, EHP II and USAID/Washington decided to launch two lessons learned activities to better understand the GESCOME II results, processes, potential sustainability and broader application.

[7] Laurie Krieger

1.3. GESCOME II Financing

EHP

- Small Benin office, supplies and equipment
- Salary of Benin Country Director
- Salary of U.S.-based activity manager, support staff and time for other necessary EHP staff
- Beninois technical assistance
- U.S.-based technical assistance
- Training workshops
- Costs of running EMEs
- 85% of micro-project costs
- Polaroid cameras and film for EMEs
- Latrine monitors' salaries
- Support for Round Tables

Communities

- 15% of micro-project cost
- Voluntary participation in GESCOME II committees
- Voluntary participation in GESCOME II meetings and PRA
- Local elected officials' time for participation

Government

- Staff time and transportation for CDSE members
- Staff time for municipal government representatives on EMEs
- Sub-prefect's time for participation in financial oversight

NGOs

- Time for participation of staff in EMEs
- Some volunteered to focus activities around GESCOME priorities.

2. Methods

The lessons learned team held discussions/interviews in Banikoara, Bembéréké/Beroubouay, Sinendé with the following people:

- Préfet of Borgou
- Director of the Department of Health
- Sous-préfet of each sous-préfecture (sub-prefecture)
- Members of EMES
- Members of CGMPs
- NGOs represented on EMEs (when possible)
- Chefs de quartier
- Officers of cotton producers' groups
- Opportunistically selected Community members in each town or neighborhood
- Latrine monitors in Banikoara and Sinendé
- Caretakers of GESCOME I and II micro-project
- The director of Bembéréké's local radio station
- Public health officials and private health care providers
- Representatives of other water, hygiene and sanitation projects.

Team members observed micro-projects and their use, household sanitation and hygiene in the compounds visited, and general sanitation in all the GESCOME I and II neighborhoods. Observations in Parakou were limited to GESCOME I latrines and their use; only caretakers of the latrines and the CGMP and users of one latrine were interviewed. Results from the latrine monitoring exercise are included as appropriate. Results from interviews by Salifou Yallou with the préfet, EME and CGMP members during the first lessons learned activity were also included in the data that the team reviewed.

In each neighborhood, a team member visited three to five opportunistically selected households, in addition to interviewing community members gathered at or walking near GESCOME I and II micro-projects. A team member also interviewed community members in public places.

The team analyzed the interviews and discussion notes together and agreed on basic themes. However, GESCOME II participants had their own perspectives on what was important about the activity, their role in it and its effects within the community. Whenever possible, the team has tried to let the participants speak for themselves in the report.

The team relied on many of the same methods that a team[8] that visited Benin early in GESCOME II had used. Although the samples in both cases were opportunistic, use of similar methods facilitated information comparison. The first team had visited all of the GESCOME I latrines. In Bembéréké, Parakou and Banikoara, the second team conducted interviews using the same questions that the first team had asked and observed some of the same GESCOME I latrines.

The team made sure to meet with the same groups and people in each town they visited (e.g., sous-préfet, EMEs, CGMPs, women's groups, latrine monitors, individuals interviewed in public places and households visited) and asked each group or individual the same questions as they asked others in that category in the other GESCOME II towns. Although those interviewed were a combination of convenience sample and government and elected officials, use of the same methodology and questions allow for comparison between towns and between the first and second team visits.

[8] John Borrazzo, Laurie Krieger, and Salifou Yallou were on the earlier team.

3. Emerging Themes

A number of major themes emerged regarding GESCOME's impact or its contribution to identifying and resolving local environmental health issues:

- Perceived GESCOME effectiveness in preventing diarrheal diseases
- Community generation of knowledge
- Rapid change in practices
- Use of micro-projects
- Building institutions and linkages between local government and communities
- Inclusiveness, representation and participation
- Building broad coalitions
- Mobilizing and managing resources
- Transparency and accountability
- Decentralization support
- Impact of external environmental factors
- Sustainability
- Synergy
- Unintended Benefits

Using these themes, the team identified the GESCOME approach's strengths and weaknesses and included them at the end of the report.

3.1. Perceived GESCOME Effectiveness in Preventing Diarrheal Disease

GESCOME I conducted an epidemiologic baseline study. GESCOME II did not conduct an additional baseline or follow-up survey because of a lack of resources. It was not possible to obtain statistics on childhood diarrheal disease incidence in the

towns; even the prefecture public health director referred to the unreliability of health department statistics. Therefore, it was impossible for the team to document a health effect. However, the team was interested to see if citizens and other participants perceived that there was a health effect from GESCOME. To determine this, the team relied on indirect evidence and qualitative interviews. Some perceived aspects of diarrheal disease were department-wide, while others were local.

In every location but Sinendé, people at all levels reported that cholera had appeared in epidemic form every five years. The last epidemic was expected in 2001, but it did not occur. Cholera appears endemically every year. Many people attributed to GESCOME all or part of the failure of the expected epidemic to appear. People in all towns reported that diarrheal disease in children has decreased, and all attributed all or part of the reduction in all diarrheal disease to GESCOME's introduction of infrastructure and stimulus for behavior change. The team collected views from a variety of people, including health care providers and health officials.

3.1.1. Perceptions of Reduced Diarrhea

"Cholera was in all villages [i.e., neighborhoods]. There were 150 deaths in one month in [the] 1996 [cholera epidemic]. Now, there isn't diarrhea."

Banikoara EME member discussing GESCOME's impact

"There was no cholera epidemic here for two reasons: one, potable water, two, latrines. There are only GESCOME latrines here."

Custodian of GESCOME I latrine

"After the pump [i.e., GESCOME II water resource points] the cholera epidemic doesn't exist. Illnesses and diarrhea have disappeared since my children drink from the pump."

Community member and mother

Banikoara: The Zonal hospital director reported that his staff had not completed analyzing their data, but there was an obvious decrease in diarrheal disease among children. He confirmed that the expected cholera epidemic had failed to appear. The responsible person for hygiene and sanitation for the sous-prefecture stated that diarrheal disease had decreased. A private nurse asserted that the number of diarrheal disease cases he saw in his practice—both children and adults—had decreased by 80%.

Bembéréké: Statistics for the Evangelical Hospital of Bembéréké, a private hospital, which maintains records on diarrheal disease cases, reported a decrease in the incidence of childhood diarrhea last year and confirmed that the epidemic form of cholera had not appeared as expected in 2001. This hospital attracts patients from many parts of Benin and from neighboring countries, in addition to the town of Bembéréké. Therefore, the hospital staff's views and statistics do not necessarily reflect their perception solely of the Bembéréké situation.

Beroubouay: The health center nurse was unable to provide statistics but stated that childhood diarrheal disease cases seen at the public health center had decreased in the

past year. (GESCOME was the only diarrheal disease ongoing activity in Beroubouay until two months ago, as far as the team could determine).

Sous-préfets, health officials and EME, CGMP and community members asserted, often with great enthusiasm, that the latrines and potable water that GESCOME micro-projects provided and the behavior change that GESCOME stimulated were the causes or partial causes of the decrease in diarrheal disease and non-appearance of the cholera epidemic. Health officials tended to be more cautious (and realistic) in also according other activities a role in the decrease of diarrheal disease in their towns, when other major activities existed.

Banikoara: Of the people in the three towns, Banikoarans were the most concerned about cholera. In almost every interview in Banikoara, people mentioned the terrible periodic cholera epidemics and their relief that none had appeared since 1997, although they had anticipated one in 2001, based on a five-year cholera epidemic cycle.

Sinendé: Cholera seemed to be less of a concern in Sinendé; only one person mentioned the disease.

"There is less diarrhea because people are covering their wells, and there is less feces around."

Sinendé sous-préfet responding to a question on what he thinks are the GESCOME II effects

"Usually cholera does a lot of harm. This year in this village [i.e., quartier], there was no cholera."

A Sinendé CGMP member responding to a question about why people use latrines

"Before [GESCOME] I can't say how much I used to spend on medicines—it was so much, so much! And it seemed like my children were always sick. In the past year I haven't spent more than 1,000 CFA on medicine. So I can recognize the truth of what the EME talks about."

A Banikoara male CGMP member

"We always have cholera [in endemic form]. Not everyone follows [health guidelines]. But in the center [of Bembéréké commune] where there are GESCOME [I] wells, the commune of Bembéréké does not have cholera."

Sous-préfet

"Diarrhea [i.e., cholera] has disappeared [in the town], but in the neighboring villages, one still sees people who go to the health center for cholera, but in the city we don't see it."

A women's group member

In all the towns men tended to refer to the effect of improved health in monetary terms, while women tended to concentrate exclusively on improved child health.

3.1.2. Community Generation of Knowledge

> *"We noticed that pump water gives health because when we drink well water we get a stomach ache and diarrhea."*
>
> Water users' committee member in Banikoara
>
> *"A young man came to the house and talked to me about diarrhea in children. I followed his advice and saw that it was effective."*
>
> A Bembéréké mother in response to a question about why her young child defecated in a potty (It is probable that her visitor was a government hygiene agent)
>
> *"We've tested the mosquito nets and the treated nets are good. [So] the demand is higher than the supply here."*
>
> A CGMP member in Banikoara

Knowledge generation is the process(es) through which members of a social group learn, understand and categorize information about the world around them. Oral communication has traditionally played a large role in this process.[9] There, information is not power; it is for sharing. In the project towns, people seemed to be extremely open to new health information and to use the experimental method to verify the validity of information. If people had heard that something new might be to their advantage, they tried it. If they saw that a practice, commodity, etc., helped them, they adopted it.

- In every town, female community members, members of the women's groups, CGMP and EME members volunteered that as soon as they learned something, they shared it with their households. Households are large, extended joint families often with several adult women and numerous children (only 8.3% of women surveyed in the 2001 Demographic and Health Survey (DHS) in Borgou reported using modern contraceptive methods and only 9.3% reported any use (draft 2001 DHS)). Men who were not EME members tended to share information immediately only with their wives.

- Members of formal groups (e.g., women's groups) and informal groups (e.g., men accustomed to sitting around chatting with each other) shared information with each other, often as soon they heard it, even before testing its validity.

- Household members who either attended PCHC meetings or heard about the content in all but one case (Sinendé) reported that the household tried new hygiene and sanitation practices and, in all cases, noted a great reduction in diarrhea and general illness in children.

- Local radio is fairly new in the three towns. Many community members in the three towns mentioned radio as an information source on diarrheal disease prevention. GESCOME's use of radio varied by town.

[9] Unless Parakou is mentioned specifically, the reference to towns refers to Banikoara, Bembéréké/Beroubouay, and Sinendé.

Banikoara: The farthest town from Parakou, Banikoara has had its own local radio station for eight years. Most community members interviewed said that they had learned about diarrheal disease through radio and community meetings (often GESCOME, but also COSA—Composante Sanitaire, a project financed by various European donors).

The Banikoara sous-préfet had volunteered to issue an order to the radio station authorizing GESCOME to have free airtime whenever GESCOME needed it. As a result, EME members made many broadcasts about GESCOME and how to prevent diarrheal disease. Other projects (e.g., COSA) also used radio extensively. PROSAF, Integrated Promotion of Family Health in Borgou and Alibori) uses radio for health messages, some of which pertain to diarrheal disease.[10]

"We don't keep our knowledge only for our households. When we go back [from GESCOME or women's group meetings], we tell everyone and go from neighborhood to neighborhood and talk to the women's groups."

A women's group member in Sinendé

"Where defecation happens in the bush, there is sickness. It happened a lot. They tell us at the health center. We talk among ourselves [about healt] under the mango tree."

A group of older and middle-aged men sitting under a mango tree across the street from a GESCOME latrine in Bembéréké ("the health center" probably refers to the Evangelical Hospital of Bembéréké)

Bembéréké: The local radio station was established with Swiss development aid only one year ago. Despite its recent launching, this private station is already making a profit. The station head said that the station had conducted a qualitative study and found that their most popular programs were an international music program and a program that the station writes and produces on various health topics. This is in keeping with the team's impression that people in the three towns are eager for new health information. Radio sales are up, according to the station's interviews with radio sellers and its own radio sales figures.

Sinendé has no local radio station of its own; it receives Bembéréké's program.

3.1.3. Rapid Change in Practices

In all locations but some parts of Bembéréké, EME members, women's group members and community members seem to have adopted practices fairly rapidly to prevent diarrheal disease in children. This generalization includes Beroubouay, where GESCOME II has not been able to help the community to construct any operational infrastructure. However, not all towns or neighborhoods changed practices to the same extent.

[10] At the time of this report, PROSAF was USAID/Benin's largest health project. It works in both reproductive health/family planning and maternal and child health.

Banikoara, Gomparou: Neighborhood women attending a PCHC meeting

Except for Beroubouay, where GESCOME II seems to have been virtually the only environmental health actor, it is impossible to trace all of the rapid changes in practices to GESCOME. However, the evidence is suggestive of a large or catalytic role when others are working in the same area. For example, in Banikoara, where the COSA project worked from 1995–1999, it seems that rapid change in practices may have been seen only in the past two years.

Evidence of behavioral change was derived from self-reports, reports about others, observations of communities, compounds and latrines, interviews with GESCOME latrine custodians and latrine monitoring data. For GESCOME I latrines, observations and interviews were compared with similar data from January 2000. Findings varied somewhat by town.

In Borgou, "open air defecation" or defecation "in the bush" [11] is the traditional method of defecating. In all the towns, those interviewed said that traditionally food was not covered. Water jars for storing the household's water supply also were not covered, and people did not wash their hands with soap before eating.

Comparisons by Town in 2000 and 2002

- **Banikoara**

  In January 2000, the sous-préfet seemed discouraged. Although GESCOME I had been working since 1997, he said that few people were using GESCOME I latrines, and he had not seen remarkable behavior change. GESCOME I water points were well used. COSA had been working in the town since 1996, helping with infrastructure and conducting more prescriptive (than GESCOME II) "behavior change communication." In January 2000, interviews of neighbors of the GESCOME I latrines indicated that in some neighborhoods, few people used the latrines and in most neighborhoods, they could not name anyone else who did.

[11] "The bush" refers to uncultivated land.

Community members interviewed could not describe the benefits of using latrines. GESCOME I latrines were often locked. In one neighborhood, the team waited for many minutes for neighbors to find the custodian. However, at another latrine, the custodian was in attendance near the facility.

The January 2002 situation was very different. In surprise visits to both GESCOME I and II latrines, custodians were found sitting at or very close to the pay per use latrines. Latrines were unlocked because the custodians were present. Custodians at a GESCOME I and a GESCOME II latrine each reported collecting CFA 6,000 per month (at CFA 25 per use). All latrines had water and soap available. The July–August 2001 latrine monitoring exercise showed that some of the most used GESCOME II latrines were in a Banikoara neighborhood. In January 2002, no COSA latrine remained in use because the design did not allow rapid decomposition of latrine content. The closed COSA market latrine had a custodian in place.

Of the ten community members interviewed in January 2002, all could describe many ways to prevent diarrheal disease, and all articulated the benefits of using latrines. All but one (a renter not from the neighborhood) described specific changes that their households had made. Community members said that the information came from COSA, GESCOME and/or the health center, and many mentioned the radio as well. Community members noted the apparent (to them) health benefits of the behavior change.

The sous-préfet noted areas where the citizens had changed although he felt there was still more to be done. He thought that some of the rapid change could be due to the community recognition that cholera was linked to behavior.

"Behavior changed because the disease [cholera] has a cause."

Sous-préfet

"For a long time women had needs for household hygiene and knew there was a problem, but now with the meetings they got the information [to do something about it]."

A woman attending a PCHC meeting

Reported changes in community practices (by information source) included:

- Increased use of latrines (sous-préfet)
- Covering food (sous-préfet)
- General cleanliness of the environment (sous-préfet, CGMP members, PCHC participants and EME members)

- Water jars covered (chefs de quartier, EME members)
- Open air defection reduced (EME members)
- Food in market covered (EME and women's group members)
- Children defecate in *pots* (little round plastic tubs used as potties) or latrines (chefs de quartier)
- Consume "pump" water; use well water for washing clothes, dishes and people (several female community members interviewed)
- Participatory decision making and solution finding (PCHC meeting participants)
- More money spent on other things—less on medicine—as a consequence of improved health (male water users committee member)
- Comparatively few Banikoarans reported changes in defecation among young children.

There also was a change in the understanding of the causes of diarrheal disease (sous-préfet, water users' committee members, departmental head of hygiene and sanitation and female community members interviewed).

- **Bembéréké**

  In January 2000, few people used the GESCOME latrines. At one latrine, the team interviewed neighbors, who said that the bush was close, and a few used the GESCOME latrine, but most used the bush because it was more convenient.

  In January 2002, a child (approximately ten years old) living next to the same latrine said that all the men and women in the surrounding houses used the latrine. However, he defecated in the bush. The latrine itself was open and obviously used, although not dirty. Four women from a compound located in close proximity to the latrine said that their household used the latrine, as did everyone else in the area who did not own a private latrine.[12] They were aware of GESCOME meetings and said that a man goes to the neighbors to collect money for cleaning supplies for the GESCOME latrine when needed. They cited health reasons for using the latrine and the connection of flies, feces, food and diarrhea. One woman said, "We have our own knowledge, and each day we learn more. We listen to the radio and the hospital."

  There were mixed results from the other interviews. Four women living in a compound in a different neighborhood, a four to five minute walk up a hill to a

[12] The Evangelical Hospital of Bembéréké had a project in this *quartier* to encourage construction of private latrines and provide health information.

GESCOME latrine, were aware of the latrine but did not use it because the bush was closer. None had been to a GESCOME meeting and none knew the causes of diarrhea, only that it was "sent by God." A group of older and middle-aged men engaged in conversation under a tree across the street from the same latrine all claimed to use the latrine and said that everyone used the latrine, regardless of age or gender. They cited both health and convenience reasons for using the latrine.

Only one out of five mothers interviewed in the market took steps to prevent diarrhea (her little child defecated in a potty). A young man had visited her in her home. The other mothers denied knowing anything about diarrhea causes or prevention.

- **Beroubouay**

Beroubouay was not a GESCOME I community. However, it illustrates the possibility of community change, even in the absence of infrastructure. The two quartiers of the town are treated as Bembéréké, but Beroubouay is 37 km from Bembéréké and resembles an overgrown village, although it has many of the structures of towns. The eight Beroubouay neighborhood representatives on the Bembéréké/Beroubouay EME received a great deal of assistance from their Bembéréké colleagues, but distance often made communication difficult, and there were several cases of miscommunication. One case affected the construction of micro-projects, so that Beroubouay's six latrines were almost complete but unusable. Therefore, the Beroubouay members concentrated on PCHC. In addition, Beroubouay has at least one active GESCOME Community Environmental Sanitation Committee, which also took on a PCHC role. A hygiene agent comes to Beroubouay, but is reportedly not very active in hygiene education. The Danish sponsored Programme D'appui au Développement de l'alimentation en Eau potable et Assainissemen en Milieu Rural (PADEAR) started working in the town in the last two months. There is no other hygiene education other than possibly in the schools.

The EME, women's group and community members noted great changes in community practices:

- Little children now defecate in potties (little plastic tubs) instead of anywhere (EME, women's group and community).

- Women cover food in the market and at home instead of leaving it open to flies (EME, women's group and community).

- Water is stored in covered jars instead of leaving jars open (women's group and community).

- Open-air defecation is reduced due to the demand created by GESCOME for PADEAR household latrines (PADEAR just began working in the area) (EME and women's group).

- ∉ Household courts are well swept every morning instead of infrequently (EME, women's group and community).

- ∉ Women wash their hands before eating (women's group and community).

- ∉ [Women] wash children's hands before they eat (women's group and community).

Team members made surprise visits to four compounds. In three households, they noted well-swept courts and covered water jars. All the adult women recited public health explanations for diarrhea transmission, which they had heard at GESCOME II meetings. They also reported that their little children defecated in potties, which their older children had not done when small because the women hadn't known about the practice's importance. In the remaining household, no one had attended a GESCOME meeting, the court had obviously not been swept recently, and water containers were open. The women had trouble thinking of diarrhea causes in children, except for teething and giving children unclean food.

A team member interviewed a group of seven women drawing water from a (non-GESCOME) standpipe. Five of the seven women had attended GESCOME meetings and could identify multiple methods of preventing diarrheal disease (washing hands with soap at appropriate times, covering water jars, defecating in latrines, children five and younger using potties that were emptied in latrines, etc.). The women who had not attended also were familiar with most of the information.

> *"We learned the importance of science. All women in the neighborhood here have changed their behavior."*
>
> A women's group member

An enterprising community environmental health committee member realized that GESCOME was creating a large demand for covered water containers, which did not exist in the community, so he learned how to make them and now has a business making covered household water containers.

Beroubouay: The new innovation, a covered water jar, is in foreground. In the background is a traditional water jar with an improvised cover (this picture was taken in a compound (household) during a surprise visit).

∉ **Sinendé**

Sinendé was not a GESCOME I community. Sinendé also has an active community environmental health committee, which decided to work on garbage collection. The EME noted community changes, but expressed some disappointment that more behavior had not changed.

Changes noted in community practices (by source) included:

– The community is much cleaner (sous-préfet and EME).

– Children defecate in potties instead of anywhere they want (sous-préfet, community and women's group).

– Mothers throw the contents of potties in latrine (community).

– Women cover food in market (EME, community and women's group).

– They drink only "pump" water (community and women's group).

– They defecate in latrines instead of bush (community and women's group).

– They wash fruit and vegetables before eating (women's group).

– Women cover water storage jars (women's group).

The team observed users at a GESCOME latrine wash their hands with soap after using the latrine. Members of the water CGMP said that "pump" water (i.e., water from a connection to the national water company, Société Beninoise d'Electricité et d'Eau or SBEE) was equivalent to well water. However, another project has been working to institute well chlorination. Latrine monitors, the EME and CGMP members noted that not everyone used the latrines.

Visits to two households revealed that the women in these households had attended multiple GESCOME meetings and were well aware of ways to prevent diarrhea. One household knew that "pump" water was supposed to be better for the health but said that they were unable to afford it at this time and used well water. At a PCHC meeting for neighborhood women, women enthusiastically shared information and experiences about preventing diarrhea.

3.1.4. Use of Micro-projects

Latrines

To discover whether GESCOME II latrines were being used, GESCOME employed secondary school students in July and August 2001 to observe GESCOME II latrines and the handwashing behavior of users in Banikoara and Sinendé. Latrines were not

observed every day of the two-month period. There were at least two weeks when they were not observed at all. The preliminary results are attached (see Annex C). The most important results were:

Sinendé, Danrigourou quartier: A GESCOME II latrine

- All GESCOME II latrines were used (11,349 uses of 15 latrines were observed in the two towns).

- Sinendé reported almost twice the users of Banikoara, although the two towns have approximately the same population. During this time, all Sinendé latrines were free in order to promote use of the new infrastructure, according to the Sinendé latrine monitors. Banikoara latrines were not free, except in one neighborhood, where the cotton producers' association or groupement villageoise (GV) paid for latrine use for one year.

- The payment scheme was strongly associated with the number of users. The heaviest used latrines were in neighborhoods where latrines were free or where a yearly payment for maintenance was paid as a kind of community tax by the GV. A 25 CFA charge per use was associated with much lower latrine use.

- About half the users washed their hands after latrine use. Of those who washed their hands, about half used soap, but almost all washed both hands and rubbed them together at least three times.

Bembéréké latrine monitors: The monitor on the left is from the Demanou quartier, and the two on the right are from the other quartiers.

The team visited all the GESCOME I and II latrines in the three towns and two GESCOME I latrines in Parakou. All the latrines had water. All latrines with custodians had soap (the pay per use latrines). All the latrines were immaculate except for a GESCOME I free latrine in Bembéréké.

∉ **Parakou**

While Parakou was included in the CDSE in GESCOME II, there had not been any GESCOME II follow up in the city since December 2000.

Banikoara, Demanou quartier: Two latrine monitoring teams

All GESCOME I latrines in Parakou are pay per use. The three latrines that the team visited were very busy. For example, the team observed five users during a 17-minute period in the middle of the day (which latrine monitoring data from other towns showed is one of the least busy periods). That latrine reportedly earns from 30,000 to 40,000 CFA per month, and the custodian reports to the still-active CGMP.

Community women adapt a water resource point: At a Banikoara water resource point, neighborhood women attached a long wide hose to the faucet and planted a tall, thick forked stick in the ground nearby. With the help of another woman who points the hose into the user's water container, a woman can keep her water basin on her head while filling it from the hose, which is just the right height and angle to run water into her basin. This saves the woman from bending and lifting a full heavy water container onto her head. The hose rests in the fork of the stick when not in use to stay clean.

In another neighborhood, the team observed a latrine and interviewed the still-active CGMP. The CGMP has expanded both its membership and duties. It is now responsible for maintaining all the public latrines in the quartier, including the elegant latrine with showers built by Parakou's sister city, Orléans, France. The French-built latrine earns a great deal. The CGMP uses the surplus to pay the

Parakou administration to empty the GESCOME latrines.[13] The CGMP has also taken it upon itself to provide public trash cans, which they inspect and pay the municipal administration to empty. Finally, CGMP members sometimes go to the bush at about 6:00 am and monitor defecation and garbage dumping. They chastise defecators and dumpers and report them to the sanitary police, who fine the illegal defecators 6,000 CFA, (this was certainly not a CGMP role that GESCOME I had planned).

3.1.5. Water resource points

There was a mixed outcome on the water resource points. Use was always high when the points were open, but there were factors that led some to close.

- **Banikoara**

  The CGMPs and water users' committees complained of extremely high water bills from the SBEE. They said bills were estimated from another town and bore no relation to actual water used. The water users' committee prices the water based on the container size that the woman or girl brings to fill. The money pays the water bill and maintenance.

  Usually there is a surplus after the bill is paid, but if the bill is unusually large, proceeds from the water will not cover it. When proceeds cannot cover the water bills and surplus funds are exhausted, the water users' committee and CGMP have no choice but to close the water source. All recently opened GESCOME II water source points were operating. After two years, four of six water resource points still operated in a GESCOME I neighborhood. However, other projects' water resource points reportedly had been closed.

- **Bembéréké**

  Both GESCOME I free water resource points are extremely popular, as they were during the 2000 visit. The sources are connected to mountain springs rather than SBEE water. However, at one water point resource, two taps were broken and ran continuously, wasting a great amount of water. The elderly woman who cared for one of the water resources did not know who built the water resources or was responsible for them. She only knew that she had been asked to clean and maintain one of them and was not compensated for her work. To the team's knowledge, these GESCOME I water resources have never been tested to see if the water is potable. No water resource points were built during GESCOME II.

[13] Parakou is the only town where latrine use is so heavy that both latrine pits fill up before the material can decompose, so the pits must be emptied regularly.

- **Sinendé**

  Only a few water resource points are open because "the wells still have water."[14] Sinendé also complained that the SBEE bills were estimated and completely unrelated to the amount of water consumed. The team did not observe any Sinendé GESCOME water resource points.

3.2. Good Governance and Health

GESCOME's institutional approach differed markedly from most projects that address diarrheal disease. Other projects usually pay little attention to governance issues. When they do, they are concerned primarily with governance issues in project health structures. In contrast, GESCOME placed greater emphasis on:

- Community ownership, control and maintenance of local health infrastructure
- Close collaboration among a wide range of local government and community institutions
- Community representation at the neighborhood, commune[15] and departmental levels.

GESCOME sought to create the kind of governance structures that are needed to ensure sustainability. Much of GESCOME's perceived success was derived from the following factors related to governance:

- Building coalitions and trust between local government and community groups and institutions, so the groups can mobilize financial resources, generate and transmit knowledge about diarrhea and find solutions
- Participation of local government, technical services, community governance institutions and community groups in joint decision making at the commune and department level through EMEs and the CDSE
- Community ownership, management and maintenance of latrines and water resource points through the creation of decentralized neighborhood governance structures (e.g., CGMPs, latrine and water users' committees and community environmental health committees)
- Fostering good governance practices (e.g., participation, efficiency, responsiveness, transparency and accountability) in institutions and groups involved in the project.

[14] As the dry season (from October through May) progressed, the water level in wells would decrease.

[15] As it actually operated during GESCOME, a commune was a local municipal government unit that served primarily as an instrument of local administration.

3.2.1. Building Institutions and Linkages Between Local Government and Communities

GESCOME I began by establishing close linkages with local department-level administration. This collaboration resulted in the CDSE creation at the departmental level, EMEs at the municipal (town) level and CGMPs at the neighborhood level. The institutions that GESCOME created and EHP designed (rather than local government officials or local communities) quickly became instruments for linking community-based governance structures to different local administration levels. The GESCOME institutions provided opportunities for communities to identify needs and priorities and to assume responsibility for financing, managing and maintaining micro-projects.

In the three institutions that GESCOME created, only in the CDSE did state and local government officials outnumber community representatives. As a policy and decision–making body, the CDSE:

- Approved and modified micro-project requests
- Reviewed EME work plans and activities
- Acted on requests by the EMEs (e.g., to increase the number of community representatives on the EME)
- Enforced GESCOME project rules
- Assessed GESCOME's strengths and weaknesses.

Parakou: CDSE Round Table—the préfet is seated at the head of the table near the windows.

EME coordinators represented EMEs on the CDSE as advocates and spokespersons and served as the main channel for conveying community sentiments to departmental authorities. Conversely, the coordinators informed their local communities about CDSE policies and decisions taken during Round Tables. All three EME coordinators worked for the government.

Unlike the CDSE, the EME was not a policy and decision-making structure. Consequently, it made no rules concerning GESCOME institutions operating at the neighborhood level. Although neighborhood representatives were the great majority of EME members, the sous-préfet's representative and other state agents often assumed leadership roles. French literacy was a requirement for EME membership.

CGMPs operated at the neighborhood level and consisted entirely of people from the neighborhood who were chosen in a "town meeting." Chefs de quartier often played an important role in nominating people to serve on both the EME and CGMP.

The local community also decided on the water users and latrine committee membership (the latrine committee is a Banikoaran community invention and only Banikoara neighborhoods chose latrine committees). The community and CGMPs made all decisions about the location of infrastructure, resource mobilization and management to finance and maintain infrastructure, setting user fees and dues, and custodian recruitment, monitoring and payment.

Banikoara, Orou Gnourou quartier: Latrine CGMP

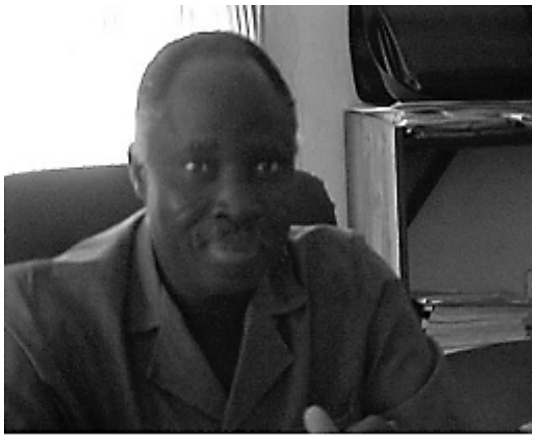
The community and community-level institutions thus had the power to manage the delivery of important public services. This phenomenon reflected GESCOME's success in building self-governing decentralized institutions at the grassroots level. The institutions operated without constant supervision and control by the two higher echelons in the GESCOME system. At the same time, GESCOME set up mechanisms that ensured effective linkages and collaboration between the three institutions.

While these institutions worked well within the GESCOME system, they had little impact at the national level. Departmental officials on the CDSE representing different central government ministries regularly sent monthly reports informing their superiors in the hierarchy about GESCOME activities, but they rarely received feedback from Cotonou.

3.2.2. Inclusiveness, Representation and Participation

Unlike most health projects, GESCOME included local administration officials, mayors and chefs de quartier as active partners. GESCOME II rules governing the EME composition and functioning ensured that not only would quartier community representatives outnumber local government officials, but women would be represented as well.

Sous-préfets: The presence of sous-préfets or their representatives on the CDSE and EME ensured that the local administration would be informed and have a voice in decision making. Their participation gave sous-preféts a stake in the project and contributed to their strong support of GESCOME activities in the Banikoara, Sinendé and Bembéréké communes. It put environmental health "on the map" for sous-prefecture governments.



Sous-Préfet of Banikoara

Sous-Préfet of Bembéréké

Sous-Préfet of Sinendé

Mayors and chefs de quartier: The inclusion of these elected local government officials brought them into the project as partners and mobilized them to participate in organizing quartier level town meetings. During the town meetings, the community conducted a participatory rapid appraisal (PRA), discussed health issues and elected community members to represent the quartier in the EME and to serve on the CGMPs.

Health Department officials: Despite their inclusion on the EME and the nature of GESCOME interventions, in terms of their participation and support of GESCOME activities, health officials in Banikoara, Bembéréké and Sinendé communes were generally less supportive than other EME members.

Chefs de Quartier, Banikoara

Rural development agents: Those on the EMEs actively participated in and supported GESCOME activities. This was particularly true in Banikoara and Sinendé communes, where the EMEs chose the rural development department representative to serve as the coordinator. They did not participate as actively in the Bembéréké commune.

NGO representatives: Although an NGO member sat on the EME, this person was not elected by the NGOs active in the commune because of the absence of an umbrella NGO organization that represented the NGOs. The NGO representatives in Sinendé and Bembéréké worked for NGOs, while in Banikoara, the NGO member was a local Red Cross volunteer.

Community representatives: At the commune level, elected representatives of neighborhoods participating in GESCOME sat on the EME. Neighborhood representatives generally reflected their community's socio-economic structure. Although they were elected in open town meetings, EME community representatives and CGMP members often were recruited by the mayor and chefs de quartier. Half of the community representatives were women, and in most EMEs, one of the women chosen as a community representative was a leader of a local women's group (groupement des femmes).

Several Bembéréké EME members

Banikoara: This EME had the broadest mix of community representatives. They included the young and old, Muslims and Christians, farmers, mechanics and merchants. EME community representatives displayed a high degree of participation and enthusiasm for GESCOME activities. EME members who did not regularly attend meetings were replaced. Participation and enthusiasm were also high among CGMP members.

Bembéréké-Beroubouay: Young people predominated as the Beroubouay elected members on the Bembéréké EME. They were enthusiastic participants in GESCOME training activities. Community representatives from Bembéréké town may have been less enthusiastic participants and GESCOME supporters. Top-down decision making by administrative and municipal authorities also seemed to be more prevalent in Bembéréké, where the EME coordinator also was an administration member.

Sinendé: Farmers comprised the single most important group sitting on the EME as community representatives. This was particularly true in Sinendé commune, where most community representatives were farmers. Representatives from Niaro Bariba quartier, the farthest from the center of Sinendé, attended meetings infrequently and showed less interest and support than representatives from other neighborhoods.

3.2.3. Women's Roles in GESCOME

In GESCOME I, few women served on EMEs. Rule changes in GESCOME II required women's representation on the EME. This led to a dramatic increase in women's participation on the EMEs and in GESCOME activities, notably in forming community ideas about diarrheal disease. However, relatively few women were elected to the CGMPs, which managed the financing and installation of latrines and water resource points. On the other hand, women often predominated on the water users' committees. Quartiers generally had one major women's group, consisting of women engaging in market activities. Their participation in GESCOME governance structures strengthened their own organization's managerial capacity and communication skills. Perhaps more significantly, women's groups applied what they had learned about diarrheal disease transmission to members' food-selling businesses in local markets and also may have served as informal channels of diarrheal disease prevention information.

3.2.4. Building Broad Coalitions

GESCOME sought to build a broad coalition between the local government, state technical services, civil society and local communities operating at the commune level to address environmental health issues focused on diarrheal disease prevention. For the most part, this strategy succeeded and produced the following positive effects:

- Increased the participation and support of many actors normally not involved in environmental health issues (e.g., rural development agents, chefs de quartier, women's groups engaged in economic activities, etc.).

- Facilitated communication and information exchange between local administrative authorities, civil society, state agents and the community in general on the transmission of knowledge of the causes and effects of diarrheal diseases. EME members representing different constituencies communicated the knowledge gained at these meetings to their constituents (e.g., rural development agents to village producer groups).

- Facilitated multi-sectoral solutions to environmental health issues by bringing together in the EMEs and CDSEs officials representing different technical ministries as individuals working at the grassroots level or as departmental representatives.

- Facilitated and benefited from synergies created by the diverse networks of actors (e.g., hygiene service agents, NGOs, COGEC members, SBEE agents, health officials, etc.) who were involved in activities that had a direct or indirect effect on environmental health issues.

Coalition building did not succeed equally well in all three GESCOME towns for various reasons (e.g., conflicting approaches and interests of different members in the coalition, the limited participation of representatives from the Health Ministry, etc.).

Banikoara: Coalition building and synergy were especially evident in Banikoara, where most EME members were involved in multiple activities as members of civil society groups, state agencies, or both. EME members conducted PCHC with seven distinct formal and informal community groups. Schweizerische Normen-Vereinigung (SNV), a Netherlands Development Organization, funded a governance project that recently began working with local associations, employing a similar experiential learning and participatory methodology, which also may have worked to complement and reinforce GESCOME's approach.

Bembéréké-Beroubouay: Logistical problems hampered coalition building and communication between Bembéréké town and Beroubouay, located 37 kilometers away. The logistics undermined the EME team, which, in effect, was divided into two distinct groups.

Sinendé: Coalition building was not quite as successful in this town. The residents of Niaro Bariba quartier and their EME representatives were not fully brought into the community coalition. The SBEE agent's presence on the EME permitted the wide diffusion of accurate information about SBEE water rates and somewhat dampened community complaints about rates, a major issue in Banikoara. On the other hand, since he was used to more directive approaches in dealing with the community, the same SBEE agent was reluctant to adopt GESCOME's participatory methodology.

3.3. Mobilizing and Managing Resources

Two of the GESCOME approach's key components were community mobilization and effective management of financial resources to create and maintain the

infrastructure needed to reduce diarrhea incidence. Communities contributed 15% of the total cost to finance infrastructure installation and assumed responsibility for maintaining the latrines and water resource points that GESCOME installed.

There were several important points concerning community efforts to finance and maintain infrastructure in the project area:

- Communities relied heavily on contributions that their local cotton marketing association (GV) made to finance construction of micro-project latrines and water points and, to a lesser extent, to maintain them. Communities with poorly managed or heavily indebted GVs experienced greater difficulty in mobilizing financial resources.

- Local communities enjoyed a considerable amount of autonomy in formulating strategies and mechanisms to mobilize and manage resources. They differed in their mix and size of contributions (e.g., GV subsidies, household levies and user fees).

- The management system's efficiency varied considerably. Latrine management posed fewer financial problems than potable water points, where failure to impose users' fees or repair broken taps rapidly would make it more difficult for the community to pay the water bills. In several instances, GESCOME latrines and potable water points were more likely to function than those that other projects established.

- Remuneration of those charged with collecting money and managing the latrines and potable water points also differed from neighborhood to neighborhood.

- GESCOME II communities depend heavily on cash revenues from their cotton crops. Therefore, their capacity to mobilize financial resources to support infrastructure construction and maintenance is highly dependent on the efficiency of the government agency that manages cotton marketing. Poor governance practices can and have resulted in delays in payment for cotton crops and "ristournes."

Banikoara: The commune experienced little difficulty in mobilizing financial resources to pay their contribution to the micro-project, which was financed largely by the cotton producers' fund. More problems arose in the water points' management and maintenance; users' committee members complained about SBEE "surfacturation" (overcharging). In some neighborhoods, pumps were closed because of the inability to pay the water bills.

Bembéréké-Béroubouay: This commune experienced the most difficulty in mobilizing financial resources to pay their full contribution for the micro-project and in managing the community contribution. In the end, Bembéréké-Est could not raise enough money to finance any micro-projects. Poor management and heavy indebtedness of the local cotton producer's fund also hindered the community's

capacity to mobilize financial resources. CGMPs also tended to underestimate the amount needed to maintain infrastructure.

Sinendé: Niaro-Bariba was slow to pay its 15% of the infrastructure cost. Delays in collecting money slowed down the construction.

3.4. Transparency and Accountability

Transparency and accountability are essential ingredients of good governance and necessary to promote trust. Community members often cited "honesty" and "trustworthiness" as the main qualities sought in members to represent the community on the EME, CGMP and other structures set up to manage the latrines and water points.

GESCOME established and applied rigorous rules to ensure transparency and accountability, especially in matters concerning money handling. Transparency and accountability rules were also set up to ensure that those involved in decision making at all levels operated in a transparent manner. For the most part, GESCOME succeeded in its efforts to build transparency and accountability into the institutions it created.

Below are some of the approach's strengths and weaknesses:

- The rigorous rules that GESCOME established and applied contributed to limiting embezzlement and increasing trust in the community concerning those who handled money. In some instances, however, the system proved to be onerous. For example, it was difficult to find a competent and reliable outside auditor in an essentially rural area and to meet the requirement that checks be countersigned by two CGMP members and the sous-préfet.

- In two instances, however, not following the transparency rules led to serious problems that blocked micro-projects' implementation in one commune.

- EME members did a good job of holding regular meetings and meeting with the community to discuss health and governance themes. The main accountability mechanisms flowed upward from the EMEs to the CDSE.

- Accountability mechanisms were weakest at the lowest echelons of GESCOME structures. For example, latrine custodians, few of whom were literate, rarely kept written records of the money they collected or kept track of the number of facility users.

- The difficulties that the EMEs encountered in maintaining and keeping full records of meetings, activities and all financial transactions and procedures may lead to a loss of institutional memory once those now active in GESCOME II leave.

Banikoara: This commune had few problems with transparency issues and generally followed procedures.

Bembéréké-Beroubouay: Beroubouay experienced major problems when transparency rules were broken and contracts were made with entrepreneurs without the CGMP's approval.

Sinendé: This site also experienced problems in following the rules set up for the recruitment of an entrepreneur. However, the concerned CGMP quickly rectified the mistake and got back on track.

3.5. Decentralization Support

GESCOME was developed before the elaboration of the current set of decentralization laws that transfer power from local administrators that the central government named to mayors whom the population elects directly. As a result, GESCOME governance structures established a partnership with local administration officials as their main line of communication and in collaboration with the government.

Existing relationships with the local administration and GESCOME-created structures, such as the CDSE and EME, may disappear or undergo major changes when the new system is put in place after the December 2002 municipal elections. Nevertheless, GESCOME participants strongly believe that their involvement in GESCOME structures and activities prepared them and others for the evolving decentralization process.

GESCOME supported decentralization processes as follows:

- Created decentralized, community-based, decision-making structures to provide public goods and services. In providing latrines and potable water points, GESCOME structures performed functions that state agencies and formal municipal institutions usually carried out.

- Provided skills in problem analysis and resolution, project design and management, community mobilization and communication that are essential for planning and implementing environmental health interventions at the neighborhood level.

- Revitalized the chef de quartier office by involving these traditional local government officials in GESCOME governance and environmental health activities. This is especially important because the quartier—as a local government unit—will remain a key component of the new decentralized local government system.

- Fostered horizontal links and collaboration between local communities, local administrative officials and locally-based state agents.

- Reinforced the capacity of local community groups and women to participate effectively in decentralized decision-making structures and processes.

3.6. Impact of External Environmental Factors

Several important environmental factors influenced the operation of GESCOME structures and activities:

- **Seasonality**: The exigencies of the agricultural calendar and timing of the rainy season resulted in fewer meetings and lower attendance at GESCOME II events and activities. Seasonality also adversely affected the capacity to mobilize financial resources and pay for services during the *soudure* (hungry season) when people were strapped for cash and often lacked food.

- **Dependence on agriculture**: Most people living in the three urban communes were farmers who derived much of their cash income from the sale of cotton. Community capacity to mobilize financial resources was thus strongly affected by cotton production and prices, the cost and timely delivery of inputs, and the efficiency of cotton marketing boards in paying farmers.

- **Prevalence of Cholera:** Cholera greatly concerned the communities that suffered from periodic cholera epidemics (almost all the towns). These communities seemed to adopt more eagerly measures to reduce diarrhea incidence.

- **Degree of Urbanization**: The lack of socio-economic differentiation and relatively low population densities in the rural towns in GESCOME's target areas shaped the kind of environmental health interventions and scale of activity and investment needed to prevent diarrheal disease.

- **Spatial Location:** Distances between local neighborhoods affected the transaction costs of attending EME meetings and may have adversely affected participation. Those living far away from GESCOME meeting places had to spend more time and money to attend meetings.

3.6.1. Parakou: A Special Case

GESCOME I operated in three quartiers in Parakou. A variety of factors increased public demand for community neighborhood latrines, facilitated payment for use, and generated sufficient revenue to maintain them: densely populated neighborhoods, relative inaccessibility of the "bush" to much of the town, and higher family cash incomes. Parakou's greater socio-economic heterogeneity, population density and limited dependency on agriculture created conditions that were markedly different from those of the rural towns.

The failure of Parakou's GESCOME chefs de quartiers to recruit sufficient representatives from their quartiers created governance problems that eventually led

to the quartiers' exclusion by the CDSE in GESCOME II. While the formal participation of the Parakou quartiers in GESCOME I ceased with GESCOME II, public latrines that the CGMPs in Parakou built and managed continued to function and were sometimes heavily used. The CGMPs continued to function, after essentially being ignored by GESCOME for well over one year, suggesting that the GESCOME neighborhood structures may be sustainable. One latrine was so popular that it was able to generate a sizeable surplus that was used to construct a shelter for the custodian.

The Parakou case also demonstrates that the public latrines that GESCOME established have the potential to be sustainable and self-supporting. It also highlights the greater financial capacity of quartiers in large urban towns with high population densities and higher monetary incomes to support public latrines through user fees than in GESCOME's rural towns.

3.7. Sustainability

Are GESCOME institutions and processes sustainable? Sustainability depends on the resolution of several governance issues and assurance that a number of issues are in place that are more closely related to health:

- CDSE and EME modification to reflect the greater role that new mayors and municipal councils will play, as well as the elimination of sous-préfetures as administrative entities

- Recruitment and participation of "development champions" from the administration at the departmental level and from the new mayors and municipal councilors to oversee and support the continuation of GESCOME activities in the rural towns and the scale-up and extension of similar activities in other urban areas within their jurisdiction

- Improvement in the management skills of those charged with running public latrines and water resource points

- Development of viable financial mechanisms that take into consideration seasonality factors and the limited financial capacity of rural town dwellers

- Sustaining use and public support for financing maintenance of public latrines and the water resource points that contribute to preventing diarrheal disease

- Community perception that adoption of new practices and/or changed understanding results in less diarrhea

- Presence of a health service should severe diarrhea outbreaks occur (e.g., cholera) that can identify causes quickly and accurately and work with community structures both to trace the cause and facilitate or help (in the case of a polluted water supply believed to be potable) the community to address it

- Ability to recruit and train new volunteers, as the incumbents are lost to attrition
- Ability to raise the very modest funds needed to maintain the municipal level structures and conduct community activities (e.g., PCHC, community monitoring and evaluation)
- Ability of members of the structures to maintain the participatory framework and philosophy rather than reverting to more usual top-down government and development approaches.

3.8. Synergy

GESCOME promoted synergy in the following ways:

- Expanded the pool of people involved in environmental health activities to include a wide range of non-health personnel (e.g., community members, administrative and other state officials who can reach a wide range of constituencies)
- Included members of other organizations working in environmental health as members of GESCOME structures
- Adopted a participatory approach so other efforts were welcomed, rather than viewed as territorial invasions
- Revitalized moribund offices such as traditional municipal mayors and chefs de quartier to support environmental health activities.

Banikoara, Demanou neighborhood: Women in a compound attended PCHC meetings and heard radio broadcasts on preventing diarrhea. Note the covered food containers and well-swept courtyard, which the community agreed are important for diarrheal disease prevention. The women in the compound are producing food to sell at the market.

There seems to be a synergistic effect between GESCOME and other environmental health actors. Although this section only addresses the role of synergy, it is important to remember that there were many other factors affecting generation of health knowledge, adoption of new practices and governance issues. These are addressed elsewhere in the report.

In all the communities but Beroubouay, the coercive methods of hygiene agents in forcing market women to cover their cooked food wares created a not altogether welcome synergy. There seemed to be some variation in synergistic effects in the different towns.

Banikoara had the largest number of other actors in environmental health and diarrheal disease prevention. COSA had been very active in hygiene education, using community meetings as well as household visits and hygiene messages. COSA noted that that there were some problems with behavior change (former COSA staff local director, October 2001). With its different approach to communication, GESCOME may have served as a catalyst for rapid change, but it would probably not have been able to do so had it not been for COSA's and others' work and the amount of time that Banikoarans had been exposed to environmental public health due to COSA and GESCOME and radio programs.

Sinendé, Lemanou neighborhood: A community woman speaks her mind during a PCHC meeting.

Bembéréké had relatively few other environmental health activities. The Evangelical Hospital conducted intensive hygiene promotion together with promotion of household latrines, particularly in one GESCOME I neighborhood. In this neighborhood, compounds close to the GESCOME I latrine had adopted its use. Compounds farther away had built household latrines.

Bembéréké also had a popular health program on the radio that occasionally addressed diarrheal disease prevention. GESCOME activities seem to have benefited from the other activities. GESCOME produced a synergistic effect with a local women's group whose president was also an EME member. The women's group expanded its function from a purely economic self-help organization for members to a hygiene and health promotion and community volunteer clean-up organization.

Sinendé had relatively few other actors working in diarrheal disease prevention. GESCOME appears to have reached enough people in the community to result in changes in community understanding of diarrheal disease. PADEAR had only been working in the town for about one month. As an EME member, the PADEAR representative clearly articulated the differences in approaches between the two organizations (PADEAR works at the household level, GESCOME at the community and group levels; PADEAR is prescriptive and less participatory than GESCOME). Nevertheless, the PADEAR representative felt that GESCOME's work had created demand for PADEAR household latrines.

Parakou is a city rather than a rural town and has many other organizations active in water, sanitation and hygiene currently or in the past (e.g., MCDI, CREPA, Parakou's sister city of Orléans, France, etc.).

SYNERGIES WITH GESCOME:

OTHER DIARRHEAL DISEASE PREVENTION ACTORS

Organization/ Actor	Banikoara	Sinendé	Bembéréké	Beroubouay
COSA	Was very active; former COSA representative now in charge of hygiene and sanitation for sous-prefecture; two COSA animators on GESCOME committees	Was not very active	No	No
Sanitary Agent (government)	Active; former EME member	Active, partners with EME	Active; GESCOME not collaborating with him	Present, but not very active;
MCDI and UNICEF school latrine programs	MCDI was active	MCDI –was active, UNICEF – was active	MCDI - active	MCDI - active
PADEAR	No	Just starting, PADEAR representative is EME member	No	Started after GESCOME, no health communication
PROSAF	Yes—diarrheal disease treatment; some radio throughout Borgou about prevention	Yes—diarrheal disease treatment	Yes—diarrheal disease treatment	Yes—diarrheal disease treatment
SNV	Very active; supports decentralization	No	No	No
Evangelical Hospital of Bembéréké	No	No	Very active in one GESCOME I neighborhood, less active in rest of town	No
Local radio (refers to radio of the town)	Very active; COSA used this medium extensively; provides free time to GESCOME by the sous-préfet's order	Access to Bembéréké local radio	Very active; station broadcasts health advice independently, including diarrheal disease prevention	Access to Bembéréké local radio

Beroubouay had the fewest other actors in diarrhea prevention. It was the only location where all but one household interviewed and all community members interviewed in public places had heard of diarrheal disease prevention activities only through GESCOME. Only one household visited was unfamiliar with diarrheal disease causes and prevention and did not appear to be implementing protective practices.

PADEAR was new in Beroubouay. It appears that GESCOME II may have generated demand for PADEAR latrines. It was clear that the community had generated widespread new knowledge on diarrheal disease and obvious that households now used covered water jars and swept the courts (where food preparation and most daily living occurs). The launch of a new business to meet the new demand for non-traditional, covered water jars was further evidence of adoption of new practices in the absence of new infrastructure. GESCOME II seems to have created a base on which PADEAR can build. It is important to note that MCDI has worked in diarrheal disease prevention in the school in Beroubouay. Although no one mentioned school as an environmental health information source, it is possible that MCDI has been influential.

3.9. Unintended Benefits

- GESCOME structures were adapted, elaborated and increased by communities to suit local needs and tastes. The expanded role of the GESCOME I Parakou CGMP is one example. Another example is the decision in Banikoara to create two CGMPs: a CGMP to build the micro-project and a Comité de Suivi (follow-up committee) to maintain the micro-project.

- In Bembéréké and Sinendé, women's groups had been exclusively economic mutual benefit associations. However, the participation of their presidents in the EMEs or CGMPs had inspired the groups to enlarge their purpose to include community service, especially in Bembéréké, where the group undertook hygiene education, broader health education and community clean-up work. In Sinendé the group began hygiene education.

- The GESCOME custodian latrine position was sometimes difficult to fill for some neighborhoods. Other neighborhoods used the position as a social welfare program and hired very old, poor or disabled neighbors.

- The covered water jar production business in Beroubouay was an unanticipated GESCOME PCHC benefit.

One unintended consequence was not so beneficial. Inclusiveness inadvertently caused some conflict. At times it also harmed GESCOME's participatory approach, such as when EME members from organizations with more prescriptive approaches applied these to their GESCOME work. For example, a Ministry of Health hygiene agent and a former EME member went to the market and yelled at women selling

food from uncovered containers and dumped the entire contents on the ground. An EME member of another government organization blamed the "ignorance of community members" for a problem although the basis of GESCOME is respect for local knowledge.

3.10. GESCOME's Strengths and Weaknesses

3.10.1. Strengths

- Strong support for decentralization
- A broad coalition provided wide support for diarrheal disease prevention
- A strong participatory approach creates ownership
- PCHC and coalitions combines to provide a very low cost method to share/create new diarrheal disease knowledge widely
- A cost-effective method provided infrastructure and creates demand for its use and local maintenance that uses appropriate technology
- The approach may be effective alone in reducing diarrheal disease transmission but seems to be excellent in creating or adding to a synergistic effect with others' activities
- Diarrheal disease prevention activities are sustainable at the lowest level (i.e., the neighborhood)
- Training fosters awareness of gender equity issues among women participating in training
- Reliance on PRA rather than research by outside experts seems to create much greater community, as well as policy maker, buy-in.

3.10.2. Design Weaknesses

If the CDSE disappears, there will be no higher-level, decision-making body.

- The CDSE requested training in the GESCOME process during both GESCOMEs and both the Activity Manager and Benin GESCOME Coordinator felt that the CGMP should receive training. However, resources were insufficient to supply training to either committee. GESCOME staff had not anticipated the relatively large role that chefs de quartier and some mayors would play in GESCOME and did not provide for training these officials.
- Certain sustainability elements were neglected in the design. For example, the original design did not include institutions to provide a home for GESCOME and

follow up on the care of micro-projects and sustain the coalitions after the project ended.

- The participatory GESCOME process demanded a great many meetings. Both community members and EME members grew tired of the meetings.

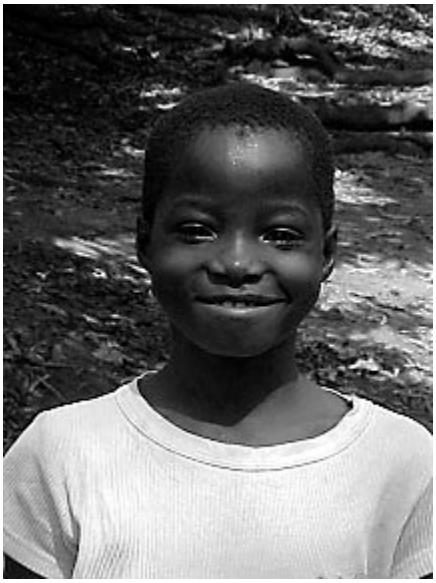
- Insufficient linkages with the health system constituted a double-edged sword. On the one hand, the health system's prescriptive approach did not jeopardize GESCOME's participatory process. On the other hand, GESCOME had no institutional home at the project's end.

- Local NGOs could have been included more extensively (e.g., with a workshop about GESCOME's needs during start up).

- Auto evaluation was not stressed enough at the community level. It is unclear whether communities will be interested in latrine monitoring over the long term.

- No quantitative epidemiologic data were collected for GESCOME II baseline or results.

- PRA limited the kinds of questions asked, techniques used and data collected.



Bembéréké: A satisfied latrine user

4. Summary and Conclusions

The GESCOME approach was effective in stimulating community changes in health understanding and practices (as shown by the use of latrines). GESCOME demonstrated that effective decentralized, autonomous, decision-making institutions can be established successfully and can function with a minimum of external supervision by towns. The following factors contributed a large share to the success of the project:

- Strong support by the local community, local government and administrative officials
- Willingness and financial capacity of local communities to maintain infrastructure and manage health activities
- A tradition of participatory decision making
- The relative marginality to the rest of culture of traditional beliefs about the causes of diarrheal disease.
- The combination of health and governance activities with multi sectoral participation fostered collaboration but was limited in its success by the relatively lower participation of the health sector. However, this also meant that the more directive approach of the health sector did not have much influence on GESCOME.

The GESCOME II experience demonstrates that the GESCOME approach can successfully be scaled up to whole towns and to all the major towns in a region but that large urban centers may need to be included on their own timetable, and the process may need modification.

Although the project was designed for rural towns, it encompassed several types of towns. The towns themselves had different types of quartiers.

> The GESCOME II Bembéréké quartier, for example, seemed to be a community in the minds of those who worked with GESCOME, but perhaps not in the minds of those who lived there. Beroubouay, also in Bembéréké EME, appeared to see itself far more as a community and its size (two quartiers) impressed the team as somewhere between a village and town. Banikoara was a rural town, but in many quartiers, neighbors seemed to know each other and spoke of themselves as a social entity. However, the team encountered migrants in other neighborhoods. Mr. Yallou pointed out that, although the Bembéréké quartier had many migrants and a military installation that contributed to the transient population, other

quartiers also had transient populations, but few problems financing their micro-projects.

This experience indicates that the GESCOME process should include an additional step in the PRA: definition by people living in an area of what the community consists of, since community participation is the foundation of GESCOME. The different experience of different towns and quartiers strongly supports GESCOME's approach of letting the perspectives of those involved determine what is done. To an outsider, towns or neighborhoods with transient populations might seem to have similar lack of cohesion, but this was not the case. GESCOME walks a fine line between administrative and social realities, and other factors, such as the management and solvency of the cotton producers' association, also play a part in outcome.

The lesson learned from the team process of conducting this lessons learned exercise mirrors this lesson of GESCOME. The perspectives and skills of professionals from different sectors were crucial in understanding the project. This combined multi-sectoral understanding provided breadth and depth to the report, as well as to the understanding of each team member.

Bembéréké children and friends collecting water from GESCOME I water source.

Annex A: List of People Contacted/Interviewed

The team arrived at the themes used in this evaluation based on discussions/interviews in Banikoara, Bembéréké/ Beroubouay, and Sinendé with the following people:

- Borgou Alibori préfet (prefect)
- Department of Health director
- Sous-préfet of each sous-préfecture (sub-prefecture),
- EME members
- CGMP members
- NGO members represented on EMEs (when possible)
- Women's group members who were represented on the EME
- Officers of the cotton producers' groups
- Chefs de quartier
- Mayors
- Community members in town or neighborhood interviews; these included all of the following:
  - Three to five opportunistically-selected households (if possible, per neighborhood)
  - Community members gathered or walking near GESCOME I and II micro-projects
  - Opportunistically-selected people in a public place (e.g. market or busy street),
- Latrine monitors in Banikoara and Sinendé
- Caretakers of GESCOME I and II micro-projects
- Bembéréké's local radio station director
- Public health officials and private health care providers, when possible
- Representatives of other water, hygiene, and sanitation projects

Annex B: References

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Annex C: Preliminary Results of Data Analysis

Community Latrine Monitoring

EHP II CESH Benin Activity, GESCOME II

Methods

The Equippes Municipal Elargie (EMEs), or Expanded Municipal Teams, of Sinendé and Banikoara recruited high school students from GESCOME II neighborhoods to serve as latrine monitors. Bembéréké/Beroubouay latrines were not observed because they were still incomplete in July. The high school students conducted structured behavior observations of GESCOME II latrines during the months of July and August 2001. Latrine monitors were paid the same wage that they would earn as field laborers, since students in these towns generally work as field laborers during the summer and would be losing that income. Each EME member was assigned at least one latrine monitor to supervise. The high school students received training in the methodology and ethics of structured behavior observations of latrines, including hand washing. EME members attended this training, but also received training in supervision and supervising latrine monitors.

Latrines were observed from a discrete distance where the observer would not be obvious, but could see the identity of who went into the latrine, as well as whether and how the user washed her/his hands (see attached latrine monitoring form).[16] Latrine monitors observed in male/female teams in four hour shifts from 5 am to 12 am. They were not permitted to work two consecutive shifts. Latrine monitoring schedules were developed by the EME, together with the latrine monitors, in order to maximize unpredictability of when a latrine would be observed. Schedules were also developed to assure that every shift period and every day of the week would be observed at least once during each month. It is very important to note that latrines were not observed every day. Sometimes there was an entire week or two when a latrine was not observed. This means that the total number of observations does not represent the total number of users between July 1 and August 31, it represents only the uses observed during that period. The data show when latrine monitors observed latrines, however, this finding will not be discussed in this preliminary report.

Latrine monitors observed only users of their own sex. As soon as they observed a user, they noted the observation on the latrine monitoring sheets that they used for the current observation period. All observations were recorded in French.

[16] All latrines are supposed to have water, soap, and a special handwashing place outside the latrine. This place is readily observable.

Latrine monitors were prohibited from talking to latrine users, unless the users talked to them first. Monitors were also prohibited from mentioning anything they had observed to anyone other than their latrine monitor partner or their EME supervisor. They were prohibited from discussing the identity of users or non-users with anyone. Latrine monitors were also issued insect repellent and were expected to use the repellent in order to prevent insect vector borne diseases.

The methodology was developed so that the community would own the data because their children and EME had done the work. It was also developed as a test to learn whether this methodology could serve as a community monitoring tool. Although cross-tabs and tests of significance were performed on the data, if simple frequencies could provide a significant amount of useful information, then EMEs could analyze the data by themselves, using only a calculator. Summary sheets were developed for EME supervisors to summarize the data. EME members did not use these sheets because they found the supervision task took a great deal of their time without completing these sheets. In the future, EMEs might wish to use the summary sheets after the end of latrine monitoring, calculate frequencies at their leisure, and report back to the community. The community would then have a way of keeping track of their latrine use, as well as their hygiene behavior.

Results

During July and August, 11,439 uses of the 15 GESCOME II latrines in Banikoara and Sinendé were observed. About 48% of users were female and 52% were male. About 76% were adults, 19% were children five years or older and only 2.4% were children younger than five. Monitors were supposed to observe when one or more children was/were accompanied by an adult, but few monitors followed the direction. It is unclear at this point why that was the case. In order to put the number of latrine uses into perspective, it is crucial to note that data may be missing for latrines in Niaro quarter, Sinendé. Presumably, the number of uses would actually be higher if all the observations were recorded. The reasons for the missing observations will be explored during the Lessons Learned trip.

In about half the observations (5,552 cases), users washed their hands. Of those observed washing their hands, slightly more than 48% of women washed their hands, while slightly over half, about 53% of men washed their hands. Females (a category that included both adults and children) were disproportionately represented among those who used soap: among those who used soap, 2,128 were males (both adults and children) and 2,188 were females, although females represent about 4% fewer latrine users than males.

Almost everyone who washed their hands also washed both hands: 2,361 out of 2,653 females and 2,581 out of 2,899 males. This means that 89% of those who washed their hands washed both hands. Over 86% of those who washed their hands also rubbed them at least three times. Females were over-represented among those who rubbed their hands at least three times. Only 8% of those who washed their

hands dried them "hygienically," i.e., either wiped them on a clean cloth or towel or allowed them to air dry.

Sinendé and Banikoara have approximately the same size population. However, Sinendé accounted for far more latrine use (7,399) than Banikoara (4,040). The reasons for this are unclear, but can be explored through in-depth interviewing during the Lessons Learned trip.

Since August is the height of the agricultural season when many people are away at their farms, we anticipated that latrine use would be far less in August. As anticipated, latrine monitors reported far fewer uses of all latrines during the month of August than in July (7,255 uses reported in July and 4,184 uses in August).

There was an association between method of collecting users' fees, the amount charged for pay per use, and latrine usage. This association was significant ($P< 0.01$). The two neighborhoods that voted to collect users fees through a kind of community tax deducted by the village agricultural cooperative yearly from the proceeds of the cotton harvest on a per household or per person basis, Gomparou in Banikoara and Lemanou in Sinendé, were also the neighborhoods reporting the most latrine use. Lemanou reported 3, 025 uses and Gomparou reported 2,672. The neighborhood reporting the next greatest use (Niaro at 2,422-which may be an under-representation of use) used a pay per use scheme, but charged only 15 CFA per use. The other neighborhoods charged 25 CFA per use and reported far fewer uses, ranging from 609 in Onou Gnonrou in Banikoara to 1952 in Danrigourou, Sinendé. Unfortunately, population figures for these different neighborhoods are not available.

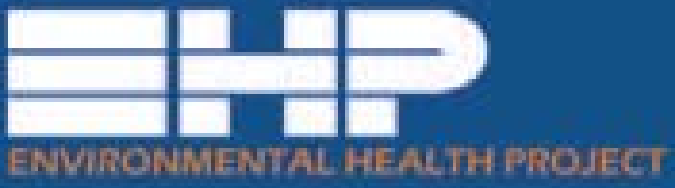
Discussion

GESCOME II latrines were most assuredly being used, although not by small children. However, small children are accustomed to defecate in little plastic tubs, so their paltry representation among latrine users is not surprising. Many women in both towns work as traders in the market and may not be in their home neighborhood during much of the day. The rainy season may have caused an over-representation of market women in this sample. People who used the latrines stayed home during the rainy season instead of going to the fields, which may have been an economically advantageous strategy for some market women.

In about half the uses of the latrines, users washed their hands. This is higher than EHP II had anticipated. If a user washed hands, s/he was likely to use soap in about half the cases, but very likely to wash both hands, and rub at least three times in almost all cases. However, few dried their hands hygienically, defined as using a clean cloth or towel or allowing the hands to air dry. This finding is not surprising, given the physical environment. It is very difficult for children, who often dress only in underpants, to take a towel with them to the latrine. Everyone would have to anticipate latrine use and carry a clean towel or cloth with them when they went to the latrine or carry a towel or cloth with them continually. In the environment of a Borgou rural town, towels and cloths would not stay clean for very long.

In considering the handwashing results, it is extremely important to note that Sinendé did not have any water connection yet for the latrines during the observation period. In some neighborhoods, the CGMPs managed to buy water to supply the latrines. In other neighborhoods, the CGMPs did not buy water or soap so that it was virtually impossible for any user to wash his/her hands. In these neighborhoods monitors did not record any hand washing. Therefore, the percentage of Sinendé users who washed their hands might have been higher had water and soap been supplied universally.

The numbers presented in this report are derived almost exclusively from frequency distributions that could have been calculated by EME members. It appears that the latrine monitoring procedure is a tool that communities could use to assess their latrine use and latrine-related hand washing. The data, when presented to the community by the EME at meetings, might further serve to focus the community's attention on hygiene and latrine use.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