

Millennium Development Goals City-to-City Challenge Pilot Program

Final Report

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I. Executive Summary

The Sister Cities International/World Bank Institute (WBI) Millennium Development Goals City-to-City Challenge Pilot Program is designed to demonstrate the effectiveness of international municipal cooperation in addressing the Millennium Development Goals. In this pilot, three pairs of communities agreed to further the principles of the UN Millennium Development Goals (MDGs) as adopted at the United Nations Millennium Summit in September 2000. The three pairs of communities are Louisville, Kentucky and Tamale Ghana; Chicago, Illinois and Casablanca, Morocco; and Boulder, Colorado and Dushanbe, Tajikistan.

The pilot demonstrated that citizens, working in cooperation with their local governments, are a creative and innovative force in finding ways to address the MDGs at the sub-national level. Working within their own cities and towns, they reinforced the goals of good governance, sustainable development, social development, and environmental stewardship. They proved that they can advance the knowledge and practice of the MDGs through long-term partnerships with their sister cities around the world.

Citizens in developed countries, such as the United States, must understand the daily challenges facing their fellow citizens in the developing world. The MDG City-to-City Challenge Pilot Program gave local governments and their citizens the unique opportunity to “think globally” in terms of the MDGs and to “act locally” to achieve tangible results towards meeting these goals. Citizens in developing countries should also understand that solutions to some of the extraordinary challenges facing their communities can be found through collaboration with their counterparts in the developed world.

The main aims of this pilot are:

- To raise awareness about the Millennium Development Goals in pilot cities
- To raise awareness about specific roles local governments and citizen groups can play in reaching MDG targets they have identified as priority:
 - In Tamale, raise awareness about sanitation and related health issues
 - In Casablanca, raise awareness about the literacy rate of 15-24 year olds
 - In Dushanbe, raise awareness about the role of ICT and global partnerships.
- To build the capacity of local governments and sister city organizations
- To support the poverty reduction strategy of national and local governments
- To scale up the program throughout the Sister Cities International Network for Sustainable Development.

The pilot requires the sister city partnerships to address the MDGs through a creative and innovative community-based process. Each of the selected partnerships jointly:

- Partake in WBI learning activities about MDGs
- Select a MGD, specific target and indicator(s) on which they wish to work
- Prepare a diagnostic assessment of present conditions
- Create an action plan to improve conditions
- Launch implementation of the action plan
- Monitor progress and compare with initial conditions.

The ultimate aim of the program is to create an enabling environment, whereby local communities are empowered to address key quality-of-life issues around the MDGs.

Louisville, Kentucky and Tamale, Ghana

Louisville and Tamale selected MDG 7 – Ensure Environmental Sustainability, Target 10: To halve, by 2015 the proportion of people without sustainable access to safe drinking water and basic sanitation, and Indicator 31 – Proportion of urban and rural population with access to improved sanitation. Successful outcomes of the pilot include the establishment of community partnerships in each city under local sister city leadership. Partner groups in both cities include: 1) a task force of water, waste water, sanitation, environment protection, and public health providers; 2) a community-wide coalition of women’s groups; and 3) in Louisville, a partnership with the United Nations Association. The diagnostic survey performed by a local consultant in Tamale, resulted in an assessment of sanitation and health conditions in three neighborhoods, ranging from urban to rural. Based on the outcome of the diagnostic, Louisville and Tamale created an action plan focused on education about the MDGs in general and goal seven in particular. They launched a major educational campaign in Louisville that will be replicated in Tamale. Highlights of the action plan include:

- Awareness campaigns on sanitation-related diseases in the three targeted communities by promoting the proper use of public and household toilets (including hand washing)
- Increasing awareness in Metro Tamale of the importance of hand washing to good health
- Increase awareness of, and desire for, neat and clean households and surroundings
- A “clean neighborhood” contest and other contests to encourage proper sanitation practices
- Capacity building workshops for technical staff

The Tamale Metropolitan Government allocated more funds for sanitation in the three highlighted neighborhoods as a direct result of the pilot activities. The Ministry of Local Governments co-sponsored a conference in Tamale to disseminate the results of the pilot and sister cities. Future plans include training of trainers to teach strategies and techniques to improve conditions in the selected MDG areas; capacity strengthening; and other needs. Early evaluation results for the project show the strengthening of an established sister city relationship, community mobilization and cooperation, and capacity building of local sister city programs. As a result of the pilot, Louisville and Tamale are committed to addressing other MDGs in addition to MDG 7. They also plan on assisting neighboring communities develop sister city relationships using their successful model.

Chicago, Illinois and Casablanca, Morocco

The members of the Casablanca Committee from Chicago introduced the pilot program during “Chicago Week” in Casablanca. “Chicago Week” brought a delegation of 82 people from Chicago to Casablanca to conduct a range of projects - from workshops, economic forums, and surgeries, to vision clinics and concerts. The initial presentation of the pilot program took place at a volunteerism workshop, attended by many local NGOs, associations, students, and sister city members. This motivated the group to participate and they identified literacy as an important focus. During the remainder of “Chicago Week,” many meetings and dialogues took place with government officials, members of local associations involved in literacy, and sister city groups. At the conclusion of the meetings, the group selected *MDG 2 – Achieve Universal Primary*

Education, Target 3: Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling, and Indicator 8: Literacy rate of 15-24 year olds.

The Chicago-Casablanca team chose to conduct the diagnostic in the Sidi Moumen-Bernoussi district in a diplomatic attempt to reach out to the home of the suicide bombers of May 16, 2003. The diagnostic is currently underway and is analyzing the literacy rates among 15-24 year olds in the district. A Monitoring and Evaluation consultant is in place to capture all phases of the pilot. Chicago and Casablanca assembled teams of literacy experts to work with their sister city groups for this project. Both communities are taking advantage of opportunities to teach the public about the MDGs, the pilot, and sister cities in general.

The Chicago-Casablanca action plan focuses on assessing the existing literacy resources and developing a model program for Casablanca. Two literacy experts from Chicago traveled to Casablanca to meet their colleagues and learn about literacy programs. Their recommendations will be incorporated into a study tour in Chicago. These two trips will be used to create an effective and appropriate literacy program for Casablanca. They will then conduct training of trainers and capacity building of sister city programs in support of agreed upon literacy initiatives.

Boulder, Colorado and Dushanbe, Tajikistan

The sister cities selected *MDG 8 – Develop a Global Partnership for Development*, as a natural sequel to their ongoing project, the construction and outfitting of a cyber café in Dushanbe. In 1987, Dushanbe presented Boulder with a traditional Tajik choihona (teahouse), a priceless representation of Persian culture and Tajik artistry. The teahouse operates as a full-service restaurant, drawing more than 100,000 visitors annually and offering ethnic foods and exotic teas from around the world. The cyber café is Boulder's reciprocal gift. The building will be a showcase of "green" architecture, with solar heat and natural light, low-water-use toilets, and other innovations. The pilot helped Boulder and Dushanbe focus on sustainable uses for the cyber café.

Although Boulder and Dushanbe were unable to complete the entire pilot program, they will continue to construct the cyber café, and recently completed an exchange visit to Dushanbe to discuss their future activities. Contributions from the Digital Development Partnership and Citrix Systems, Inc. will set the technological groundwork for this project and introduce new technology applications. Boulder and Dushanbe will examine their options regarding sustainable ways to use this technology including possibilities such as health, education, and youth development.

II. Project Background

Sister Cities International and the World Bank Institute believe local communities can play a crucial role in achieving global development objectives and city-to-city cooperation can be instrumental in understanding and addressing the MDGs at the local level. Addressing the MDGs should not be viewed as the sole responsibility of international and national development agencies or of sovereign governments. In the recent past, many local, national, and international agencies explored ways to broaden the development process by mobilizing local governments. In the face of globalization and decentralization, the needs of cities are increasing, and official development assistance must find more effective ways of meeting those needs. The partnership believes that sister city affiliations between developing and developed countries can respond in significant ways to the daunting technical and resource needs required to meet the MDGs.

Sister Cities International is a nonprofit, citizen diplomacy network that creates and strengthens partnerships between U.S. and international communities to increase global cooperation at the local level. Headquartered in Washington, DC, Sister Cities International promotes sustainable development, youth involvement, cultural understanding, and humanitarian assistance. As an international membership organization, Sister Cities International officially certifies, represents, and supports partnerships between U.S. cities, counties, states, and similar jurisdictions in other countries to ensure their continued commitment and success. The Sister Cities International network represents more than 2,400 communities in 124 countries.

The World Bank Institute (WBI) was created to help share the World Bank's expertise and that of its member countries with policymakers and decision makers throughout the developing world. As the learning arm of the World Bank, WBI designs and delivers courses and seminars aimed at reducing poverty and promoting economic opportunity and growth.

In the pilot, three pairs of communities agreed to further the principles of the MDGs: Louisville, Kentucky and Tamale Ghana; Chicago, Illinois and Casablanca, Morocco; and Boulder, Colorado and Dushanbe, Tajikistan. The pilot will lead to a large-scale, three-year project that will include 10 pairs of communities. In the larger MDGs City-to-City Challenge Program, each partnership will develop a replicable action plan and strategy for sustainability within their respective communities. An emphasis on two-way learning and mutual cooperation will ensure both communities can find ways to sustain the projects and the partnerships well beyond the initial program funding. Development activities often require long-term commitments before sustainable and measurable results are achieved. Sister city partnerships provide the administrative and capacity-building framework for maintaining and scaling up project activity. Foundations, corporations and local community-based organizations will be presented with an opportunity to invest in this new development paradigm. Through investments from international corporations, foundations, national, state and local governments, local and international NGOs, and other multilateral institutions, the MDGs Challenge Program has the potential to become a major force in changing the scope and direction of community-based development. By bringing together major global actors and focusing their energies on key development issues at the community level, the MDGs Challenge Program will allow citizens to become internationally engaged and key stakeholders in the development process. Major partners already committed to the MDGs Challenge Program are Sister Cities International, the

World Bank Institute, UN-HABITAT, the United Nations Association of the United States of America, the National Peace Corps Association, and Citrix Systems, Inc.

The MDG Challenge Program gives cities and their citizens the ability to build development capacity, enrich their communities by implementing a joint project with their sister cities, and strengthen their international bonds of cooperation and friendship through education and advocacy. Program results, innovative successes, best practices, and options for replicating the program in additional cities will be disseminated as broadly as possible.

III. Methodology

The MDG City-to-City Challenge Pilot Program began in October 2003. The pilot program was contracted by the World Bank Institute through the President's Contingency Fund as the first step in a larger program that will follow under separate funding.

Sister Cities International and the World Bank Institute shared project management responsibilities throughout the pilot program. Sister Cities International was responsible for administrative management while WBI provided technical assistance related to selected MDGs. The coordinating team consisted of Sister Cities International staff members Matthew Corso, Director of the Sister Cities Network for Sustainable Development; Alyson Schwaber, Sustainable Development Program Manager; and World Bank Institute Consultant Svetlana Marjanovic. Matthew Corso was the project manager for Boulder-Dushanbe with support from Svetlana Marjanovic. Alyson Schwaber, with support from Svetlana Marjanovic, was the project manager for Louisville-Tamale and Chicago-Casablanca. Tim Campbell, Lead Urban Specialist at the World Bank Institute, provided general oversight of the pilot program.

Two pairs of existing sister cities, one in the U.S., the other in a World Bank client country, were selected to demonstrate the viability of city-to-city cooperation as a method of addressing the MDGs. For the purposes of the pilot, the communities were selected from the Sister Cities International Network for Sustainable Development and in compliance with the World Bank's list of priority and focus countries. When one of the pairs was unable to continue, another existing sister city pair was chosen. During the pilot, task teams in each of the pilot cities undertook the following steps:

Partake in WBI learning activities about MDGs

The partnerships take part in WBI learning activities that provide the communities with information about the MDGs and their objectives. Learning activities include conferences and face-to-face meetings. Communities received a toolkit that included definitions of sustainable development, the MDGs, and a concept note about the pilot program. The communities were encouraged to take this material and create their own information sheet to help disseminate information.

Select a MDG, specific target and indicator(s) on which to work

Each pair used a participatory process to select a specific MDG. In each case, the communities selected an MDG based on the needs of the international city and the previous history and interests of the sister city pair. In addition, WBI made the Poverty Reduction Strategy Papers

and MDG Country Report available, if applicable, to help the communities put the MDGs in a larger, national context. In all cases, the U.S. city brainstormed about a possible MDG and then approached their counterparts with their ideas, but selection was made only after a series of meetings in both communities.

Prepare a diagnostic assessment of present conditions

Once they chose a MDG, WBI supported the sister cities by providing examples of diagnostic tools. The sister cities worked with the provided diagnostic tool to make it suitable for their needs. An experienced consultant was hired to perform the diagnostic. In both Tamale and Casablanca, the diagnostic involved a door-to-door questionnaire. The diagnostic consultant hired volunteers to assist with data collection. The consultant also analyzed the data and submitted a report and related documentation. The committees identified one or more neighborhoods or districts within the international city for the diagnostic assessment. They selected neighborhoods based on perceived need related to the selected MDG and on specific demographic factors. The selected neighborhoods served as a model or a sample of the general population of the city.

Prepare an action plan to improve conditions

Once the diagnostic was completed, each pair of communities worked together to prepare an action plan that responded to the needs highlighted in the diagnostic. The action plan provides a detailed description of each activity, the people or groups responsible, and a timeline for completing specific activities. All of the pilot communities were encouraged to create an action plan that goes beyond the scope of the pilot and touches upon issues outside of their selected MDG. The coordinating team instructed them to keep the pilot-specific action plan separate for easy distinction and provided suggested activities to help the communities. These included, but were not limited to workshops, training seminars, study tours, contests, and awareness raising events and publications.

Implement the action plan

After the committees in both communities and the coordinating team approved the action plan, implementation began. Execution of the action plan focused on addressing the MDGs and in the long term, achieving significant, measurable improvement in people's lives using the indicators associated with the selected MDG as a benchmark. Diagnostic data collected also provided a means to determine the impact of the project.

Monitor progress and compare with initial conditions

Throughout the pilot program, progress is monitored and statistics compared with the early assessment to measure changes. Monitoring and evaluation in the pilot serves to provide information for decision-making and improved project management, to demonstrate results, and to empower communities and other stakeholders. The communities hired independent consultants to work with project participants, monitor progress, and ensure participatory progress in all phases. Reports are due periodically and a final report is due at the completion of the program. The work program is structured to demonstrate results both from the process of city-to-city exchange as well as in the movement of indicators to show progress in conditions in the developing cities.

Reporting

The project leaders in each community submitted narrative reports at the end of each phase. These reports highlight the activities and process of each phase and provide an account of meetings that took place. Financial reports were submitted as the money distributed was spent and were a requirement in order to release additional funds.

IV. Participant Communities

1. Louisville, Kentucky and Tamale, Ghana

Louisville and Tamale have been Sister Cities since 1979. The strength of the connection varies over time, depending on conditions on both sides of the Atlantic, and on the number of people in each place willing and able to devote time to cultural, educational, and economic development projects and exchanges. The relationship got off to a good start between 1979-1981. However, the December 31, 1981, military coup in Ghana dashed plans for their first exchange. Frustrated, people on both sides became discouraged and communication ceased. Early in 1984, a revival began thanks to the decision of the Episcopal Diocese of Kentucky to establish a "Companion Diocese" relationship with the Anglican Diocese of Sunyani and Tamale. For the next few years most of the funding and actual exchanges between the two cities were connected to the Companion Diocese relationship. Church exchanges continued to dominate the Tamale-Louisville linkage from 1988-1992. In 1992, a joint University of Louisville-Sister Cities study group traveled to Ghana. Since then, the relationship between the two cities has grown steadily, with connections multiplying and visits becoming more and more regular. In 1994, the Tamale Committee was able to return the hospitality showed to the Louisville delegation in 1992. For two weeks in July, Sister Cities of Louisville hosted a delegation from Tamale that included the Mayor and two prominent businessmen. In 1995 the Tamale Municipal Assembly and traditional chiefs of Dagbon in Tamale created a special chief position for long-time Tamale Committee Co-Chair, Dr. Susan Herlin. Her chiefly residence ("palace") was inaugurated in 2001 and currently has guest quarters and an office to house Sister Cities of Tamale.

Volunteer members of the Tamale Committee in Louisville and the Louisville Committee in Tamale manage the relationship between the two cities. The Tamale Committee is a part of Sister Cities of Louisville, Inc. (SCL), which is a non-profit 501(c)(3) membership organization. It receives some support from the City of Louisville, but depends on private funds and volunteers to fulfill its mission. Through its Board of Directors, SCL acts as a coordinating umbrella and fiscal agent for the six committees of Louisville's sister cities. It is through these city committees that the linkages between Louisville and each counterpart municipality are developed and maintained.

In Louisville, Board of Directors appoint co-chairs to head each sister city committee. The co-chairs are accountable to the Board at their monthly meetings. The general membership of SCL meets two times a year to elect officers, set policies, enjoy cultural programming and socialize with each other and current visitors from the various sister communities. The co-chairs for the Tamale Committee are Susan Herlin and Shedrick Jones.

Many projects have been undertaken and linkages established in the last few years. Some of the most important projects include sending medical supplies to the Regional Hospital, sponsoring four

healthcare professionals to attend the Sister Cities of Louisville Medical Conference, celebrating the Dagomba traditional Damba festival in Louisville, and supplying a computer and books to the Northern Regional Library. There are links between public libraries, sports organizations, medical personnel, Anglican (Episcopal) cathedrals, and universities in each city. There is also a scholarship program to send underprivileged talented students to high school in Tamale. While this project is largely funded by U.S. donations, it would not be possible without the hard work and dedication of sister city volunteers in Tamale.

In addition to cultural, humanitarian and educational projects, the relationship has fostered economic ties as well. Three economic development oriented summits have been held, one in Tamale. An international economic development company, The EconVillage Group, LLC, has grown out of them. Its Ghanaian headquarters are in Tamale.

Under the leadership of the Louisville Committee, the sister city effort in Tamale developed into one of the strongest of its kind in Ghana. The group ably hosted many groups from Louisville; raised money for, and organized representatives to go to Louisville in 1994 for the Sister Cities International Annual Conference, and in 1999 for 20th anniversary celebrations, Damba celebration and the first Economic Development Summit. Volunteers manage the Zo-Simli-Naa Scholarship program since its inception, and have helped found the Friends of the Northern Regional Library.

In 2003 the Louisville Committee reorganized and became Sister Cities of Tamale, a registered non-governmental organization. Within a few weeks of its founding, Sister Cities of Tamale had 85 dues paying members and was forming a committee to manage the new relationship between Tamale and the city of Fada N’Gourma in Burkina Faso.

The relationship between Sister Cities of Tamale and the administration of Metropolitan Tamale and the Metro Assembly remains close. The Metro Chief Executive, the leadership of the Assembly, and the top civil servants are all involved in sister city programs and exchanges.

2. Chicago, Illinois and Casablanca, Morocco

The Chicago Sister Cities International Program, Inc., was established to build Chicago's international relations through sister cities activities and exchanges that increase international trade and economic development and promote cultural and educational opportunities. The Chicago program, founded in 1960, was established as a municipal program in 1990 by executive order of Mayor Richard M. Daley. It is a volunteer, 501(c)(3) not-for-profit organization and has expanded to include 23 sister city relationships. The past decade has seen a re-focus on economic development and a dramatic increase in activity beginning with the Sister Cities International Annual Conference hosted in Chicago in 1991.

The Executive Committee and Board of Directors are approved by the Mayor and meet quarterly at the Chicago Cultural Center to oversee the program's direction, finances, committees and events. Mayor Richard M. Daley serves as Honorary Chair of the Board of Directors, and Commissioner Lois Weisberg heads the Department of Cultural Affairs. Chicago Sister Cities International has a staff of ten, led by Program Director Julie Stagliano.

Each sister city relationship has a committee of volunteer members and a chairperson with cultural, commercial or ancestral ties to the sister city. Chicago sister cities' projects and exchanges are committee-driven. The Sister Cities Program has galvanized its volunteers' commitment and their range of expertise. Volunteers - from the Board of Directors to committee members and volunteers at large - are the producers of the program's activities and responsible for its success. The current co-chairs of the Casablanca Committee are Marilyn Diamond and Janet Murphy.

The official sister city signing between Casablanca and Chicago took place in May 1982. The relationship began to flourish in 1991 when Cindy Mitchell took over as Chair of the Chicago Casablanca committee. Since then, social, cultural, and business exchanges between the two cities have included:

- Trade missions in 1992, 1996, 1998, and 2004
- Memorandums of Understanding between Chicago and the Ibn Rochd public hospital in 1995
- Medical exchanges in 1995, 1997, 1999, and 2004
- Sister School agreements signed between Groupe Scolaire Le Cedre and Abraham Lincoln Elementary school in 1999 and Ben M'Sick and Walter Payton High School in 2004
- Student exchanges in 1994, 2001, and 2004
- A Zellij fountain built in the Garfield Park Conservatory during the summer of 2003 along with a documentary on the production process
- A documentary on the "Music of Morocco and Cycles of Life" produced by Chicago-Casablanca committee member Vicki Vorreiter
- Two life size replicas of "Carcharodontosaurus," a dinosaur discovered by University of Chicago Paleontologist Paul Sereno in Morocco in 1995. The dinosaur skull replicas were given as a gift to the City of Casablanca. They are now permanently on exhibit in La Coupole du Parc de la Ligue Arabe in Casablanca.
- Two Volunteer Optometric in Service to Humanity (VOSH) missions in 2002 and 2004.

Casablanca organized and formed the Chicago Committee in 2003. Until then, they were an informal group operating out of the Dar America, an American Cultural Center in Casablanca. They now have two co-chairs and a diverse group of volunteers. They recently hosted "Chicago Week" in Casablanca that brought a delegation of 82 people from Chicago to Casablanca to conduct a range of projects - from workshops, economic forums, and surgeries, to vision clinics and concerts.

3. Boulder, Colorado and Dushanbe, Tajikistan

Founded in 1982, Boulder-Dushanbe Sister Cities (BDSC) is dedicated to developing friendship and understanding between the citizens of Boulder, Colorado, and the citizens of Dushanbe, Tajikistan. A formal partnership was signed between the two communities in 1987. BDSC is an apolitical, all-volunteer, not-for-profit 501(c)(3), membership organization. Membership is open to anyone sharing the goal of improved understanding and communication between the U.S. and

Tajikistan. BDSC provides programs about the culture and history of the former Soviet Union and the culture of the region for Boulder audiences.

BDSC sponsors cultural, educational, medical, and business exchanges between Dushanbe and Boulder. Boulder's sister city relationship with Dushanbe is recognized both nationally through agencies and organizations in the U.S. and the C.I.S. (former Soviet Union), and locally through a protocol agreement between the governments of both cities.

In 1990 Dushanbe presented Boulder with a traditional Tajik choihona (teahouse), the only one in the Western hemisphere, a priceless representation of the Persian culture and Tajik artistry. After a long search for a perfect location, local construction workers and visiting Tajik artists assembled the pieces of the 2,100-square-foot puzzle. On 15 May 1998, Boulder citizens stepped into the Faberge-egg interior of the teahouse, a million-dollar work of art, and the largest gift ever presented to the United States by the former Soviet Union. The teahouse now operates as a full-service restaurant, drawing more than 100,000 visitors each year. The teahouse offers ethnic food from many cultures, exotic teas from around the world and special blends from Boulder-born Celestial Seasonings teas.

After the Soviet Union collapsed, Tajikistan suffered the loss of shared infrastructure and economic support, complicated by a civil war. BDSC members kept watch and sent medical supplies and volunteer doctors to help ease the suffering. In addition, BDSC initiated the following programs:

- A sister school program between Flatirons Elementary School in Boulder and Pushkin School #20 in Dushanbe. Students at both schools exchange letters, art and photographs.
- A partnership between Boulder Community Hospital and Dushanbe's City Medical Center. Nurses and doctors from Tajikistan have been sent for training in Boulder and now training is being offered in Tajikistan.
- Peace Ride 2000 raised \$35,000 to support orphans in Tajikistan.
- The premiere of "The Silence," a film shot in Dushanbe by Iran's most celebrated filmmaker at the Boulder Public Library
- A reciprocal gift to Dushanbe – a cyber café – that will become a center for learning and entrepreneurship.

The primary focus of Boulder's involvement with the pilot program is centered on their plans to construct a cyber café in Dushanbe. BDSC will present a cyber café to the people of Dushanbe, where both physical and technological access to the rest of the world is difficult. The cyber café is a restaurant, learning center, and Internet portal. This reciprocal gift to Dushanbe will reflect the culture, style, sensibilities and resources of Boulder—its technology, Western openness, and education. The building will be a showcase of "green" architecture, with solar heat and natural light, low-water-use toilets and other innovations. A Reciprocal Gift Subcommittee has been making plans for the cyber café for over three years.

V. Project Descriptions

A. Louisville-Tamale

1. Selection of MDG

Louisville and Tamale were chosen to participate in the pilot based on their strong relationship and history of success. Representatives from Sister Cities International and the World Bank Institute visited Louisville in November 2003 to introduce the pilot. They gave a presentation at the Sister Cities of Louisville (SCL) general membership meeting and then met with the Tamale Committee. The SCL Tamale Committee discussed the project with their counterparts in Tamale and decided to participate. Once both groups were on board, the two committees began learning about the MDGs and assessing their priorities. Toolkits were sent to both communities to familiarize them with the MDGs, sustainable development, and the pilot program.

The result of discussions in both Louisville and Tamale was a consensus that water and sanitation, along with associated health problems, was a high priority. The other issue that emerged was gender, particularly the education of girls and the empowerment of women to raise their standard of living. Susan Herlin and Shedrick Jones, Tamale Committee Co-Chairs, Tom Syvertson and representatives from Sister Cities International and WBI planned a trip to Tamale in mid-November. After a series of meetings in Tamale, sanitation and associated health problems was chosen as the number one priority and the focus of the pilot. Sister Cities of Tamale members, technical experts in sanitation and environmental protection, the Tamale Municipal Assembly (TAMA) and its leaders, and a newly formed women's coalition participated in the series of meetings that led to this conclusion.

Involvement in the pilot program has given rise to community partnerships in both Louisville and Tamale. In both cities these partnerships have developed quickly and strongly because they are based on existing sister cities networks of friendship and cooperation. In Tamale, a Primary Project Partners Coordinating Committee (PPPCC) was put together under sister cities leadership. This committee included Sister Cities of Tamale (SCT), Tamale Metro officials, including the Chief Executive, a team of sanitation, water, wastewater, environmental protection and public health professionals and department heads, and representatives from the newly formed women's coalition. Mohammed Haroon, Secretary of SCT, was elected Project Leader. The goals of the PPPCC were to plan, develop, and implement the pilot program in cooperation with the community, carry out necessary assessments and benchmarking, and develop and publicize the relationship between the pilot and the longer term plan of which it is a part.

2. Awareness building

The delegation from Louisville returned from Tamale knowing that they had a lot of catching up to do. Tamale had organized and mobilized their community in preparation for the pilot and it was time for Louisville to do the same. With strong cooperation of Sister Cities of Louisville, a meeting was held to organize interested parties. The interest shown during this meeting from community groups, such as the Center for Women and Families and the University of Louisville Women's Center, by city officials and other city committees of Sister Cities of Louisville,

provided the momentum to take the project into 2004. Louisville is also fortunate to have the local United Nations Association chapter among its community partners. The Board of Directors of the UN Association of Louisville voted to officially join the partnership. The President, David Simcox, and the Vice President, Bill Friedlander agreed to be available for subsequent community partnership meetings.

The first meeting with Louisville Metro TV Director Matt Schuster was on January 16th 2004. Metro TV, a production facility owned by Metro Louisville Government, agreed to produce six videos about sister cities and the Millennium Development Goals. At this first meeting, the idea was to introduce the Pilot and MDGs in the course of informing people about the Tamale-Louisville relationship and partners. Susan Herlin began to produce a preliminary script outline to get the process underway. The original script was finished on January 24, but before production could begin the overall plan changed—for the better. At the second video team meeting on March 2nd it was decided that each video would concentrate on one of Louisville's sister cities—along with one or more of the MDGs. The first video will concentrate on Louisville-Tamale, and introduce Goal 7. The time frame for the production of the six-video series was revised to coordinate with the program of anniversary celebrations planned for September. Their goal is to have the first one ready for showing by that time, both for purposes of public education, and to serve as a model for the subsequent videos at a time when representatives of all sister cities will be in Louisville.

The second meeting of the Sister Cities' MDG pilot project community partnership was held on January 29th. Although attendance was not as good as it had been at the initial meeting, an excellent and diverse core of interested people came, including Stephen Hubbs of the Louisville Water Company, who was preparing to go to Tamale as a technical consultant to the project and Peter Meyer, a University of Louisville professor who is heading up the conference on sustainable development that precedes the SCL Mayoral Summit in September.

Much time was spent talking about exactly what the pilot project was, and what role was being proposed for the community partnership. Discussion was excellent, with participants concerned not only about improving conditions in Tamale, but also with educating people in both cities about the conditions in each. In particular, Dr. Adewale Troutman, Director of the Louisville Metro Health Department, suggested that there could be very real benefits to both communities if ways were developed to share not just problems, but information and ideas about how problems are identified, solutions proposed and implemented.

After an hour of general discussion, there was general concern about the advisability of having another general meeting until a clearer direction was developed. Thus a smaller, representative group agreed to meet on February 5th to create a more concrete proposal.

The Community Partners Planning Group meeting was held on February 5. Attendees included UNA head David Simcox, Steve Hubbs, Jack Wright, Paige Pearman, Fred Smart and Susan Herlin. The larger group of community partners met on February 10th and adopted the report of the planning group. The "February Update" document (Appendix A) is based on the February 5th and 10th meetings. This report was used to educate community partners in both Louisville and Tamale, especially in preparation for the video conference.

There was one disappointment at the Planning meeting--the absence of significant representation from either the Women's Community Connection project or other women's groups, which were represented at the previous meetings. To respond to this, Ms. Virginia Speed of Metro United Way, Paige Pearman, and Susan Herlin worked together to set up a planning meeting specifically geared to reaching more women's groups across the community.

The women's group planning meeting, held on February 20th at Café Kilimanjaro, attracted about 20 participants, including three high school students. The major outcome of the discussions was a decision that the Women's Community Connection, an existing loose network of women's groups would work with SCL to convene a meeting. An open meeting for representatives of women's groups from all over the community was set for May 6. Planning for the meeting was under the leadership of Virginia Speed (Metro United Way), Polly Tompkins (Junior League), Paige Pearman (SCL), Connie Williams (SCL).

In Tamale, awareness building took a different course. As part of the action plan, Tamale decided to host a conference that would discuss the results of the pilot, raise awareness about MDGs, and introduce the concept of sister cities to other Ghanaian communities. The Ministry of Local Government agreed to sponsor a portion of the conference and to send delegations from each municipality in Ghana. A delegation from Louisville will attend as will delegations from other existing sister cities in Ghana. The conference, to be held June 25-27, is expected to be a large community event and be very successful.

3. Diagnostic Assessment

The diagnostic phase of the pilot began by hiring a consultant to undertake a household survey. A survey designed by UNICEF for a nearby community was borrowed and adapted to fit the needs of Louisville and Tamale. Four questions were added by Tamale and two by Louisville. The final survey used is attached as Appendix B. The PPPCC chose to conduct the diagnostic in three sample neighborhoods. They were Dohin-nayili, an urban community, Gbambaya, a peri-urban community, and Tugu, a rural community.

A delegation of six from the PPPCC went to the selected communities to sensitize them about the pilot program and to pave the way for the diagnostic work. The delegation paid courtesy visits to the chiefs of all three communities and gave gifts of cola nuts and cash. These gifts as well as transportation for the delegation were provided by TAMA. When the delegation arrived in Tugu, a large gathering was waiting for them. They took this opportunity to tell the community about the MDGs and the pilot project. The same large gathering was waiting for them at the other two sites. Interestingly enough, the delegation was unable to drink the water traditionally offered to them by the Chief of Gbambaya because it was green with algae. This alerted them to the dire need for a diagnostic and follow up.

The Diagnostic Consultant, Dr. Francis Bacho, organized a two-day training seminar for the six teachers hired for the door-to-door data collection. Two teachers were hired from each of the three communities. The consultant explained the questionnaire to the data collectors and they

decided they would travel together from community to community. The data collection team visited 90 households – 35 in Dohin-nayili, 30 in Gbambaya, and 25 in Tugu.

TAMA provided transportation for the first day trip to Tugu and the six data collectors began the survey. The project leader and diagnostic consultant visited them every day to monitor progress and ensure there were not any problems. The monitoring and evaluation consultant also visited the communities to observe the diagnostic process.

The diagnostic consultant collected the surveys from the data collectors and analyzed the results. His report provides a baseline of data against which progress can be measured as the pilot progresses. The diagnostic examined demographic profiles, housing quality, sanitation, water sources and quality, mother characteristics, child welfare, and the prevalence of malaria and how it is prevented and treated.

A total of 652 people were surveyed. The diagnostic consultant concluded that there are grossly inadequate sanitation infrastructure facilities in the three communities resulting in the frequent incidence of diseases such as malaria, diarrhea, and skin infection. Conclusions related to sanitation state that low literacy, unplanned development, poor infrastructure, and poor sanitation management practices exacerbate the poor sanitation conditions in Tamale. Public KVIP toilets are the most popular form of toilet facilities in urban Tamale, with 80.6 - 94.1% of people surveyed using it at home. In the more rural suburbs, free range is practiced 100%. Waste management data indicates that 90% of households in Tamale dispose of solid waste in piles outside homes and liquid waste is allowed to flow freely behind the house resulting in pools of water that are prime mosquito breeding grounds. The full diagnostic report is included in Appendix C. Copies of the completed survey are available upon request. Although the group had access to the Ghana PRSP, they did not use it to assist them collect data.

During February and March, Paige Pearman took the lead in the area of diagnostics in Louisville. She met with Professor Peter Meyer on February 26th. At this meeting they put together a request for data to be sent to those Community Partners who had indicated a willingness to provide it. Manjari Kumar, the Sister Cities of Louisville intern, was assigned to work on this part of the project. However, only the women's group turned in any data, in the form of the comprehensive 2000 survey of the status of women in the metro area known as *Benchmark 2000*.

Louisville was having difficulty creating a useful diagnostic tool and they slowly realized that they lack a good “diagnostic” framework as “sisters”. Without a basic tool for developing a deeper knowledge of each other, there was little context for comparative inquiry at any level. For example, it is very important to understand that Tamale city government, as well as many essential services, such as roads, fire, health and police, function as local sub-divisions of national entities and are ultimately under the appropriate Ministry in Accra. It is equally important to understand that Tamale Metro encompasses 162 functioning villages, all of which have their own chiefs, elders, lands and ways of settling local disputes.

Susan Herlin and Mohammed Haroon, the two project leaders, began to work on this issue together and they soon realized that their mutual lack of knowledge about each other's cities demonstrated that systematic comparative questions were in order. Out of this realization they

developed a set of questions titled “comparative framework” (attached in Appendix D). Louisville and Tamale completed this comparative framework and it is now clear that this approach, if not this actual document, has several possible uses. Among them, it can serve as a basis for the revised first video script as well as many other types of educational and public relations applications. It is also adaptable by other sister cities for investigative, educational, and publicity purposes.

4. Action Plan

Thanks to the work that had been done in both cities during the diagnostic phase (and even during Phase 1), the actual putting together of Action Plans, along with their implementation particulars and budgets, although time consuming, was not very difficult.

In Tamale, the project leader arranged a meeting with the women’s coalition and Nancy Cosway. Nancy Cosway is a Project Manager for WARDROP, a Canadian Consultant Firm. The objective of the meeting was to enhance the role and understanding of the women’s coalition in the PPPCC. Ms. Cosway discussed the diagnostic with the women and led them in a brainstorming session about possible action plan items. Some of the ideas that arose were:

- Awareness of the importance of household and public latrines
- Hand washing campaign in the metropolis. It was suggested that:
 - ♦ T-shirts be printed for people to wear during the campaign
 - ♦ Soap companies to be contacted to help in putting containers of soap near public toilets
 - ♦ Posters be produced on the hazards of free-range defecation and the random disposal of polythene waste.
- Theater skits on the importance of good sanitation practices on radio and television
- Lobby the Assembly to re-instate or re-introduce Health Inspectors or Health Inspection Systems throughout the metropolis
- Encourage behavioral change through education or in the school system
- Incorporate all women’s groups in Tamale to take part in the campaign
- Encourage all students in Basic and Senior Secondary Schools to use toilets and wash their hands afterwards
- Work with Chiefs and Opinion Leaders to recruit sanitation volunteers in the communities
- Introduce games like snakes and ladders on health practices through informal education
- Introduce an annual prize for the neatest community in order to generate competition among the communities
- Conduct a neighborhood assessment or analyses in the communities.

Sister Cities of Tamale had subsequent meetings to update all members on the phases of the pilot. The PPPCC also met on a regular basis to make sure the pilot was moving along as planned.

Susan Herlin returned to Tamale and worked with the Tamale community partners and sister cities to complete the Action Plans for both the Tamale and Louisville. In the case of Tamale, her main role was to put their rough draft into a better format and systematize implementation

activity details. As for Louisville, Susan produced the Action Plan, with input from Paige and the members of the Community Partners group.

In Louisville, the major goals for the Pilot, as articulated in the meetings of February 5th and 10th, include:

- Educating sister cities membership about the MDGs
- Increasing public awareness of the MDGs
- Educating the public about Sister Cities of Louisville's goals and activities in promoting positive people-to-people relationships internationally.
- Developing capacity for sister cities, other citizen organizations, and local governments to work cooperatively to achieve common goals of benefit to both communities.
- Working with community partners in both Louisville and Tamale to develop long term action plans designed to improve conditions related to selected goals
- Creating community partnership organizations (in both cities) necessary to sustain cooperation between both communities
- Developing the means to help other sister cities in the US and Ghana build and strengthen their relationships.

Action plans for Louisville and Tamale are attached in Appendix E.

As part of the action plan, a technical team of Sarah Lynn Cunningham (Metropolitan Sewer District) and Steve Hubbs (Louisville Water Company) visited Tamale. The objectives of the trip were to:

- Establish working relationships with individuals in Tamale responsible for public-health/sanitation activities and decisions
- Build a base of trust between the technical people in Louisville and their counterparts in Tamale
- Establish effective communication links between technical groups in Tamale and Louisville
- Assess the level of technical capability in water/wastewater/sanitation in the local government, utilities, and the technical schools.

This visit was very successful, resulting in many new contacts and many excellent photographs, as well as several reports, both technical and for a more general public.

On June 25-29, 2004, a Sister Cities Workshop will be held in Tamale. The workshop is part of the action plan and will highlight the accomplishments of Tamale and Louisville during the pilot. The workshop is being funded in part by the Ministry of Local Governments who agreed to send delegations from the majority of municipalities in Ghana. Representatives of existing Ghanaian sister cities will attend as will a delegation from Louisville. The workshop will raise awareness about the MDGs, about sanitation in Tamale, and about sister cities in general.

5. Monitoring and Evaluation

Frank Cosway was the Monitoring and Evaluation consultant in Tamale. His role was to provide information for decision making and improved project management, demonstrate results, and empower communities and other stakeholders. Mr. Cosway particularly examined transparency,

accountability, inclusion, and participation. Mr. Cosway interviewed members of the PPPCC and other individuals involved in the project through TAMA, technical teams, sister cities, and the women's coalition. Mr. Cosway outlined specific recommendations after the completion of phases one and two. Some of those suggestions were:

- The overall goal and objectives of the project be communicated in writing to all members of the PPPCC and sub-committees.
- The sanitation committee should make an effort to recruit more women members.
- Consideration is given to having representatives of each of the three selected communities on the PPPCC.
- Meeting schedule be made readily available for all committee chairpersons.
- Diagnostic data collection should use a variety of participatory methodologies such as focus group discussions, community mappings, transect walks, observation in addition to the structured questionnaire.
- Criteria for respondents are developed to ensure that all sectors of the community are included as respondents.
- Sufficient time is allocated for the data collection to ensure quality of data and probing if required.
- A special effort is put forward to ensure women as effective respondents.
- That data collection teams be gender balanced.

The interim Monitoring and Evaluation report is attached in Appendix F.

B. Chicago-Casablanca

1. Selection of MDG

Chicago and Casablanca were asked to participate in the pilot in late February 2004 after Boulder and Dushanbe decided not to continue. Casablanca Committee Co-Chair Marilyn Diamond and committee member Cindy Mitchell came to Sister Cities International headquarters in Washington, DC, to learn more about the project. They agreed to participate and immediately called Boubker Mazoz, the Sister Cities Chair in Casablanca to seek his approval. He concurred and plans were made to include a presentation on the pilot during "Chicago Week" in Casablanca.

Eighty-two people from Chicago traveled to Casablanca the week of March 8, 2004 for "Chicago Week." Representatives from Sister Cities International and the World Bank Institute made the initial presentation of the pilot program at a volunteerism workshop attended by many local NGOs, associations, students, and sister city members. Although the project was introduced as focusing on literacy, Chicago and Casablanca sister cities members had identified this as a major need in Casablanca. The group was very motivated to participate. During the remainder of "Chicago Week," many meetings and dialogues took place with government officials, members of local associations involved in literacy, and sister city groups. At the conclusion of the meetings, the group agreed to work on MDG 2 – Achieve Universal Primary Education, Target 3: Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling, and Indicator 8: Literacy rate of 15-24 year olds.

The group in Casablanca took advantage of their late start and asked specific questions regarding the methodology used by Louisville and Tamale. They decided to create a committee to manage the pilot project that includes representatives of local government, literacy experts, and sister city members. Boubker Mazoz was elected Project Leader. Chicago also invited literacy experts to join the Casablanca Committee during this project.

2. Awareness Building

Chicago and Casablanca are both working to raise awareness about the MDGs and the pilot program in their respective communities. Haytham Abu Zayd, a staff member in Chicago, recently gave a presentation about the pilot at the Illinois State Sister Cities Convention in April 2004. They have also had articles in local Chicago newspapers. In Casablanca, awareness of sister cities in general has increased since the “Chicago Week” activities in March 2004. The local government is now actively involved, as illustrated by the presence of the Mayor of Casablanca and the Governor of the Casablanca region during the GDLN videoconference (see section VII).

In July 2004, members of the Chicago-Casablanca team will participate in the Sister Cities International Annual Conference by giving presentations about the pilot as part of workshops focusing on Sustainable Development.

3. Diagnostic

Between April 1 and May 15, 2004, sister city committee members from both Chicago and Casablanca working with almost a dozen local associations/NGOs active in the field of literacy, Casablanca local government officials and a team of seven data collectors led by a prominent Moroccan sociologist, have designed, implemented and analyzed an assessment of present conditions in two targeted neighborhoods in Casablanca, Sidi Moumen and Hay Bernoussi.

Casablanca hired Mr. Jamal Khalil, a Sociologist and Professor at the Faculty of Letters and Human Sciences, Hassan II Ain Chock University as the diagnostic consultant. He is also the Cultural Advisor to the “Forum of Student Creativity” within the same university. He recently completed a study on “Values in Casablanca.” He chose four students from Ain Chock and three students from Ben M’Sick University as volunteer data collectors.

There was some confusion regarding the diagnostic tool. The Chicago Committee in Casablanca was under the impression that the tool provided to them was in fact the tool they had to use during the diagnostic. It was soon made clear that they were in fact expected to shape the tool to fit their needs. Members of both committees in Chicago and Casablanca had a conference call to work out the difficulties. They clarified the use of the diagnostic tool and agreed on alterations.

The Casablanca-Chicago team decided to survey the Sidi Moumen and Hay Bernoussi neighborhoods, the home of the May 16th suicide bombers. The questionnaire includes 22 questions on oral and written language, numbers, signs and letters of which 7 questions are qualitative, 11 questions on space and dwellings, 7 questions on family structure, and 15 questions on social class and behavior. The diagnostic was designed to:

- Develop a profile of people with low education levels residing in targeted districts
- Determine the literacy levels of this population
- Produce ideas about the actual education system and its effectiveness
- Better understand the scholastic discrepancies of the targeted population
- Make several practical recommendations.

The survey sample included 322 residents - half male, half female - in the targeted population between the ages of 15 and 24. In each phase, sharing of information and experience, and constructive commentary of various aspects of the project contributed to the timely and successful completion of this phase of the project. From the survey findings, the following profile of the population in these Casablanca communities emerged:

- 66% are unemployed. 70% of the employed do odd jobs with micro enterprise or as craftsman.
- Even with employment, salaries are rarely more than minimum wage.
- Arabic is the primary language spoken at home, work and in education settings (90%); 10% speak Berber. Arabic also is the main language used in correspondence.
- 94% watch TV. Egyptian, Moroccan and Indian films are popular as are soap operas and variety shows.
- The primary means of transportation is on foot.
- There were inconsistent results from participants when asked if they could read. Some said they could read but were unable to demonstrate this ability when given a reading selection. 33% indicated that they could read.
- Females are less likely to be employed than males.
- 4% are currently in a literacy program.

Some trends emerged:

- Illiteracy was more predominant among residents in apartments than those in stand-alone Moroccan homes or in the slums. The isolation of apartment dwellings seems to contribute to low literacy.
- The higher the education level the more likely the participant could read and write. This however is not the sole determinant of literacy. Social milieu and living environment are factors as is exposure to the outside world. Many with low literacy live in isolation geographically and socially.
- Getting a job does not appear to be influenced by whether or not a participant can read. There is a lack of employment for those who are literate as well as illiterate.
- Those who can read watch more TV and educational programming. They also are more likely to participate in sports and social activities than those with low reading skills.
- Those with low literacy are more likely born outside of Casablanca, usually in a rural area.
- Participants with low literacy had difficulty recognizing signs. Even when they recognized them, they often did not understand their meaning.
- Participants could do addition and subtraction, but were less able to do multiplication or division.

Recommendations based on the results of the diagnostic include:

- Customize proposed programs to the needs of the respective communities and reflect the community realities.
- Secure official endorsement of the programs and involve autonomous NGO's that are in the community. Include community leaders in the development and delivery of the programs.
- Use culture, art and sports to facilitate literacy and engage participants in literacy development.
- Consider these findings as a snapshot of two communities in Casablanca. Conclusions should not be considered definitive or applicable to Casablanca as a whole without further qualitative analysis.

The diagnostic tool is attached in Appendix G. The diagnostic report is attached in Appendix H.

4. Action Plan

Based on the results of the diagnostic, Chicago and Casablanca worked together to create an action plan for the pilot project. Some concepts included are:

- Identify best practices among programs in Morocco that are succeeding and ask:
 - What audience do they serve?
 - What makes them successful?
 - Do they have a “champion”?
 - What resources do they use?
 - What obstacles have they overcome?
- Offer examples from existing literacy programs in Chicago.

The team plans on using existing successful literacy programs in Chicago to try to understand the motivations behind literacy:

- “What will drive me to commit to a program to read?”
- “What’s in it for me?”
- How to tap into motivations?
- How do you spend your time?

Following the videoconference on April 6, Chicago formed a literacy campaign subcommittee and elected Dana Rice and Judy Klikun as co-chairs. The co-chairs planned a trip to Casablanca to complete the following objectives:

- Learn about existing literacy efforts in Casablanca and meet the major stakeholders involved in them.
- Examine what defines a successful literacy program in Casablanca.
- Share ideas on successful literacy programs.
- Work jointly on the long term action plan.
- Tour the 2 neighborhoods used in the diagnostic to better understand the environment of the participants (how/where they live, play and work).
- Meet with sociologist and diagnostic consultant Khalil (and possibly his team) to better understand the challenges, survey results, and their views on the best hooks and methods for improving literacy in the 2 neighborhoods.

- Travel to Rabat to meet with 2 literacy groups that were awarded prizes by UNESCO for successes in improving literacy among women.

The results of this trip will be used to plan for a study tour in Chicago in late June. The study tour will provide an opportunity for a literacy team from Casablanca to learn about existing programs in Chicago. The group will use this time to develop a literacy program to fit the needs of Casablanca and finalize the longer term action plan. The results of both the technical trip and the study tour will determine the need for training and workshops on literacy techniques in Casablanca and the capacity building needs of local partners in both communities. The action plan is attached in Appendix J.

5. Monitoring and Evaluation

Mohamed El Amine Moumine was hired as the monitoring and evaluation consultant. To date, he has met with the diagnostic consultant and his team. During this meeting he was able to gather information about the working atmosphere of the team and to collect some data about the design and the methodological approach adopted in the diagnostic survey. Mr. Khalil, the diagnostic consultant, cooperated by providing documents related to the different stages of the study. Mr. Moumine has started writing a critical report on the different aspects of the design and on the methodological approach adopted in this study. As part of the evaluation project, he has started collecting documents on previous and current initiatives related to literacy projects in Casablanca in particular and in Morocco in general, both successful and less successful ones. Mr. Moumine reports that local associations working in the field of literacy, sister city committee members from both Chicago and Casablanca, Casablanca local government officials and the investigation team have been involved in the project in different degrees. All participants have access to information and the most common means of information sharing is through informal meetings and written reports. The first Monitoring and Evaluation report is attached in Appendix K.

C. Boulder-Dushanbe

1. Selection of MDG

Boulder and Dushanbe were chosen to participate in the pilot project based on their cyber café project. At the beginning of the pilot, almost 50 percent of the \$660,000 budget for the café had been raised. While a good portion of the donations originated from community-based donors, including individuals, businesses and foundations, the technology piece of the project was provided through a partnership between Citrix Systems, Inc. and Sister Cities International. Through the Digital Development Partnership - a new foundation supported by Citrix Systems, Inc. in cooperation with the Sister Cities Network for Sustainable Development - equipment, technology and training will be provided to bring new opportunities to people in Tajikistan and to strengthen the project's sustainability.

On October 30, 2003, representatives from Sister Cities International and the World Bank Institute traveled to Boulder to introduce the pilot project, discuss the benefits and outcomes of the project for both communities, outline the role of BDSC in the pilot and conduct a

brainstorming session on which MDG to select for the pilot. Prior to the meeting, information and documents were supplied to BDSC committee members, including background information on the pilot, an introductory handout, the concept note (which outlines the methodology for the pilot), a timeline for events, and Tajikistan's poverty reduction strategy paper. Representatives from the City of Boulder and the United Nations Association Boulder County Chapter participated in the meeting. At the conclusion of the meeting, it was determined that Goal 8 – Global Partnerships for Development, would be the best fit for the pilot project.

2. Explanation for Termination

Following the October meeting, two months elapsed as BDSC conducted internal conversations about its role in the pilot program to further identify key areas to focus on within MDG 8. Arrangements to travel to Dushanbe to introduce the pilot program to the Mayor and citizens were also underway. In December, BDSC went through a leadership transition as new board members were elected to the organization. During this time, a trip under the leadership of local architect, Vern Seieroe, was planned. The purpose of this trip was to discuss with the Mayor and city leaders about Boulder's plans for the cyber café and to set a construction schedule.

In December 2003, significant movement on the fundraising front occurred. Members of BDSC presented a resolution to the Boulder City Council that included a unique financing protocol to begin construction of the cyber café. In this financing mechanism, the City of Boulder agreed to allow the application of future Teahouse revenues (based on an existing city loan) as collateral towards the repayment of a private loan in the amount of \$350,000. This would complete the fundraising, allowing the cyber café to be built by 2006, barring any further delays. At the December 16, 2003 city council meeting, the proposed financing plan was approved. The city council resolution is attached in Appendix L.

Following this important milestone, BDSC turned their attention to determine in what manner the cyber café should be utilized. After receiving the proposed pilot program contract, BDSC made a counter offer to Sister Cities International. After careful review, it was decided that BDSC's further participation in the pilot program was no longer in the best interest of both BDSC and Sister Cities International. The counterproposal clearly outlined the goals BDSC sought to achieve in relation to the MDGs and their desire to have the cyber café become an engine for development rather than an expensive video game parlor. Part of the delay and inability of BDSC to meet the timetable set forth in the contract stemmed from their singular focus on the construction of the cyber café. Once financing was secured, BDSC decided to turn their attention to determine in what manner the cyber café should be used. Unfortunately, the timing between these two activities did not coincide with the timeline of the pilot program. This experience provided valuable lessons about project initiation and management, which will be useful in the larger MDG Challenge Program.

VI. Global Distance Learning Network (GDLN) Video Conference

A Global Distance Learning Network Videoconference was held on April 6, 2004, and connected Chicago, Casablanca, Louisville, Tamale, and Washington, DC. The videoconference highlighted the four communities participating in the Sister Cities International/World Bank

Institute Millennium Development Goals City-to-City Challenge Pilot Program. Representatives from all areas of civil society, including sister cities members, local government officials, and technical experts participated in the videoconference. In Washington DC, representatives of Sister Cities International, the World Bank Institute, other partner organizations, the Moroccan Ambassador, and a representative from the Ghanaian Embassy were there to ask questions of the participating communities. Presentations were made by Casablanca and Tamale and there was sufficient time for questions and answers from the other participants. The PowerPoint presentations from both pilot pairs are in Appendix M and the videoconference is now posted online in B-SPAN format at www.reducingpoverty.org.

Louisville and Tamale were fortunate in that Susan Herlin was in Ghana during the videoconference. This allowed for her and Mohammed Haroon to give a joint presentation, something truly indicative of the pilot project as a whole. A group of 20 people traveled from Tamale to Accra for the event and the trip itself served to solidify the group. They were hosted by the Ministry of Local Government, under the direction of acting chief director, Mr. Daniel Nyankamawu, a long time leader of Sister Cities in Tamale. The group was able to call on the Vice President, His Excellency Alhaji Aliu Mahama at his residence. The Vice President was also one of the strong leaders in developing Sister Cities in Tamale, and remains a strong supporter of its work.

Chicago and Casablanca worked together on their PowerPoint presentation, finalizing it during a conference call. The presentation was given by Boubker Mazoz in Casablanca. Both Chicago and Casablanca had an impressive participant list including literacy experts in Chicago and Casablanca and local government officials in Casablanca.

VII. Major Findings and Conclusions

A large portion of the success of the pilot can be attributed to the strong existing sister city relationships. Louisville and Tamale are celebrating their 25th anniversary in September 2004 and their relationship has never been stronger than it is today. Chicago and Casablanca also have a strong history that is growing due to more awareness and support in both communities. Boulder and Dushanbe are working very hard to construct the cyber café and to ensure that it is used as a knowledge center for future development activities.

It is clear that the pilot program has helped all of the communities create new community support for the sister cities movement as well as new community networks and partnerships focused on the MDGs and city-to-city cooperation. There is also now a greater visibility of the MDGs in the target communities.

In Louisville and Tamale, the pilot allowed them to focus their sister city relationship on a single concept, the MDGs, and draw participants from all sectors of society. Some examples are the Metro TV programs in Louisville and the community partnership in both communities. In Tamale, the high profile conference co-sponsored by the Ministry of Local Governments is a prime example of partnership and recognition. The Tamale Metropolitan Government pledged to allocate more funding to sanitation needs in the three neighborhoods targeted in the diagnostic assessment. As action plan implementation unfolds, outcomes include more participation by the

local government in terms of addressing sanitation needs, raised awareness in the three diagnostic communities about sanitation and related health issues, and more general awareness about sister cities and the MDGs. Louisville and Tamale won the Sister Cities International Annual Award for Innovation for the Environment and Susan Herlin won the Volunteer of the Year Award. Both of these awards will be recognized at the Sister Cities International Annual Conference in July 2004.

Chicago is a different situation, due to their large-scale sister city program and their links to city hall. They have a communications and media staff person and previously enjoyed recognition of their relationships and projects. The sister city program in Casablanca expanded and re-organized itself due to the pilot. There is a greater recognition of literacy needs in Casablanca and the Casablanca Committee's focus on literacy helped encourage greater community involvement.

The pilot has expanded the scope of sister city projects in all pilot communities. Sister Cities International recently launched a Network for Sustainable Development. Although all of the pilot communities were previously members of the network, they had never embarked on a project of this scale and magnitude. The pilot has proved to them that they are capable of executing a project that truly impacts conditions related to poverty. As Louisville and Tamale said, "It is a basic premise of the longer-term goals of this international partnership for development, that although the specific problems related to the MDGs may be quite different between our two cities, we do both have problems—and ways to solve them. Sharing these and pulling together will benefit us both."

Throughout the pilot project there were eight exchanges that included a total of 27 people. Louisville-Tamale conducted five of the exchanges while Chicago-Casablanca conducted three exchanges since March. At the inception of the pilot project, three meetings took place in Louisville reaching a total of 41 people. In Tamale, five meetings took place reaching approximately 80 people. The delegation that traveled from Chicago to participate in "Chicago Week" in Casablanca numbered 82, but it is estimated that 10 people from Chicago participated actively in pilot discussions. The two initial meetings in Casablanca reached approximately 29 people.

The outcomes of the pilot in terms of addressing the MDGs were positive. Although it is nearly impossible to move indicators in such a short time period, the pilot has allowed the communities to identify specific problems and plan ways to address them. Louisville-Tamale, Chicago-Casablanca, and Boulder-Dushanbe are looking forward to continue their work and appreciate the pilot's ability to initiate a new thinking process about how communities can work together.

Sister Cities International benefited from the pilot project in many ways. The pilot gave more credibility to the Network for Sustainable Development and served to leverage funds for other initiatives. The lessons learned from the pilot will help make the larger scale project more effective and successful. The pilot also helped attract partners for the larger scale project such as the United Nations Association of the United States of America and the National Peace Corps Association.

VIII. Recommendations and Lessons Learned

The first complaint from every participant in the pilot was the tight timeline. Almost all of the participants are volunteers, except for one paid staff person in Louisville and two in Chicago. This means that progress and agreements move slowly and one must be prepared to make adjustments. It has been frustrating for the volunteers involved to receive direction at the last minute and be expected to comply with very short notice. All of the participants have other jobs and responsibilities. Volunteers must be given plenty of time and clear directions. They cannot be expected to respond as paid consultants. Most of them have no experience in the development world and it is necessary to explain everything in layman's terms. Development jargon confuses and angers them. This was noted several times in Louisville and Tamale, most recently in preparation for the videoconference. Chicago and Casablanca also noted this problem while setting up their diagnostic work. This will be less of a problem during the larger scale program because each participating community will be given a Project Operation Manual.

Concerns were also voiced that the pilot project raised expectations of the participating communities that could not be met at the conclusion of the project. Louisville and Tamale voiced concern that the pilot raised expectations specifically among residents in Tamale, but also among partners in Louisville. Louisville and Tamale were unclear at the beginning of the pilot about the use of resources. They mistakenly thought the pilot funds could be used to construct latrines in Tamale. Louisville was aware that the pilot was not meant to be used for infrastructure, but did not realize the definition of the term. This misconception was corrected early and they switched gears to focus on awareness and capacity building. This obstacle, and the raised expectations associated with it, led them to create a three to five year action plan in order to truly meet the needs of their communities. While they appreciate learning about the MDGs and specifically about MDG 7, they would much prefer to see actual results. When expectations are raised in a sister city project, friendship and cooperation are at stake. This was very troubling to Louisville and Tamale. Chicago and Casablanca also experienced the same problem, as they were weary of creating empty promises that result in yet another report and no actual results. This problem will be corrected in the larger three-year program where the communities will be allowed to implement action plans that include infrastructure projects.

The lack of a coordinating committee between BDSC and Dushanbe significantly reduced communications and the ability of BDSC to achieve the goals set forth in the pilot program. Both the experiences in Louisville-Tamale and Chicago-Casablanca demonstrate the importance of having committed volunteers on both sides of the partnership to move activities along. At present, BDSC must communicate through the Mayor of Dushanbe, resulting in communication delays as it took over two months to confirm and finalize the construction trip.

Project leadership in both communities is essential for implementation. Without dedicated leadership, significant delays can occur and the participants run the risk of missing project goals and deadlines. Given the aggressive timeline for this pilot, BDSC experienced delays because project leadership was not clearly established until later in the project cycle. While Sister Cities International and WBI staff communicated directly with one individual, it was clear following

the termination of BDSC's involvement that that individual did not have the mandate to conduct the pilot without BDSC board approval for each major step. In Louisville-Tamale and Chicago-Casablanca it was made clear that each community must select a project leader before proceeding. The selection of this person was a joint participatory decision made by the sister cities committee in each community. In the larger program, project leader selection should follow the initial MDG learning activity.

The communities enjoyed the videoconference and appreciated the exposure to a new means of communication. Pilot communities commented that the videoconference was scheduled not because they had actually completed the Pilot, but because of the timing of the Shanghai Conference. The fact that they had to drop everything and do the teleconference—without much advance information about what its goals were—put stress on everybody, especially the Project Coordinators. Quoting Susan Herlin, “the fact that it went as well as it did is somewhat miraculous, a tribute to the high levels of cooperation and sheer work that have gone into this project on both sides on the Atlantic!” The communities were disappointed because the Shanghai conference was highlighted at the beginning of the pilot as being a large international event that would showcase the work of the pilot communities. The communities did not receive any information prior to the conference about the showcasing of their work nor did they receive information about the outcomes and results of the conference. For the communities involved, this was another case of raised expectations not being met.

Susan Herlin's development of a “comparative framework” provided an important tool that was utilized to help Louisville and Tamale develop a greater understanding of each others' community and culture. The issues discovered through the exercise enhanced the ability of the committees in both communities to create the action plan. The comparative framework will be altered to include information about the MDGs and will be used in the larger scale MDG City-to-City Challenge Program to assist participating communities in selecting a MDG.

All of the communities involved have learned a great deal from this experience, and although there were bumps along the road, they appreciated the opportunity to participate in this pilot program. All of the participants learned about problems facing cities in developing countries, problems facing their own communities, and constructive ways to address these issues within the context of city-to-city cooperation.

IX. Attachments

Appendix A – Louisville February Update

MDG Project Planning Team

Report of Meeting. February 5, 2004. 12-1:30, Café Kilimanjaro.

Attending: Paige Pearman, Susan Herlin, Jack Wright, Steve Hubbs, Fred Smart, David Simcox

The Community Partnership group held lively discussions about the Project, and ‘What to do next?’ The discussion focused on 1) the Phase 2: ‘Diagnostics’ both in Tamale and Louisville; 2) the Action Plan (or Plans); and 3) what we would do for ‘Implementation’ especially in Louisville. Questions of what our goals are were threaded throughout, along with the companion undercurrent of, ‘Is it all worthwhile?’

Before we got started on the actual project planning, we discussed our partnership itself, raising questions about its nature and about what benefits could be expected by each of the groups of partners (Sister Cities/Metro Government; Sanitation/Public Health/Water Task Force; Coalition of Women’s Groups; United Nations Association. We agreed that we weren’t sure whether we were looking at one or more Action Plans. However, it does seem clear that we need one plan for the Pilot, or maybe through 2004, and perhaps an integrated set of plans for 3-5 years out.

We have completed Phase 1 of the Pilot, so we now must turn to Phase 2, the Diagnostics. This Phase most clearly affects Tamale, where a sanitation and public health improvement project plan is being put in place in three designated neighborhoods. Their diagnostic must address this directly, and consultants have been hired to carry out a household survey based on a UNICEF document that has already been used in the Region. Both Steve Hubbs and Jack Wright expressed interest in adding particular questions to the survey. They will communicate directly with the Project Coordinator in Tamale for this purpose. Steve also made the point that what we are mainly concerned with, in this Pilot, is ‘human infrastructure,’ which I think is related to ‘capacity building.’ It is strong ‘human infrastructure’ that must characterize the partnerships this project is built on and is building.

1) The Baseline Survey or Diagnostic, in Louisville:

- What are the goals of this exercise?
 - ✓ Allow us to develop effective awareness and education campaigns around the MDGs and international cooperation, as required by the Pilot Project..
 - ✓ Establish a baseline for measuring the effectiveness of the awareness/education campaign.

We agreed that in Louisville we can assume a baseline of zero %, when it comes to knowledge of the MDGs, since none of the educated, generally aware citizens at the meeting, except the UN Association president, David Simcox, knew about MDGs before becoming involved in the Pilot.

- ✓ Collect comparable published data about the MDGs in both Louisville and Tamale, on which to base our awareness and education campaigns, as well as our conversations with our international counterparts. This would not be particularly detailed, but might include MDG elements not among the UN Targets and Indicators for developing countries. For example, under goal 7: Environmental Sustainability, we might look at air quality in addition to water and sanitation. Other possible areas suggested are availability of health care and infant mortality.
 - What issues related to each MDG are most important in each city?
 - We might chose three Louisville communities for more specific comparisons—with each other, and with counterparts in Tamale. In Tamale

three communities (actually villages) have been chosen for the detailed benchmark survey; one urban, one peri-urban, one rural.

- ✓ Examine inequities within our own city/country as well as between 1st and 3rd worlds in order to establish a realistic basis for planning community cooperation around whatever goals are chosen for action.
 - Possible differences to document besides those between our cities and countries generally: between neighborhoods within our own city; between counties or regions in Kentucky and Ghana; or between Kentucky and other, richer states in the U.S.
- ✓ Develop comparisons about how things get done (or don't) in each city.
 - Help us to understand our own strengths and weaknesses, as well as enhance the prospects for success with specific projects within the scope of the 3-5 year plan(s).

2) The Action Plan for the Pilot in Louisville

- ✓ We are required by the terms of the Pilot Project to conduct some sort of campaign to make people here more aware of the MDGs, both their implications for improving the lives of millions of people in the developing world, and their relevance to us in the U.S.— as major players in the world and as people who live with our own inequities and problems.
- ✓ We must include Tamale in our planning, plans..
- ✓ We are also supposed to develop longer-term plans for community partnership and city-to-city cooperation around the MDGs.
 - Since any sustainable partnership involves a lot of good organization, communication and awareness--development of these needs to be part of our Action Plans.
 - Training of all kinds can be paid for in the pilot.
- ✓ How do we create an effective awareness/education campaign, one that can further the MDGs while strengthening our partnerships' capacity to attain and sustain measurable improvement in quality of life for our communities?
 - What groups are to be targeted? Schools? Community leaders? The large and active memberships of the various partner organizations?
 - In what ways can educating the community about the MDGs also educate them about the opportunities to work for community betterment offered by the member groups of the partnership?
- ✓ How do we create a working, sustainable coalition of community partners around the MDGs and international cooperation?
 - What sort of coordinating body is required? Should Sister Cities continue to take leadership after the Pilot period (during which this is required)?
 - Should the working partnership be stabilized at a certain number of members, or should it continue to grow?
 - How will the group decide on what activities to undertake together, or at least have its name (and those of the members) attached to?

3) The implementation calendar.

- ✓ What activities will be undertaken by May (in the actual funded, pilot phase)?
- ✓ Should we plan for activities at least through the end of 2004? In particular should we focus on expanding our international scope to Louisville's other Sister Cities, all of whom are expected to be represented at a grand anniversary celebration in Louisville in September?
- ✓ Should there be any attempt at an implementation calendar beyond that?

- ✓ What about separate, but complementary plans for the four sub-groups within the partnership? Shouldn't each have some meetings on its own to decide what they want to accomplish with the framework of the larger organization and the MDGs?

We agreed on a list of things we must accomplish during the Pilot. They are:

1. Educate ourselves about the Pilot Project and decide whether to participate.
2. Identify key groups and individuals as community partners
3. Create a working community partners coalition that is linked to counterpart in Tamale..
4. Collect published data about Louisville relative to the MDGs and related issues (as we decide).
5. Create a plan or set of plans for community education and improvement around MDGs.
6. Educate ourselves and our constituents within the Community Partnership about the MDGs and about Louisville, and Tamale, in relation to them.
7. Begin reaching a larger public with the message about MDGs and international cooperation.

We agreed that we have accomplished numbers 1. and 2., and are well on the way towards accomplishing 3.

Appendix B – Diagnostic Survey Louisville – Tamale

Line Number	1.1 Name:	1.2 Sex	1.3 Age		1.4 Residence	1.5 Selection criteria
			Birth date (child) (dd/mm/yyyy)	Age group		
1.0		1. Female 2. Male	_____	1. 0-4 yrs 2. 5-12 yrs 3. 13-15 yrs 4. 16-18 yrs 5. 19-49 yrs 6. 50-64 yrs 7. 65 + yrs	1. stays in household 2. does not stay in household	1 2 3 4
		1. Female 2. Male	_____	1. 0-4 yrs 2. 5-12 yrs 3. 13-15 yrs 4. 16-18 yrs 5. 19-49 yrs 6. 50-64 yrs 7. 65 + yrs	1. stays in household 2. does not stay in household	1 2 3 4
		1. Female 2. Male	_____	1. 0-4 yrs 2. 5-12 yrs 3. 13-15 yrs 4. 16-18 yrs 7. 19-49 yrs 8. 50-64 yrs 7. 65 + yrs	1. stays in household 2. does not stay in household	1 2 3 4
		1. Female 2. Male	_____	1. 0-4 yrs 2. 5-12 yrs 3. 13-15 yrs 4. 16-18 yrs 1. 19-49 yrs 2. 50-64 yrs 7. 65 + yrs	1. stays in household 2. does not stay in household	1 2 3 4

Question 1.5: 1=mother/caretaker with child under 18; 2=child under 5, 3=child over 5 years but under 15; 4=no

MODULE 02 – Education Form for all children 5-15 years of age

2.1 Are there any children between 5-15 years staying in the household? 1. Yes 2. No – go to module 03							
Line No.	3.2 Name	3.3 Age in yrs	3.4 Has she/he ever attended school?	3.5 Is she/he at school this year?	3.6 Which class is she/he currently attending/?	3.7 Was she/he attending school last year?	3.8 Which class did she/he attend last year?
			1. Yes 2. No – go to next child 3. Do not know – go to next child	1. Yes 2. No – go to next child 3. Do not know – go to next child	1. Nursery 8. JSS1 2. P1 9. JSS2 3. P2 10. JSS3 4. P3 11. SS1 5. P4 12. SS2 6. P5 13. SS3 7. P6 14. Dnk	1. Yes 2. No – go to next child 3. Do not know – go to next child	1. Nursery 8. JSS1 2. P1 9. JSS2 3. P2 10. JSS3 4. P3 11. SS1 5. P4 12. SS2 6. P5 13. SS3 7. P6 14. Dnk

			1.Yes 2. No – go to next child 3. Do not know – go to next child	1. Yes 2. No – go to next child 3. Do not know – go to next child	1. Nursery 8. JSS1 2. P1 9.JSS2 3. P2 10.JSS3 4. P3 11. SS1 5. P4 12. SS2 6. P5 13. SS3 7. P6 14. Dnk	1.Yes 2. No – go to next child 3. Do not know – go to next child	1. Nursery 8. JSS1 2. P1 9.JSS2 3. P2 10.JSS3 4. P3 11. SS1 5. P4 12. SS2 6. P5 13. SS3 7. P6 14. Dnk
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MODULE 03 - Water and Sanitation

<p>3.1 What material did you use to build the walls and roof of the room of the head of household? (Observe from what material the walls and roof of the room of head of household is constructed)</p>	<p>Walls 1. Mud 2. Cement 3. Mixture</p>	<p>Roof 1. Thatch 2. Zinc 3. Cement</p>
<p>3.2 Where do you go to toilet when you are at home?</p>	<p>1. Own Flushed toilet 2. Shared flushed toilet 3. Public KVIP 4. Household KVIP 5. Household VIP 6. Traditional pit toilet 7. Bucket/pan latrine 8. Free range (bush) 9. Other _____(Specify)</p>	
<p>3.3 Where do you go to toilet when you are in the market (or away from home)?</p>	<p>1. Own Flushed toilet 2. Shared flushed toilet 10. Public KVIP 11. Household KVIP 12. Household VIP 13. Traditional pit toilet 14. Bucket/pan latrine 15. Free range (bush) 16. Other _____(Specify)</p>	
<p>3.4 How do you dispose of your rubbish?</p>	<p>1. On a heap 2. On a central heap outside the community 3. In a central container 4. Excavation 5. In a pit 6. Other</p>	
<p>3.5 What happens to the rubbish after you disposed of it?</p>	<p>1. it is burned 2. it is buried 3. nothing 4. other _____(Specify) 5. do not know</p>	
<p>3.6 How do you dispose of your waste water from bathing?</p>	<p>1. Drainage 2. Soak away 3. Thrown away in front of compound 4. Free flowing 5. Other _____(Specify)</p>	
<p>3.7 How do you dispose of waste water used in dish washing, laundry and /or cooking?</p>	<p>1. Sewerage 2. Soak away 3. Thrown away in front of compound 4. Other _____(Specify)</p>	

3.8 Where do you fetch drinking water for your household in the dry season?	<ol style="list-style-type: none"> 1. piped water in compound 2. public stand pipe 3. borehole 4. protected well 5. unprotected well 6. river/stream 7. pond/dugout / dam 8. rainwater 9. tanker truck / vendor 10. other (Specify)
3.9 What is the distance of this source of drinking water?	<ol style="list-style-type: none"> 1. in the compound 2. less than 500 meters 3. more than 500 meters 4. do not know
3.10 Where do you fetch drinking water for your household in the rainy season/	<ol style="list-style-type: none"> 1. piped water in compound 2. public stand pipe 3. borehole 4. protected well 5. unprotected well 6. river/stream 7. pond/dug out / dam 8. rainwater 9. tanker truck / vendor 10. other (Specify)
3.11 What is the distance to this source of drinking water?	<ol style="list-style-type: none"> 1. In the compound 2. less than 500 meters 3. more than 500 meters 4. do not know
3.12 Do you treat this water before drinking	<ol style="list-style-type: none"> 1. Yes 2. No – go to 8.13
3.13 How do you treat the water before drinking?	<ol style="list-style-type: none"> 1. boiling 2. use of alum 3. filtering (ask “can I see the filter you use? Record only 4 when you have seen an used filter) 4. boiled and filtered 5. alum and filtered 6. boiled and alum 7. other (Specify)
3.14 How do you store the drinking water?	<ol style="list-style-type: none"> 1. in a bucket 2. in a clay pot 3. in a drum 4. in a ‘garawa’ 5. other (Specify)
3.15 Ask: “ Can I see where you store your water?” Observe and record whether the water storage is covered	<ol style="list-style-type: none"> 1. yes if covered 2. no if not covered
3.16 When was the last time you cleaned this water storage?	<p>_____ days ago</p> <p>_____ weeks ago</p> <p>_____ months ago</p>
3.17 I would like to know whether the salt you use for cooking is iodated. Could you give me a spoonful of the salt you use? Record test outcome.	<ol style="list-style-type: none"> 1. Salt changes color to blue/violet 2. Salt does not change color

MODULE 04 – Characteristics of the mother

4.1 What material did you use to build the walls and roof of your room? (Observe from what material the walls and roof of the room is constructed)	Walls 1. Mud 2. Cement 3. Mixture	Roof 1. Thatch 2. Zinc 3. Cement	
4.2 Are you presently married?	1. Yes – go to 4.5 2. No		
4.3 Have you ever been married?	1. Yes 2. No – go to 4.7		
4.5 How many wives does your husband have?	1. One – go to 4/7 2. Two or more		
4.6 What is your rank in the marriage?	1. First wife 2. Second wife 3. Third wife 4. Fourth wife 5. Other _____ (Specify)		
4.7 Have you ever attended school?	1. Yes 2. No – go to 4.9		
4.8 What is the highest level of school you attended?	1. some primary 2. Primary completed 3. some JSS/middle 4. JSS/middle completed 5. some SSS/Sec. School 6. SSS/Sec. School completed 7. Higher		
4.9 Did you attend any literacy classes?	1. Yes 2. No – go to module 5		
3.18INTERVIEWER INSTRUCTION Show her a simple sentence in Dagbani and ask her to read it out loud. Can she read the sentence?	1. Yes 2. No		
3.19INTERVIEWER INSTRUCTION Show her a simple sentence in English and ask her to read it out loud. Can she read the sentence?	1. Yes 2. No		

MODULE 05 – Diarrhoea, intestinal diseases, and skin diseases

5.1 How often do you bathe your child?	1. ___ times a day 2. ___ times a week 3. ___ times a month
5.2 How often do you bathe yourself?	1. ___ times a day 2. ___ times a week 3. ___ times a month
5.3 Did (name of child) have a skin rash in the last two weeks?	1. Yes 2. No
5.4 If yes, what did you do to treat the rash?	1. Take him/her to the doctor 2. Buy ointment at the pharmacy 3. Home remedy/ natural medicine 4. Did nothing 5. Other (explain) _____

5.4 Did (name of child) have diarrhoea in the last two weeks?	<ol style="list-style-type: none"> 1. Yes 2. No – go to module 06 3. Do not know – go to module 06 																												
5.5 During the last episode of diarrhoea, did (name of child) drink any of the following? <table style="margin-left: 100px; border: none;"> <tr><td>Breast milk</td><td>1. yes</td><td>2. no</td><td>3. do not know</td></tr> <tr><td>Water</td><td>1. yes</td><td>2. no</td><td>3. do not know</td></tr> <tr><td>Cereal based ORT</td><td>1. yes</td><td>2. no</td><td>3. do not know</td></tr> <tr><td>ORS sachet</td><td>1. yes</td><td>2. no</td><td>3. do not know</td></tr> <tr><td>Sugar-salt solution</td><td>1. yes</td><td>2. no</td><td>3. do not know</td></tr> <tr><td>Other fluids</td><td>1. yes</td><td>2. no</td><td>3. do not know</td></tr> <tr><td>Anti-diarrhoea medicine or antibiotics</td><td>1. yes</td><td>2. no</td><td>3. do not know</td></tr> </table>	Breast milk	1. yes	2. no	3. do not know	Water	1. yes	2. no	3. do not know	Cereal based ORT	1. yes	2. no	3. do not know	ORS sachet	1. yes	2. no	3. do not know	Sugar-salt solution	1. yes	2. no	3. do not know	Other fluids	1. yes	2. no	3. do not know	Anti-diarrhoea medicine or antibiotics	1. yes	2. no	3. do not know	
Breast milk	1. yes	2. no	3. do not know																										
Water	1. yes	2. no	3. do not know																										
Cereal based ORT	1. yes	2. no	3. do not know																										
ORS sachet	1. yes	2. no	3. do not know																										
Sugar-salt solution	1. yes	2. no	3. do not know																										
Other fluids	1. yes	2. no	3. do not know																										
Anti-diarrhoea medicine or antibiotics	1. yes	2. no	3. do not know																										
5.6 During (child name) diarrhoea, did he/she drink much less, about the same or more than usual?	<ol style="list-style-type: none"> 1. more than usual 2. same as usual 3. less than usual 4. stopped drinking 5. do not know 																												
5.7 During (child name) diarrhoea, did he/she eat the same or more than usual?	<ol style="list-style-type: none"> 1. did not eat 2. much less than usual 3. somewhat less than usual 4. same as usual 5. more than usual 6. do not know 																												
5.8 What do you think was the cause of this diarrhea?	Write in answer:																												

MODULE 06 – Malaria

6.1 Did (name of child) have a fever in the last 14 days?	<ol style="list-style-type: none"> 1. Yes 2. No – go to question 6.6 3. Do not know – go to question 6.6
6.2 Did he/she have a cough at the same time?	<ol style="list-style-type: none"> 1. Yes 2. No 3. Do not know
6.3 Did you seek advice or treatment?	<ol style="list-style-type: none"> 1. Yes 2. No – go to question 6.6 3. Do not know – go to question 6.6
6.4 From whom did you seek advice/treatment?	<ol style="list-style-type: none"> 1. Government hospital clinic 2. Health center / post 3. Mobile clinic 4. Community health worker 5. Private doctor / clinic 6. Pharmacy / shop 7. Traditional healer 8. Drug peddler 9. Self-medication

	10. Other _____ (Specify)
6.5 What was given to treat the fever?	<ol style="list-style-type: none"> 1. Injection 2. Antibiotic (pill or syrup) 3. Antimalarial (pill or syrup) 4. Cough syrup 5. Other pill or syrup 6. Unknown pill or syrup 7. Home remedy / herbal tea / local treatment 8. Other _____ 9Specify)
6.6 Does (name of child) sleep under a mosquito net	<ol style="list-style-type: none"> 1. Yes 2. No 3. Do not know

MODULE 07 – Breast-feeding and complementary feeding

7.1 Is (name of child) up to 24 months? <ol style="list-style-type: none"> 1. Yes 2. No 	
7.2 At the delivery of (name of child), who tied and cut the cord?	<ol style="list-style-type: none"> 1. Myself 2. Family member 3. Untrained Traditional Birth Attendant 4. Trained Traditional Birth Attendant 5. Health Professional (Director, nurse, midwife) 6. Other _____ (Specify)
7.3 Has (name of child) ever been breast-fed	<ol style="list-style-type: none"> 1. Yes 2. No – go to 7.10 3. Do not Know – go to 5.10
7.4 After delivery of (name of child), when did you breast-feed her/him for the first time?	<ol style="list-style-type: none"> 1. during the first hour after delivery 2. from 1-8 hours after delivery 3. more than 8 hours after delivery 4. the next day 5. do not remember
7.5 Did you give anything to (name of child) to drink before her/his first breast feeding?	<ol style="list-style-type: none"> 1. Yes 2. No – go to 7.7
7.6 What did you give?	_____ (Specify)
7.7 What did you do to the first breastmilk after _____ was born	<ol style="list-style-type: none"> 1. give to the child 2. squeezed out and threw away 3. do not know 4. Other _____ (Specify)
7.8 Is he/she still breast-fed	<ol style="list-style-type: none"> 5. 1. Yes – go to 7.10 6. No 7. Do not know – go to 7.10
7.9 If he/she is no longer breast-fed, at what age was breast-feeding stopped?	<ol style="list-style-type: none"> 1. _____ months 2. do not know
7.10 Since this time yesterday, did (name of child) receive any foods, liquids or water beside breastfeeding	<ol style="list-style-type: none"> 1. Yes 2. No 3. Do not know

7.11 Are you giving any of the following to (name of child)?			
Plain water	1. Yes	2. No	3. Do not know
Tinned, powdered/fresh milk or infant formula	1. Yes	2. No	3. Do not know
Solid or semi solid food (such as porridge, weanimix)	1. Yes	2. No	3. Do not know
Fruits	1. Yes	2. No	3. Do not know
Carrot, mango, papaya, squash	1. Yes	2. No	3. Do not know
Green leafy vegetables	1. Yes	2. No	3. Do not know
Meat, Fish	1. Yes	2. No	3. Do not know
Eggs	1. Yes	2. No	3. Do not know
Groundnuts, pigeon pea, or beans	1. Yes	2. No	3. Do not know
Honey or sugar	1. Yes	2. No	3. Do not know
Fat/oil/shear butter	1. Yes	2. No	3. Do not know
Palm nut oil	1. Yes	2. No	3. Do not know

Appendix C – Diagnostic Report Louisville-Tamale

I. INTRODUCTION

As part of the Millennium Development Goal’s City to City programme, Tamale has been selected along side three other cities to pilot this initiative. Tamale, in Northern Ghana, and Louisville in the Kentucky State of the United States of America have for some time now, being exploring ways of developing relations that will lead to the mutual benefit of the people from both ends. It is for this reason that, the two Sister Cities were selected under the World Bank Institute Pilot Grant to accomplish their selected priority Millennium Development Goal (MDG). So far, the two sister cities have made significant progress in their chosen priority MDG i.e. number seven (7). They have successfully completed the first and second step and have selected to work MDG 7, Target 10 .This Diagnostic study is being undertaken to help establish the baseline information against which progress will be measured subsequently.

X. METHODOLOGY

To ensure comparability across the board, a diagnostic tool was developed. This tool was then applied to collect relevant data from target respondents. Preliminary discussions were held with stakeholders to determine the selection criteria of the respondents, the sample sizes and plans to sensitize the target communities prior to the administration of the questionnaire. After several meetings and discussions, it was decided that respondents should be selected from the following areas in Tamale:

A hemmed-in zone, comprising mostly “rural” urbanites.

A transitional zone or peri-urban zone

A rural fringe.

Based on the above criteria, Duanayili was chosen to represent the first, while Gbambaya and Tugu were selected to represent the second and third. A total of ninety (90) respondents were interviewed. This was distributed as follows: Duanayili (35), Gbambaya (30), and Tugu (25). Individual respondents were then selected using the selection criteria provided in the diagnostic tool. Particular attention was also paid to female-headed households.

XI. RESULTS

This section presents the results of the diagnostic study, covering the following areas;

- Demographic profile;
- Housing quality;
- Sanitation;

- Water sources and quality;
- Mothers characteristics; and
- Child welfare.

A. Demographic profile

A total of 652 people were enumerated in the three sampled zones of Tamale. These comprised 408 males and 244 females. A further breakdown of the demographic data shows that females represent 37.4 percent of the enumerated population. Children of basic school going age constitute between 20.8 to 30.9 percent for both sexes in the two most rural portions of Tamale i.e. Gbambaya and Tugu.

Table 1.1: Percentage distribution of sample population

Age group	Sex					
	Male			Female		
	Duanayili	Gbambaya	Tugu	Duanayili	Gbambaya	Tugu
0-4	4.9	9.6	3.8	5.4	13.2	3.5
5-12	13.3	27.4	20.8	14.9	30.9	17.4
13-15	2.8	9.6	5.4	5.4	16.7	9.3
16-18	5.6	7.4	11.6	2.7	8.3	10.5
19-49	58.7	34.8	44.6	68.9	30.9	59.3
50-64	8.4	7.4	10.0	1.4	0.0	0.0
65+	6.3	3.8	3.8	1.3	0.0	0.0
Totals	100.0	100.0	100.0	100.0	100.0	100.0
	143	135	130	74	84	86

Source: Diagnostic survey of Tamale, February 2004

On the contrary, in the largely immigrant zone of Duanayili, children of school going age constitute 13.3 percent and 14.9 percent for males and females. Duanayili plays the role of a dormitory suburb for the immigrant workers, especially, the hospital workers and primary school teachers. This argument is supported by the fact that the most active labour age group 19-49 constitute 58.7 percent and 68.9 percent for males and females respectively. The higher portion for females is attributed to the nursing population.

Household Living arrangements

The survey results reveal that:

about 32.3 percent of the enumerated household members do not stay in the household.

Infants and children aged 0-4 years are not given out to stay outside the household.

Table 1.2: Percentage of persons staying or not staying in household

AGE GROUP	Staying in			Not staying in		
	Duanayili	Gbambaya	Tugu	Duanayili	Gbambaya	Tugu
0-4	6.4	13.3	5.7	0.0	0.0	0.0
5-12	16.3	29.8	23.7	2.0	17.9	9.9
13-15	3.6	13.8	7.9	6.0	7.1	2.8
16-18	3.5	6.1	13.8	6.0	17.9	7.0
19-49	56.0	28.7	37.4	82.0	53.6	80.3
50-64	7.8	5.5	7.9	2.0	3.5	0.0
65+	6.4	2.8	3.6	2.0	0.0	0.0

Totals	100.0	100.0	100.0	100.0	100.0	100.0
	141	181	139	50	28	71

Source : Diagnostic survey of Tamale, February 2004

The households in all three communities, the proportion of people in the age group 19-49 staying outside the household is high, although invariably, these still cling to the larger household and share food and other common resources. Of particular interest is the fact that the aged, i.e. people aged 65+ does not stay outside the household. The evidence enumerated above, point to a strong family bond still in place.

B. Housing quality, sanitation and access to facilities

This section examines the living environment of the sampled population in terms of their housing quality, access to sanitation facilities, modes of waste disposal and access to potable water.

Housing types

Table 1.3: Housing types

Locality	Types of walls			Types of roofs		
	Mud	Cement	Mixture	Thatch	Zinc	Thatch/zinc
Duanayili	83.9	12.9	3.2	12.5	56.3	31.2
Gbambaya	96.7	3.3	0.0	44.7	39.5	15.8
Tugu	100.0	0.0	0.0	100.0	0.0	0.0

Source : Diagnostic survey of Tamale, February 2004

In terms of housing the following observation can be made:

There is very little innovation in terms of the building of walls. Most households, between 83.9 to 100 percent still use mud. Mud walls have proved to be a stable building material. There may be the need to look into the possibility of improving the technology for better housing, since this will be more affordable.

On the contrary, the use of zinc as an alternative to the traditional thatch is gaining grounds. Between 39.5 to 56.3 percent of the households used zinc in Duanayili and Gbambaya.

The more rural households in Tugu rely solely on the traditional thatch as a source of roofing material. In the relatively more urbanized area of Duanayili thatch has become insignificant.

Among the three sampled areas, Tugu is still very much traditional, thus depicting the slow process of change among the more rural folk. In Tamale, one can find a lot of hemmed-in rural suburbs resulting from the rapid outward sprawl of the municipality. These engulfed rural suburbs are still maintaining to a large degree, their rural characteristics. Any intervention may need to take this into account.

Sanitation

Sanitation constitutes a critical problem in urban areas in Ghana, particularly Tamale, where low literacy, unplanned development, poor infrastructure and poor sanitation management practices tend to exacerbate the problem. Sanitary facilities are inadequate, outmoded and poor. In terms of toilet facilities, the public KVIP is still the most popular in Tamale. Between 80.6 to 94.1 percent use it while at home and also away from home. Other alternative facilities like the traditional pit latrine, bucket/pan latrine and the household KVIP are not common. In the more rural suburbs of Gbambaya and especially Tugu, free range is still practiced. The use of these outmoded types of toilet facilities is linked to the water supply situation as will be seen in the section under water sources.

Table 1.4: Percentage Distribution of households by type of Toilet Facilities at home and away from home

Type of toilet	At home			Away from home		
	Duanayili	Gbambaya	Tugu	Duanayili	Gbambaya	Tugu
Public KVIP	94.1	80.6	0.0	91.6	91.9	0.0
Household KVIP	2.9	0.0	0.0	0.0	0.0	0.0
Bucket pan laterine	3.0	0.0	0.0	2.8	0.0	0.0
Traditional pit latrine	0.0	0.0	0.0	2.8	0.0	0.0
Free range	0.0	19.4	100.0	2.8	8.1	100.0
Total	100.0	100.0	100.0	100.0	100.0	100.0

Solid waste disposal

Solid waste, especially household refuse is commonly disposed of in front of the house in most parts of Northern Ghana. This is evidenced by the information contained in table 1.5. In all cases, ninety (90) percent of households disposed of their waste on heaps in front of the house.

Table 1.5: Percentage distribution of households by disposal of waste

Method of solid waste disposal	Locality		
	Duanayili	Gbambaya	Tugu
On heap outside	96.7	93.7	95.8
In a pit	3.3	6.3	4.2

Solid waste is burnt mostly, as indicated by 91.4 percent, 89.7 percent and 84.0 percent of the respondents from Duanayili, Gbambaya and Tugu respectively.

Waste water disposal

Just like in the case of solid waste, liquid waste, especially waste water from bathing is allowed to flow freely behind the compound house. It was observed during the survey that pools of water usually lie behind the houses, thus serving as mosquito havens. (see Table 1.6).

Table 1.6: method of disposing wastewater from bathing and cooking/laundry

Methods	Bathing			Cooking/laundry		
	Duanayili	Gbambaya	Tugu	Duanayili	Gbambaya	Tugu
Soak away	2.9	3.3	0.0	0.0	0.0	0.0
Throw away in front of house	5.7	3.3	0.0	100.0	100.0	100.0
Free flow	91.4	93.4	100.0	0.0	0.0	0.0

Source : Diagnostic survey of Tamale, February 2004

Waste water from laundry and cooking is just disposed off in front of the houses in all cases as evidenced by the 100 percent score in all three cases as shown in table 1.6.

C. Sources of drinking water

Generally, drinking water in Tamale has been an age-old problem. It's location in the voltaian basin, with its characteristic sedimentary rocks, has made the tapping of underground water source uneconomical.

Table 1.7: Percentage distribution of households by sources of drinking water

Source	Dry season			Rainy season		
	Duanayili	Gbambaya	Tugu	Duanayili	Gbambaya	Tugu
Piped water	36.8	0.0	0.0	34.1	26.2	0.0
Public stand pipe	21.0	0.0	0.0	19.5	11.9	0.0
Protected wells	18.4	0.0	0.0	24.4	2.4	4.0
River/stream	2.6	0.0	4.0	2.4	2.4	0.0
Pond/dugout/dam	21.0	100.0	96.0	7.3	30.9	96.0
Rain water	0.0	0.0	0.0	12.3	26.2	0.0

Source : Diagnostic survey of Tamale, February 2004

The undeveloped fractures and fissures in the sedimentary bedrocks make the collection of water difficult, thus giving rise to costly underground water prospecting. Boreholes and hand dug wells dry up quickly in the dry season due to the low water table. The following patterns of water availability in the study communities have emerged as a result of the peculiar geology described above.

About 40.5 percent of households in Gbambaya enjoy potable water from pipes (26.2%), public stand pipes (11.9%), and protected well (2.4%) in the rainy season. These sources are, however, unavailable in the dry season and households have to rely on ponds, dugouts or dams for their drinking water.

Duanayili, due to it's closeness to the regional hospital, the Atta Essibeh Junior Staff Residential area and other developed suburbs enjoys a fair supply of potable water in both the dry and rainy seasons. In the dry season, 76.2 percent of the households gain access to some portable water. These sources are: piped water (36.8%), public stand pipe (21.0%), protected well (18.4%). In the rainy season some households harvest rain water (12.3%), thus raising the proportion of households with access to some sort of potable water to 90.3 percent. The low proportion of households with access to in house piped water (36.8%), has a lot of implications for personal hygiene and household sanitation. As discussed earlier, free-range wastewater disposal is still the norm.

Tugu presents a typical case of the severity of water the problem in the rural areas; where shallow hand dug wells are the main sources of potable water. Ponds, dugouts and earth dams constitute the major source of water supply (96.0). Potable water is, therefore, a critical development issue in the peri-urban areas of Tamale.

In terms of distance to sources of water, the following patterns can be discerned from Table 1.7a and 1.7b.

Table 1.7a: Percentage Distribution of Households by distance from source of drinking water in rainy season

Source	Rainy season		
	Duanayili	Gbambaya	Tugu

	In compound	500m	500+m	In compound	500m	500+m	In compound	500m	500+m
Pipe water	85.7	14.3	0.0	9.0	27.2	63.8	0.0	0.0	0.0
Public stand pipe	0.0	62.5	37.5	0.0	36.4	63.6	0.0	0.0	0.0
Protected well	0.0	0.0	100.0	0.0	60.0	40.0	100.0	0.0	0.0
River/stream	0.0	0.0	100.0	0.0	16.8	83.2	0.0	0.0	0.0
Pond/dug out dam	0.0	0.0	100.0	0.0	0.0	100.0	0.0	12.5	87.5
Rain water	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Source : Diagnostic survey of Tamale, February 2004

Table 1.7a: Percentage Distribution of Households by distance from source of drinking water in dry season

Dry sea Tugu son								
Duanayili			Gbambaya			Tugu		
In compound	500 m	500+ m	In compound	500 m	500+ m	In compound	500m	500+m
71.4	21.4	7.2	0.0	0.0	0.0	0.0	0.0	0.0
0.0	75.0	25.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	100.0
0.0	37.5	62.5	0.0	0.0	100.0	0.0	8.3	91.7
100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Source : Diagnostic survey of Tamale, February 2004

It is only in Duanayili that the households have access to piped water within their compounds, i.e. 85.7 percent and 71.4 percent in the rainy and dry seasons respectively.

- Apart from the one (1) protected well in Tugu and the rainy water harvesting in Duanayili, no any other potable source of water is acquired within the compound. The largely thatch roof in Gbambaya (44.7 percent) and Tugu (100 percent) make rainy water harvesting an unattractive venture. Besides, the technology is yet to be appreciated, though it offers a viable option. Indeed, this was practiced by government officials during the colonial period.
- In all the three communities, most households travel beyond 500m to collect some drinking water of a sort. In Tugu for instance, 91.7 and 100.0 percent of households travel beyond 500m to collect water from ponds/ dugouts/dams and rivers/streams respectively.

Water treatment and storage

In areas where access to potable water is problematic, water treatment becomes a critical issue. The evidence from the diagnostic survey shows that households do appreciate this practice as shown in Table 1.8. The percentage distribution in Table 1.8 reflects the degree of access to safe water.

Table 1.8. Percentage distribution of households' water treatment response

Practice	Duanayili	Gbambaya	Tugu
Treats water	15.6	80.0	96.0
Does not treat water	84.4	20.0	4.0

Source : Diagnostic survey of Tamale, February 2004

Of the three suburbs, Duanayili has access to more potable sources hence the low water treatment practice. Tugu's reliance on ponds, dugouts and dams makes water treatment an important issue in that community.

Households use different water treatment methods as evidence in Table 1.9. Three main methods are either used singly or in combination - alum, filtering and boiling as shown in Table 1.9.

Table 1.9: percentage distribution of households by method of treating water

Treatment method	Locality		
	Duanayili	Gbambaya	Tugu
Use of alum	28.6	42.9	27.3
Filters	28.6	45.7	72.7
Boiled and filtered	42.8	8.6	0.0
Boiled and alum	0.0	2.8	0.0

Source : Diagnostic survey of Tamale, February 2004

Water storage at the household level is also an important issue of hygiene. Water is stored in several ways, as depicted in Table 1.10.

Table 1.10: Water storage

Method of storage	Locality		
	Duanayili	Gbambaya	Tugu
In day pot	56.1	82.3	88.2
Drum	43.9	14.7	5.9
Garawa (mini drum)	0.0	3.0	5.9

Source : Diagnostic survey of Tamale, February 2004

There are three (3) main ways of storing water at the household level: the traditional clay pots, the modernized 180 litre drum, and the *garawa* (a metal container used to collect water). The less urbanized Gbambaya and Tugu still rely on the traditional clay pots while in the more urbanized settler suburbs of Duanayili the metal 180 litre drum is fast replacing the traditional containers. As these containers are mostly open, one worrying problem is the contamination. The covering and regular washing of water containers are, therefore, important health issues.

Covering of water containers is an accepted norm as evidenced in Table 1.11.

Table 1.11: percentage distribution of household practice of covering and not covering water containers

Practice	Locality		
	Duanayili	Gbambaya	Tugu
Covers	96.8	96.5	95.2
Does not cover	3.2	3.5	4.8

Source : Diagnostic survey of Tamale, February 2004

The data also shows that households are conscious of the need to clean their storage containers.

Table 1.12: Average number of days water containers are cleaned in a week

Locality	Average number of days water containers are cleaned in a week
Duanayili	5
Gbambaya	4
Tugu	3

Source : Diagnostic survey of Tamale, February 2004

XII. MOTHERS CHARACTERISTICS

This section focuses on the characteristics of mothers and childcare practices.

Housing type of mothers

The mud and thatch are the dominant features of housing types in the more rural Gbambaya and Tugu.

Table 2.1: types of walls and roofs of mothers

Locality	Type of wall			Type of roof		
	Mud	Cement	Mixture	Thatch	Zinc	Thatch/zinc
Duanayili	81.8	15.2	3.0	22.6	61.3	16.1
Gbambaya	96.5	3.1	0.0	42.8	42.8	14.4
Tugu	100.0	0.0	0.0	96.0	0.0	4.0

In terms of roofing materials, zinc is gaining grounds in Duanayili where 61.3 percent of mothers households are roofed with zinc.

D. Social characteristics

Marital status, rank in marriage, education are some of the social characteristics of mothers that will be discussed in this section.

Table 2.2: percentage distribution of marital status of mothers

Marital status	Locality		
	Duanayili	Gbambaya	Tugu

Presently married	94.1	100.0	100.0
Not married	3.1	0.0	0.0

The women captured in the survey were mostly married, except the few cases in Duanayili where only 3.1 reported not married. In the Muslim and traditional communities, single motherhood is not encouraged. Widows are nearly always taken up by the relatives of the dead husband.

Table 2.3: marital characteristics of mothers

Locality	Number of wives of husband			Rank among the wives			
	One wife	More than one wife	First	Second	Third	Forth	Other
Duanayili	70.0	30.0	92.6	7.4	0.0	0.0	0.0
Gbambaya	46.4	53.6	75.9	13.8	10.3	0.0	0.0
Tugu	36.0	64.0	72.0	16.0	12.0	0.0	0.0

Polygamy is a common feature of the three communities, where by women share the same man with one or more other women. By tradition, the first woman always takes precedence over the others. This explains why the ranking of married women interviewed is skewed towards the first wives.

Education of mothers

The level of education of mothers is very low as shown in table 2.4

Table 2.4: percentage distribution of mothers by educational characteristics

Locality	Schooling		Adult literacy class		Reading ability	
	Ever attended	Never attended	Attends class	Does not attend	Can read	Cannot read
Duanayili	9.4	90.0	4.0	96.0	9.2	90.8
Gbambaya	17.9	82.1	15.8	84.2	33.3	66.7
Tugu	9.1	90.9	0.0	100.0	0.0	100.0

Except from Gbambaya, where up to 15.8 percent of mothers interviewed attend literacy classes, there are no mothers attending literacy classes in Tugu and only 4.0 percent in Duanayili. The highest level of education mothers have attained is as shown in Table 2.5.

Table 2.5: Highest level of education attained

Locality	Some JSS/middle	JSS/middle completed	Some SSS/Sec	SSS/Sec completed	Higher
Duanayili	25.0	25.0	0.0	50.0	0.0
Gbambaya	80.0	0.0	0.0	0.0	20.0
Tugu	100.0	0.0	0.0	0.0	0.0

Source : Diagnostic survey of Tamale, February 2004

Of those who indicated they had some education, non-has gone beyond SSS/Sec, except Gbambaya where 20.0 percent went beyond SSS/Sec. The bulk of them have some JSS/middle school level experience in education.

E. Personal hygiene of mother and child

The personal hygiene of both mother and child are discussed in this section. As shown in Table 2.6, the common practice is for mothers to bath their children and they themselves twice in a day. These personal hygienic practices are necessary to over come diseases such as skin rashes and diarrhoea.

Table 2.7: Bathing frequency of child and mother in a day

Locality	Frequency of child bathing	Frequency of mother bathing
Duanayili	2	2
Gbambaya	2	2
Tugu	2	2

Source : Diagnostic survey of Tamale, February 2004

As can be seen in table 2.7, the incidence of both skin rashes and diarrhoea among children is low in the more urbanized suburbs of Duanayili than the more rural Gbambaya and Tugu.

Table 2.7: Incidence of skin rashes and diarrhea of children

Locality	Skin rashes of child		Diarrhoea of child in last two weeks	
	Yes	No	Yes	No
Duanayili	18.1	81.9	6.9	93.1
Gbambaya	20.7	79.3	28.0	72.0
Tugu	32.0	68.0	44.0	56.0

Source : Diagnostic survey of Tamale, February 2004

The patterns of incidence of these common child hood diseases are a reflection of the environmental conditions, especially the water sources discussed earlier.

Mothers respond in different ways to cure their children once they are attacked by diarrhoea or skin rash. In the case of skin rash, home remedy is the most popular way of treatment (see Table 2.8). In the case of diarrhoea, the children are given some form of liquid, as shown in table 2.9

Table 2.9: Remedies to skin rash

Remedy	Locality		
	Duanayili	Gbambaya	Tugu
Taken to doctor	22.3	25.0	28.6
Ointment at pharmacy	33.3	0.0	28.6
Home remedy	44.4	75.0	42.9

Source : Diagnostic survey of Tamale, February 2004

Table 2.10: Remedies for diarrhoea

Child was given----	Locality
---------------------	----------

	Duanayili	Gbambaya	Tugu
Breast milk	25.0	6.7	15.5
Water	25.0	13.3	17.8
Cereal based ORY	0.0	0.0	4.4
ORS Sachet	50.0	33.3	20.0
Sugar/Salt solution	0.0	6.7	8.9
Other fluids	0.0	26.7	15.5

Source : Diagnostic survey of Tamale, February 2004

The quantity of fluid children are given when they are healthy and when they have diarrhoea varies according to the mother's understanding of the role of such fluid in stopping the diarrhoea (see Table 2.11).

Table 2.11: Variation of quantity of fluid given during diarrhea.

Variation of quantity	Locality		
	Duanayili	Gbambaya	Tugu
More than usual	0.0	71.4	30.0
Same as before	50.0	14.3	0.0
Less than usual	0.0	14.3	70.0
Stopped giving	50.0	0.0	0.0

Source : Diagnostic survey of Tamale, February 2004

The children also change their eating habits during diarrhoea as shown in table 2.12.

Table 2.12: Eating pattern during diarrhoea

Eating pattern	Locality		
	Duanayili	Gbambaya	Tugu
More than usual	0.0	0.0	16.7
Same as before	0.0	0.0	0.0
Less than usual	100.0	100.0	83.3
Stopped	0.0	0.0	0.0

Source : Diagnostic survey of Tamale, February 2004

Generally, children tend to eat less than usual when they have diarrhoea. In rare cases, mothers may press their children to eat more than usual because of the rapid loss of weight.

Although mothers have learnt diverse remedies for their children's diarrhoea, there is general ignorance of the causes of diarrhoea as evidence by the fact that, mothers in the three localities were not able to enumerate the causes of diarrhoea.

Malaria

The incidence of malaria is high in the three target suburbs. This is not surprising given the poor sanitation situation. The uncontrolled waste water pools from bathrooms and also waste water from kitchens disposed of freely in front of the houses are convenient breeding grounds for mosquitoes.

Table 2.13: Percentagedistribution of children with malaria and cough in the last 14 days

Criteria	Malaria			Malaria and cough		
	Duanayili	Gbambaya	Tugu	Duanayili	Gbambaya	Tugu

Yes	13.8	41.4	54.2	75.0	100.0	47.0
No	86.2	58.6	45.8	25.0	0.0	53.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
	29	27	24	14	4	17

Source : Diagnostic survey of Tamale, February 2004

The open dugouts and largely thatch and mud houses are congenial for the fast breeding and spread of mosquitoes.

Mothers are quite aware of the disastrous effects of malaria and, therefore, seek treatment for their children. In both Duanayili and Gbambaya, 100.0 percent of mothers seek treatment for their children.

Table 2.14: Percentage distribution of mothers who treat children with malaria

Criteria	Duanayili	Gbambaya	Tugu
Yes	100.0	100.0	75.0
no	0.0	0.0	25.0

Source : Diagnostic survey of Tamale, February 2004

On the other hand, mothers in Tugu are disadvantaged in terms of health services, so only 75.0 percent seek medical attention. Comparing the results of tables 2.14 and 2.15, it is apparent that although mothers seek treatment for their children, they do not necessarily go to the conventional health service delivery points. The traditional healers and home remedies are still the most important points of contact and services of treatment respectively (see table 2.15 and 2.16).

Table 2.16: Type of treatment given to child

Type of treatment	Duanayili	Gbambaya	Tugu
Antibiotic	0.0	10.0	7.1
Antimalaria	0.0	40.0	35.7
Cough mixture	25.0	0.0	21.4
Other pill or syrup	25.0	30.0	7.1
Home remedy	50.0	20.0	28.6

Source : Diagnostic survey of Tamale, February 2004

Preventive measures such as the use of mosquito nets are practised on a low scale as shown in Table 2.17. Strangely enough, it is rather in Tugu, a remote suburb that a high number of children sleep under mosquito nets.

Table 2.17: Percentage distribution of children who sleep under mosquito nets

Criteria	Duanayili	Gbambaya	Tugu
Yes	9.1	21.4	43.5
No	90.9	78.6	56.5

Source : Diagnostic survey of Tamale, February 2004

Given the poor sanitary conditions, preventive measures like the use of mosquito nets will be an important area of intervention.

XIII. BREASTFEEDING

Brest feeding is an important aspect of child care/health, especially under conditions of poor nutrition and low access to health services. Breast-feeding is widely practised, and in some cases, even children up to 24 months are still breast fed as shown in Table 3.1.

Table 3.1: Breast-feeding of children

Criteria	Child up to 24 months			Still breast feeding		
	Duanayili	Gbambaya	Tugu	Duanayili	Gbambaya	Tugu
Yes	80.0	100.0	92.0	20.7	44.8	24.0
No	20.0	0.0	8.0	79.3	55.2	76.0

Source : Diagnostic survey of Tamale, February 2004

Practices, however, vary as regards to breast-feeding children with the first breast milk as can be seen in table 3.2.

Table 3.2: Use of first breast milk

Criteria	Duanayili	Gbambaya	Tugu
Given to child	90.0	84.6	83.3
Squeezed out and thrown away	10.0	15.4	16.7

Source : Diagnostic survey of Tamale, February 2004

As shown in Table 3.2, between 80-100 percent of women in the study area are given the first breast milk to their children after birth. The length of time women take before they brest feed their children is as shown in Table 3.3.

Table 3.3: Time taken before women first breast-feed

Criteria	Duanayili	Gbambaya	Tugu
1-8 hours	79.3	86.7	60.0
More than 8hours	6.9	3.3	0.0
Next day	10.4	10.0	40.0
Do not remember	3.4	0.0	0.0

Source : Diagnostic survey of Tamale, February 2004

Apart from breast milk, there is also the practice of giving water to the child during few hours or days after birth. This practice is, however, limited as shown in Table 3.4.

Table 3.4: Percentage distribution of women who give water

Criteria	Duanayili	Gbambaya	Tugu
Gives water	13.3	3.8	16.4
Does not give water	86.7	96.2	83.6

Source : Diagnostic survey of Tamale, February 2004

Breast-feeding is thus a prominent practice in all the three target suburbs. Indeed women breast-feed for a length of between 24-36 months. The average length of breast-feeding is as shown in Table 3.5.

Table 3.5: Supplementary feeding/drink

Type of drink/food	Yes			No		
	Duanayili	Gbambaya	Tugu	Duanayili	Gbambaya	Tugu
Plain water	10.9	8.9	10.0	2.4	4.3	1.6
Tin/powder/fresh milk/inf. formula	2.8	6.6	5.9	34.2	30.6	18.7
Solid or semi solid (porridge, weanimix)	9.5	8.6	8.6	7.3	8.8	9.7
Fruits	6.7	8.6	8.6	14.6	4.3	7.9
Carrots, mango, papaya, squash	7.0	8.6	7.8	12.4	4.3	12.0
Green leafy veg.	9.2	8.9	6.8	7.3	4.3	9.7
Meat, fish	9.5	8.9	7.3	2.4	4.3	6.5
Eggs	9.5	8.9	8.6	2.4	8.8	9.7
Groundnuts, beans etc	9.9	8.6	9.6	2.4	4.3	6.5
Honey and sugar	9.5	8.2	10.5	4.9	4.3	4.8
Fat, oil, shea butter	9.5	8.6	9.9	2.4	4.3	3.2
Palm oil	6.0	6.6	6.4	7.3	17.4	9.7
Total	100.0	100.0	100.0	100.0	100.0	100.0

XIV. CONCLUSION

The selected communities represent the varied features of Tamale municipality. Although urban a large portions of Tamale is made up of hemmed in rural communities, due to rapid lateral development of the municipal. Barely ten years ago, communities liked Kuku, Vitting, Jisonayili, Gurugu, Fuo and several others were independent villages located more than 5 to 15 Km away from Tamale. Today they are all engulfed by the rapid urban spread. The result is that these engulfed or hemmed in communities are still living the rural lives in an urban setting. In the transitional zones and urban fringes there is a vigorous interaction between the urban and the rural processes which is also a prominent feature of Tamale.

The survey results reveal that in the study areas described above, infrastructure, especially sanitation infrastructure facilities are grossly inadequate. This deficiency is compounded by the by the unfavourable traditional sanitation management systems evolved over the years coupled with the low level of education of the inhabitants. The incidence of basic preventable diseases like malaria, diarrhoea and skin infections are still on the high side.

It is recommended that any community improvement programmes will need to be multiprong to address adequately, the multifaceted development needs of the people.

Appendix E – Comparative Framework Louisville-Tamale

COMPARATIVE FRAMEWORK QUESTIONS

LOCATION: visually and through charts and maps locate our two cities in each of the following important contexts.

1. Geographic location, including main physical features, continent, sub-region, climate and natural resources.
2. Political location, including country and its subdivisions—with brief indications of the relationships between national, regional and local levels of authority. Attention to pertinent local systems (e.g. government, education, water and sanitation, health) in relation to respective national political loci.
3. Historical location, including colonial background and relation of modern population to historic ones (“indigenous peoples”). Attention to language, land tenure and local political forces in this context.
4. Cultural location, including “traditional values,” daily life, land tenure, community organization, festivals.

CIVIC LIFE: develop comparative data in each of the following areas.

1. Demographic profile: ethnicity, origin, mother tongue, economic status, educational level, occupations.
2. Social organization and attitudes along lines of gender, class, religion, race or ethnicity, or in other locally important areas.
3. Economic profile: leading economic activities: agricultural, commercial, manufacturing, service, transportation, research and development.
4. Government: how are city governments constituted? Organized? Financed? Run?
5. Organization: how is each city divided into communities, neighborhoods or districts, both formally and informally,
6. What economic development strategies are used? How effective?
7. How and what city services are provided and how are they paid for?
8. How do cities identify and solve problems?
9. How do people spend their leisure time? What cultural, sports, recreational activities are sponsored or encouraged by the city?
10. How do citizens see themselves in relation to other cities and the country at large?
11. What are local media outlets? What relation to regional or national (international) ones?

CYCLES: perhaps use a “year in the life of two cities” as a framework for video or school materials.

1. Calendars regulating people’s lives, including not only the global, secular, twelve month “calendar year” used in global commerce, time keeping and communication, but also other types of calendars, such as lunar ones used in religious observances.
2. Different ‘years’ we use, in particular ‘school or academic years’ and “fiscal years.”
3. Cycles of civic or religious holidays or festivals of importance to the life of each city.
4. Daily life—typical routines of typical households (in different sections of each city?). Include household makeup, gender, age, cultural and economic aspects.

NOTE: Could add other questions and/or categories, for example, “ENVIRONMENT.”

LOUISVILLE-TAMALE

LOCATION: Geographic

Louisville, KENTUCKY, USA	Tamale, NORTHERN REGION, GHANA
Central North America	Central West Africa
Temperate climate	Tropical savannah climate
Avg. temp range: -10 to +95F (-20 to +35 C)	Avg. temp range 65 to 105 F, (21 to 40 C)
Four seasons	Two seasons
Spring: Late Mar-late June	Rainy season: May-October
Summer: Late June-late Sept	Dry season : November-April
Fall: Late Sept-late Dec.	.
Winter: Late Dec-late Mar	
Growing season is Spring to early Fall; winter temps too cold, many plants go dormant or die back.	Growing season is during rains, except where crops are irrigated. Dry season has virtually no rain, so many plants die back
Agriculture is important to Kentucky. Crops include corn (maize), soybeans, cattle and tobacco. Fish farming is also important.	Agriculture is central to the economy of the Northern Region. Crops include maize (corn), cotton, cattle, yams, groundnuts (peanuts), sheanuts, cashews, millet and cassava.
Louisville is no longer an agricultural center, but has manufacturing, services, transportation and research facilities.	Tamale is an agricultural and transportation center. It is also an educational and medical center for the Region.

LOCATION: Political

Louisville is an incorporated city with its own governing charter. It encompasses all of Jefferson County. Most administrative and other services are paid through by local taxes, revenues and fees.	Tamale is a Municipal District (on its way to becoming a Metropolitan District) under the Ministry of Local Government and Rural Development. Administration and services are largely financed through the central government.
The Commonwealth of Kentucky is one of the 50 states of the federation of the United States of America. It has its own Constitution and elects its own Governor and Legislature. State administrative and service functions are controlled and financed by Kentucky.	The Northern Region is one of 10 administrative regions into which the Republic of Ghana is divided. The chief executive is the Northern Regional Minister, a political appointee who holds ministerial rank. There is a Regional Coordinating Council with representatives appointed from all 13 districts within the region. Financing and policy mostly come from the central government.
The governor of Kentucky and the Mayor of Louisville do not necessarily belong to the Party of the President of the U.S. City and state elections are not controlled by the government of the U.S.	The Regional Minister and the Municipal (or Metro) Chief Executive are both appointees of the government in power in Accra (the capital of Ghana), although the MCE must be approved by a majority of the largely locally elected Municipal (Metro) Assembly.
Most public services, including education, sanitation, water, health, roads, fire and police are controlled (and financed) either locally or jointly by state and local authorities. Much health care and even education is private.	Most public services, including education, health, roads, fire and police are local subdivisions of national services. The municipal health director, for example, is under the regional director, who is under the Ministry of Health in Accra. The same is true of

	education, etc.
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LOCATION: Historical

U.S. has a predominantly English colonial background; getting their independence through war in 1776 after more than 150 years of colonial status.	Ghana has a predominantly English colonial background, receiving their independence in 1957 after about 60 years under British rule.
The current population of Louisville (and Kentucky), is made up of people whose ancestors came from Europe or other overseas lands during and after the colonial period. Pre-colonial native populations were largely killed or pushed onto reservations in relatively remote parts of the country. There are no reservations in Kentucky.	The current population of Tamale (and the Northern Region) is made up of people whose ancestors lived in what is now Ghana or surrounding territories. Pre-colonial kingdoms and other older autonomous polities still exist. They still have traditionally chosen kings (or equivalent), own most of the land, and command loyalty and prestige at all levels of modern society. Tamale is located in the territory of the Kingdom of Dagbon, the historic home of the Dagomba people.
Land is mostly privately owned, under laws developed from the colonial ones. It is a thoroughly capitalist commodity, bought and sold on the open market.	Land is mostly owned through complex mechanisms largely under the control of older (“traditional”) authorities, usually called ‘chiefs’ in English. While capitalist land practices are encroaching, they are still quite secondary to traditional relations and values.

LOCATION: Cultural

Louisville is a ‘middle American’ city that identifies itself with Southern American culture.	Tamale is a West African city that identifies with Northern Ghana, as against ‘the South.’
The basic culture is ‘modern Western (European)’ with strong American ‘frontier,’ African (American) and successive immigrant elements.	The basic culture is Dagomba, with strong elements of neighboring Gonja, as well as many communities of people originating from southern Ghana or Nigeria or Burkina Faso.
English is the mother tongue of a large majority, although the numbers of non-native English speakers is rising steadily, with Spanish speakers in the lead, as is true in much of the U.S. today. Most native English speakers do not speak any other language well.	English is the language of the schools, national business, news media, courts, administration and the like. It is a second language for almost all Ghanaians. Dagbani is the principal mother tongue of Tamale people. Most people, however, speak more than one language, in fact three or more is common.
Louisville observes the national holidays of the U.S., plus one major local festival, the Kentucky Derby Festival, which takes place in the two weeks leading up to the Kentucky Derby on the first Saturday in May each year.	Tamale observes the national holidays of Ghana, as well as significant Islamic holy days such as Ramadan and Dagomba festivals, including Damba and Bugum. Both the Islamic and Dagomba holidays follow lunar calendars and are not celebrated on the same date each year.

Appendix E – Action Plan Louisville-Tamale

SCI-WBI MDG CITY TO CITY CHALLENGE PILOT PROJECT ACTION PLAN LOUISVILLE

GOALS	TARGETS	ACTIONS	DATE
1. Further the MDGs by developing awareness of and support for them in our region	<ul style="list-style-type: none"> a. Educate ourselves about the UN MDGs and the WBI SCI City-to-City Challenge Pilot Project. b. Develop an effective awareness campaign to educate community partners, Metro leaders, students and the general public about the MDGs and Sister Cities 	<ul style="list-style-type: none"> 1) SCL works with Tamale counterparts and Metro TV to produce a video about Tamale-Louisville and MDGs 2) Community Partners will educate themselves and their organizations about MDGs and Tamale-Louisville through meetings and newsletters. 3) SCL and UNA will seek coverage in regional and UN media. 4) SCL will design an education campaign jointly with UNA and the K-12 schools around SC and MDGs 	
2. Strengthen Sister Cities as a vehicle for achieving MDGs	<ul style="list-style-type: none"> c. Develop the organizational capacity of the Tamale Committee and Sister Cities of Louisville. d. Help other Louisville Sister Cities to plan and implement similar projects 	<ul style="list-style-type: none"> 5) Tamale Committee educates Sister Cities of Louisville Board and membership about Pilot and MDGs 6) SCL use community education aspect of Pilot to improve its own publicity and public relations. 7) SCL and Tamale Committee create model for expanded City-to-City awareness through benchmarking. 8) Tamale-Louisville partners lead workshop during Mayoral Summit to help other Louisville Sisters implement collaboration around achieving MDGs. 	
3. Create a strong partnership with Tamale to further MDG-based development	<ul style="list-style-type: none"> e. Sustainable communications for joint planning. f. Technical exchanges to further Pilot and subsequent projects g. Effective resource development to achieve planned results. h. Ongoing cooperation to achieve agreed on goals through collaborative projects. 	<ul style="list-style-type: none"> 9) SCL collaborates with Sister Cities of Tamale and its community partners to select target MDGs. 10) Get every member of Sister Cities of Louisville and Tamale, and key Community Partners on a working email network through Sister Cities. 11) Recruit technical assistance team for Pilot and beyond 12) Recruit knowledgeable fundraising and resources development people to help with project planning. 13) Collaboratively implement and evaluate the Pilot Project 14) Jointly develop Action Plans for the Pilot period and beyond. 	
4. Expand local	<ul style="list-style-type: none"> i. A sustainable community 	<ul style="list-style-type: none"> 15) Contact community groups and Metro government 	

networks of communications and cooperation with Sister Cities	partnership coordinated by Sister Cities. j. Develop resources and methods necessary to continue cooperative efforts toward achieving the MDGs beyond the Pilot Project	departments with interests paralleling those identified for the project by Tamale and Louisville. 16) Create a partnership consisting of representatives of the interested groups and departments. 17) Create a forum for community groups to develop common goals related to MDGs and SC connections	
5. Expand and strengthen international cooperation based on existing Louisville-Tamale ties	k. Continue strong collaboration with Tamale into the next 25 years. l. Expand opportunities for additional people and groups in our two cities to learn about each other and enter into productive relationships with each other. m. Expand our networks into Kentucky and the Northern Region of Ghana.	18) Use existing Sister Cities ties between Tamale and Louisville to create parallel community partnerships 19) Work together on Pilot and use collaborative mechanisms developed during this period to identify and carry out further development projects geared toward achieving MDGs. 20) Use connections, resources and capacities developed during Pilot to develop and expand existing projects, not necessarily directly connected to MDGs. 21) Collaborate with Tamale to establish a Sister Cities of Ghana.	

CALENDAR OF ACTIVITIES FROM MARCH-DECEMBER 2004

March	April	May	June	July
Project coordinators submit final Action Plan outlines after consultation.	Complete Pilot phase of MDG Sister Cities awareness campaign	Finish all reports for Pilot Louisville Metro TV program airs in Louisville.	SC trip to Tamale to assess Pilot and plan for future activities, Metro TV video airs in Ghana	Report results of Tamale trip at SCI Conference
Sister Cities organizations & community partners approve plans	Prepare for WBI teleconference	Women's coalition initiates action planning	Finalize joint 1-3 Sister Cities of Louisville and Tamale MDG Action Plans	Complete detailed plan for September
Partners agree on implementation activities	Monitor & evaluate awareness campaign	Finalize plans for trip to Tamale; planning with Tamale for activities in	Hold workshop to help develop Ghana Sister Cities.	Work with Community Partners to integrate long term plans

		Ghana.		
August	September	October	November	December
Make final preparations for September Summit	SCL Anniversary Mayoral Summit: includes sessions on MDG cooperation with other Sister Cities	Assess September activities	MDG –SC event with schools? Partners? Fundraiser?	Final report to SCL, SCT Community Partners, & SCI on 1 st year’s work
Final integrated 1-3 plan with Community Partners	Kick off awareness campaign with JCPS	Assist other SCL pairs with Action Plans & video production		
	Publicize SC and MDG thru Summit activities and press coverage			

PILOT PROJECT AWARENESS CAMPAIGN IN LOUISVILLE

TO DO	HOW	WHO	MATERIALS	BUDGET	DATE
SCL educate itself about MDGs and Pilot	Present at General Meeting Use UN and SCI information to prepare materials for SCL and Community Partners	Svetlana and Alyson Project coordinator and Paige			
Educate Community Partners	Make presentations at meetings using prepared materials.	Project Coordinator			
Develop educational materials	Work with Metro TV to produce a series of videos about SC and MDGs, starting with Louisville-Tamale and Goal 7 Upgrade Getting to Know Ghana for Schools program Develop PowerPoint presentation on getting to know Louisville-Tamale for use at community meetings (targeting community leaders) and for fundraising (targeting corporate groups) Work with Community Partners	Metro TV-Matt Schuster; Paige; Susan. Susan Susan			

	to produce articles for newsletters and websites.				
		Paige and Tom			
Develop publicity materials	Work with media to develop a feature story or series on SC, MDGs and Pilot Create effective press releases for events, especially the visit to Tamale and the Mayoral Summit and Anniversary celebrations	Susan and Paige and SCL PR person Paige, PR person, with Susan			
Consider some sort of community awareness campaign (for the Fall)	Events with schools? Fundraiser? Some project around women's issues?	SCL with community partners			
Make presentations for community groups, Metro government agencies and Council, corporations	Develop a list of target groups in conjunction with Community Partners. Contact selected groups to try and schedule presentations. Make presentations	Community Partners “ SCL and Community Partners			

SCI-WBI MDG CITY TO CITY CHALLENGE PILOT PROJECT ACTION PLAN TAMALE

GOALS	TARGETS	ACTIONS	WHO	WHEN
1. Spread awareness of the MDGs and their importance to Tamale development.	a. Develop an effective awareness campaign to educate community partners, Metro leaders, students and the general public about	1) Educate Tamale and about MDG targets for improvement through Pilot.	SC leaders	Nov-Feb
		2) Use local media to make public aware of Sister Cities, the Louisville-Tamale relationship and its relation to Project and MDGs.	PPPCC	April-June
		3) Educate public about synergy between HIPC, GPRS, Tamale and Regional Plans and MDGs.	PPPCC	April-June

	the MDGs, the Pilot campaign and Sister Cities.			
2. Make progress toward achieving MDGs, Targets and Indicators chosen for the Pilot and beyond.	<p>b. Select and make progress toward achieving Pilot goal, target and indicator.</p> <p>c. Select and make plans toward achieving allied goals, targets and indicators for longer term.</p>	<p>4) Select Goal 7; Target 10; Indicator 30 as Pilot focus.</p> <p>5) Select and undertake diagnostic in target communities.</p> <p>6) Plan and carry out education campaigns geared toward improving conditions revealed through diagnostic.</p> <p>7) Develop awareness of and means to mobilize resources necessary to improve conditions in selected communities.</p> <p>8) Study conditions in other Tamale Metro communities, including especially those that can serve as models for self-improvement.</p> <p>9) Publicize the ways that some communities have instituted effective programs for self-improvement in the areas of sanitation, water, wastewater, environment and public health</p> <p>10) Plan and carry out education campaigns relative to selected Goal, Target and Indicator geared to larger metro audiences—especially schools. (Involve School of Hygiene?)</p> <p>11) Support staff capacity-building in sanitation, health, environmental protection and water.</p> <p>12) Carry out continuous monitoring and evaluation of activities.</p> <p>13) Final report on Pilot implementation to WBI and SCI.</p> <p>14) Work with Louisville counterparts, especially women’s groups, to select related targets and indicators under allied Goals 1, 3-6.</p> <p>15) Plan and implement to extent possible, activities to further selected targets and indicators.</p> <p>16) Monitor and evaluate these efforts through Sister Cities.</p> <p>17) Publicize successful efforts and use them as models for future planning and activities.</p>	<p>PPPCC PPPCC/Consultant PPPCC lead</p> <p>PPPCC with women Women with PPPCC</p> <p>PPPCC</p> <p>PPPCC with other partners</p> <p>Consultants</p> <p>Consultants Project Coord.. Women’s coalition, Women’s coal with PPPCC SCT recruit PPPCC/SCT</p>	<p>Nov Jan-Feb April-May</p> <p>April-May April April-June April-June March-May All along June May-June May-September All along Apr-Dec.</p>
GOAL	TARGET	ACTION	WHO	WHEN
3. Strengthen Sister Cities as a vehicle for achieving the MDGs	d. Complete administrative reorganization of SCT and Louisville Committee.	<p>18) Hold elections for officers of SCT and Louisville Committee.</p> <p>19) Set up organizational meeting for Fada N’Gourma</p>	<p>SCT SCT with MCE</p> <p>SCT and SCL with SCI SCT, SCL and SCI</p>	<p>April June</p>

	<p>e. Support the new Fada N’Gourma SC link.</p> <p>f. Develop and expand Sister Cities in Ghana.</p>	<p>Committee (of SCT); appoint founding Co-Chairs.</p> <p>20) Help launch Sister Cities of Ghana organization.</p>		June
4. Expand and strengthen local networks of cooperation with Sister Cities	<p>g. Create sustainable community partnership that is oriented toward gender equality.</p> <p>h. Strengthen member organizations to better carry out their goals of community betterment</p>	<p>21) Encourage formation of a sustainable women’s coalition within partnership, including a secretariat and internal financing of organization.</p> <p>22) Support creation of a coalition secretariat in conjunction with IMC and SCT</p> <p>23) Conduct capacity-building workshop for PPPCC and/or member organizations in conjunction with IMC and SCT.</p>	<p>Women Leaders, with SCT, IMC</p> <p>Tamale <i>Lang-meh</i> PPPCC</p>	<p>Nov</p> <p>April-June</p> <p>April -June</p>
5. Expand and strengthen international cooperation based on existing Tamale-Louisville ties.	<p>i. Create sustainable collaboration with Sister Cities of Louisville and SCI to enable us to select and carry out further MDG-related projects.</p> <p>j. Expand development activities to encompass regional and national arenas</p>	<p>24) Create a permanent community partners link committee or officers in Tamale and Louisville Committees with support of SCT and SCL.</p> <p>25) Work with Sister Cities of Ghana and Burkina Faso to expand launch regional Sister Cities initiatives in cooperation with Sister Cities of Louisville, Sister Cities of Kentucky and Sister Cities International.</p> <p>26) Hold workshop/conference for Sister Cities and aspiring Sister Cities in Ghana and Burkina Faso.</p>	<p>SCT: Louisville Committee; SCL: Tamale Comm.</p> <p>SCT, SCL, Burkina Faso SC office; Min Local Govt.</p> <p>“</p>	<p>June</p> <p>May-Sept</p> <p>June.</p>

Implementation Worksheet for Primary Pilot Project Goals, Targets and Indicators Activities.

Goal 1: Spread awareness of MDGs and their importance to Tamale development. Target a: Develop an effective awareness campaign to educate community partners, Metro leaders, students and the general public about the MDGs, the Pilot campaign and Sister Cities. Actions: 2) Use local media to make public aware of Sister Cities the Louisville-Tamale relationship and their relations to the Pilot Project and the MDGs; 3) Educate the public about synergy between HIPC, GPRS, Tamale and Northern Regional Plans, and MDGs.

TO DO	HOW	BY WHOM	MATERIALS	BUDGET	COST	DUE	DONE
Work with Sister Cities of Louisville to produce materials comparing our two cities and their linkage on the occasion of its 25 th anniversary.	Develop a comparative framework as a basis for producing video and text materials for use in both cities.	Program Coordinators; Tamale and Louisville Committees.	Published data, photographs and other AV materials. Video, audio and print publishing tools and supplies.			June	
Work with local planners and educators to develop materials about relation between local, regional and national plans, and MDGs.	Use existing plans and goals' documents along with photographs and other AV materials to produce information materials for media and schools use.	Program Coordinators; Tamale and Louisville Committees along with curriculum consultants.	Published data, photographs and other AV materials. Video, audio and print publishing tools and supplies.			June-September	
Develop effective media campaign for Ghana, focusing on Tamale and Northern Region in relation to MDGs, development and Sister Cities..	Work with local and national media (FM stations; Accra TV) to design and effective series of programs in both English and Dagbani.	PRO of SCT and TAMA; Information sub-committee of Louisville Committee.	Published data, photographs and other AV materials. Audio and video production costs. Air time.			April-June	

Goal 2: Make progress toward achieving MDGs, Targets and Indicators chosen for the Pilot and beyond. Target b. Select and make progress toward achieving Pilot Goal, Target and Indicator. Actions: 6) Plan and carry out education campaigns geared toward improving conditions revealed through diagnostic.

7) Develop awareness of and means to mobilize resources necessary to improve conditions in selected communities. 8) Study conditions in other Tamale Metro communities, including especially those that can serve as models for self-improvement. 9) Publicize the ways that some communities have instituted effective programs for self-improvement in the areas of sanitation, water, wastewater, environment and public health. 10) Plan and carry out education campaigns relative to selected Goal, Target and Indicator geared to larger metro audiences—especially schools. (Involve School of Hygiene?)

TO DO	HOW	BY WHOM	MATERIALS	BUDGET	COST	DUE	DONE
Increase awareness on sanitation-related diseases in three targeted communities by promoting proper use of public and household toilets (including hand washing).	Organize community meetings through local chiefs to sensitize residents.	PPPCC members, especially <i>Lang-meh</i> Women's Coalition and sanitation staff.	T-shirts for PPPCC team and village leaders. Flash cards and posters				
Increase awareness in Metro Tamale of the importance of hand washing to good health.	Radio drama TV drama Posters in schools and around town.	Local drama troupes recruited by PPPCC programming	Props and costumes Poster materials			April-June	
Increase awareness of and desire	Cleanest community	Organized by	Posters, ads and			June	

for neat and clean surroundings in the community.	contest. Promote the contest on radio and by posters.	PPPCC and Metro Health Inspection Department	prizes.				
Announce TAMA initiatives for each community, and who is sponsoring and when. Include discussion of what resources will be required from the community to activate these improvements.	Team visits village to make presentation after mini-workshop how to develop needed resources and manage new installations	SCT, IMC and TAMA team, plus team from a village that has successfully improved itself through community income generation and management.	Posters; donated materials for new toilet, soak away or water facility.			April-May	

Goal 2. Make progress toward achieving MDGs, Targets and Indicators chosen for the Pilot and beyond. Target b. Select and make progress toward achieving Pilot Goal, Target and Indicator. Action 11. Support staff capacity-building in sanitation, health, environmental protection and water.

Hold capacity building sessions for interested staff of relevant departments.	Bring in expert assistance requested by staff.	Consultants chosen by departments in question.	Internet or published resources.			March-June	
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Goal 2: Make Progress toward achieving selected MDG(s), Targets and Indicators chosen for the Pilot and beyond Target c Select and make plans toward achieving allied goals, targets and indicators for longer term. Actions: 14) Work with Louisville counterparts, especially women's groups, to select related targets and indicators under allied Goals 1, 3-6. 15) Plan and implement to extent possible, activities to further selected targets and indicators. 16) Monitor and evaluate these efforts through Sister Cities. 17) Publicize successful efforts and use them as models for future planning and activities.

Increase awareness on consequences of poor wastewater management for health of community.	Organize community meetings through local chiefs to sensitize residents	PPPCC members, especially <i>Lang-meh</i> Women's Coalition, health and sanitation staff.	T-shirts for PPPCC team and village leaders. Flash cards and posters			April-May	
Increase awareness of causes of under five mortality related to sanitation, especially diarrhea and malaria.	Trained teams teach about waste water & disease, especially diarrhea & malaria.	Women's coalition, with community health nurses.	Try to get donations of bed nets; posters, flash cards.			April-May	
Educate the public on child healthcare: exclusive breast-feeding, complimentary feeding practices, immunization, and maternal	Women-to-women teams visit villages, second cycle schools; market places...	Women's coalition	Posters, flash cards			June-September	

health.							
Promote capacity building for SCT and other interested community partners	Ask experienced people to help develop organization itself.	Local experts, that is persons with excellent experience and good teaching skills.	Internet or published resources. (Donate to Northern Regional Library after use.)				
Improve the ability of SCT, TAMA and community partners to ID & mobilize resources.	Hold a workshop.	Leaders from successful NGOs.					

Goal 3 Strengthen Sister Cities as a vehicle for achieving the MDGs. Targets d.-f. Actions 18-20.
To be determined

Goal 4. Expand and strengthen local networks of cooperation with Sister Cities. Target g.-h. Actions 21-2
To be determined

Goal 5. Expand and strengthen international cooperation based on existing Tamale-Louisville ties. Targets i.-j. Actions 24-26.
To be determined

Appendix F – Monitoring and Evaluation Report Tamale

Introduction

This is the first report produced by the Monitoring and Evaluation consultant engaged in the Millennium Development Goals City to City Challenge Program between Tamale Ghana and Louisville, USA. This report covers monitoring and evaluation activities in Phases 1 and 2 of the project.

Overview of the Project

The goal of the pilot project is to develop and begin implementing an integrated five-year action plan for Louisville-Tamale co-operation towards achieving the Millennium Development Goals. Tamale has chosen Millennium Development Goals number 7, which is to ensure environmental sustainability. Within this goal there are several targets including to half by 2015 the proportion of people without sustainable access to safe drinking water and basic sanitation. Several other goals that relate to environmental health and gender are to be included in the long-term plan. These goals include: to promote gender equality and empowerment of women; reduce child mortality; improve maternal health; and combat HIV/AIDS, malaria and other diseases.

The Project is structured in 5 Phases as follows:

Phase 1	Develop awareness and begin participation in the project
Phase 2	Diagnostics: Establish benchmarks for the chosen goals, targets and indicators
Phase 3	Develop action plans
Phase 4	Implementation of part of the action plan both in Louisville and Tamale
Phase 5	Public presentation of the project via teleconference April 6 th , 2004

Role of the Monitoring and Evaluation Consultant

The overall purpose of the monitoring and evaluation is three fold:

- To provide information for decision making and improved project management
- To demonstrate results
- To empower communities and other stakeholders

The terms of reference for the M&E consultant were developed jointly by Sister Cities International and the World Bank Institute and consist of the following tasks:

- Record flows of information to various stakeholders in the community during the pilot through use of monitoring and evaluation tools
- Write a narrative report for each of the five phases of the project focusing particularly on transparency – availability and access to information, accountability – use and application of information and inclusion and participation
- Produce a final report that will supply Sister Cities International and the WBI with necessary information and feedback on any actual and/or potential bottlenecks and problems to be identified and overcome before becoming constraints for future CDD projects in Tamale

Phase 1 Develop awareness and begin participation in the project

This is the first Phase of the Project and was completed early in 2004. Monitoring was conducted with participants and chairpersons of the committees. An interview tool was developed and used. A copy of the tool and all responses is found in Appendix 1.

Preparation

The M&E consultant reviewed all available documents provided by the Project Co-ordinator, Mr. Haroon to ensure a good understanding of the project's goals and objectives as well as the operational structures.

An interview guide was developed to be administered by the research assistant. The Project Co-ordinator was contacted for a list of names of persons on committees.

Activities

Meeting minutes were reviewed and interviews were held with the following persons:

Hajia Adisa Munkaila	Chairperson, Women's Coalition Group
Fati Mankaila	Member of the Education Committee
Mariam Achil	Member of the Woman's Coalition Group, Business class
Adam Mohammed Baba	Municipal Co-ordinating Director
Mohammed Haroon	Secretary to the PPCG Education Committee
Asumah Iddi	Member of the Sanitation Committee
Akwetey Sampson	Chariman of the Sanitation Committee

Findings

In Phase 1 there were a series of meetings resulting in a decision to participate in the Sister Cities project. An organisation called the Primary Project Partners Co-ordinating Committee (PPPCC) was formed.

All persons interviewed had a very good understanding of the overall objectives of the Sister –Cities project: sharing, mutual understanding, partnership, promotion of relationships, create improvements. No one was able to articulate the Millennium Development Goals, although one respondent did mention sanitation.

All respondents identified with the PPPCC, indicating there is a two-way flow of information between their organisation and the co-ordinating committee. All persons interviewed felt involved in decision making.

The Assembly taking into consideration people's backgrounds and interests as it is related to sanitation and water selected committee members. One shortcoming of the committees were the number of women members. Two exceptions were the Women's Coalition committee which is essentially women and the education committee that is about 50% women. Other committees reported a gender imbalance.

Information is shared through subcommittee meetings, informal meetings, participation in the PPPCC, letters and announcements,

50% of the respondents said they had no formal relationship with the three selected communities. The others indicated they were involved in the selection, animation and sensitisation of the communities.

Transparency

Transparency includes the availability and access to information.

Our findings suggest that subcommittees do have access to information, although the most common means of sharing the information is through informal meetings.

Goals of the project were not verbalised by 50% of the persons interviewed suggesting that they may not have been disseminated broadly enough.

Accountability

Accountability includes the use and application on information. As this is the first phase of the project there is not enough information to determine the level of accountability.

Inclusion and Participation

Several of the committees do not have women members. As this is the beginning of the project the involvement of women on committees has the opportunity to be increased.

Recommendations

1. The overall goal and objectives of the project be communicated in writing to all members of the PPPCC and subcommittees.
2. The sanitation committee seek to recruit several women members.
3. Consideration be given to having a representative of each of the three selected communities on the PPPCC.
4. Schedule of meetings be readily available for all committee chairpersons.

Phase 2 Diagnostics: Establish benchmarks for the chosen goals, targets and indicators

This report has been prepared before the Monitoring and Evaluation Consultant has had an opportunity to review the report on the diagnostics. Finding as a result of the review of the diagnostics report will be incorporated in subsequent M&E reports.

The comments below are a result of the M&E research assistant observing data collection activities in the field, and interviewing respondents in two of the three selected communities.

Preparation

A meeting was held with the Project Co-ordinator to determine the schedule for the baseline data collection.

A monitoring tool was developed to be administered by the research assistant. This is found in Appendix 2.

Data had already been collected in the urban community. The research assistant observed the data collection in the rural community, Tugu and the peri-urban community of Gbambaya.

Activities

The research assistant accompanied the diagnostics team to the field. He observed the data collection process and interviewed a number of respondents following the data collection exercise.

Findings

All M&E interview responses are found in Appendix 2. In both communities they were aware of the visit in advance and the elders, opinion leaders and other senior people had been informed. The diagnostic team was comprised of all male interviewers, three in one community and four in the other.

The community chairman selected respondents. In Tugu the community was divided into three parts and each part had ten respondents selected. In Gbambaya, there did not appear to be a division of the community prior to the selection of respondents.

The majority of the respondents were men, 20 male, 5 female in Tugu and 30 male, 15 female in Gbambaya. Men interviewed were head of the household. It was reported that most of the women had gone out to the farms. The M&E research assistant noted that when he did interview several of the women, men close by would often interject and the woman would then withdraw. No young adults or children were interviewed. Men and women were generally interviewed separately by the diagnostics team.

All diagnostic data was collected through individual interviews. Focus group discussion and other participatory methodologies were not used.

The local language was used and there was no difficulty for the respondents to understand the questions and likewise the diagnostics team to understand the responses. All responses were recorded in English. No resistance was observed from any of the community members. The interview took approximately 10 minutes with each person. It was reported to the M&E researcher by 50% in Tugu and 33% in Gbambaya that they wanted to say something else and did not have the opportunity.

All responses were accepted and recorded on the diagnostics interview sheet. Respondents were not given any feedback at the end of the data collection but were told the data would be used later.

In both communities it was observed that the team went back to the chief, elders or opinion leaders to thank them for their co-operation and assistance at the end of the data collection activities.

Transparency

Transparency includes the availability and access to information. In both communities residents were aware of the exercise, had been informed in advance and all interviews took place in an open setting with due respect shown to the inhabitants.

Accountability

Accountability includes the use and application on information. The information collected during this phase of the project will be used to develop the action plan. M&E assessment on this criteria will be completed at a later date once the diagnostics report has been reviewed.

Inclusion and Participation

The majority of respondents were male and elderly. No young people or children were interviewed.

All respondents participated willingly.

Recommendations

1. Diagnostics data collection use a variety of participatory methodologies such as focus group discussions, community mapping, transect walks, observation in addition to the structured questionnaire.
2. Criteria for respondents be developed to ensure all sectors of the community are included as respondents
3. Enough time be allocated for the data collection to ensure quality of data and probing if required
4. A special effort be put forward to ensure women as effective respondents
5. Data collection teams should be gender balanced

Appendix G – Diagnostic Tool Casablanca

XV. Literacy questionnaire

1. Investigator
.....

2. District

Bernoussi ____ Sidi Moumen ____

3. Date

Enter the date:

4. Age
.....

5. What is your level of education?

0 ____ EC ____ 1 ____ 2 ____ 3 ____ 4 ____ 5 ____ 6 ____

6. Gender

Male ____ Female ____

7. What is your permanent placeme of residence?
.....

8. What is the name of your neighbourhood?
.....

9. What type of residence do you live in?

Modern Moroccan house ____ Apartment ____ Shanty ____

10. Have you ever moved homes?

Yes ____ No ____

11. If yes, what type of residence did you live in previously?

Modern Moroccan house ____ Apartment ____ Shanty ____

12. What is your family situation?

Single ____ Married ____ Widowed ____ Divorced ____

13. How many children do you have?
.....

14. How many people are in your care?
.....

15. How many brothers or sisters do you have?
.....

16. Where were you born?
.....

17. What is your profession?
.....

18. Where do you work?
.....

19. What is your principal mode of transport?

Foot ____ Bicycle ____ Motorcycle ____ Bus ____ White Taxi ____ Red Taxi ____

20. Where was your father born?
.....

21. What is your father's profession?
.....

22. Where was your mother born?

.....
23. What is your mother's profession?

.....
24. What is your maternal language

Berber _____ Arabic _____

25. What languages do you speak?

Arabic _____ Berber _____ French _____ English _____ Spanish _____

26. What languages do you speak at home?

Arabic _____ Berber _____ French _____ English _____ Spanish _____

27. What languages do you study in?

Arabic _____ Berber _____ French _____ English _____ Spanish _____

28. What languages do you speak at work?

Arabic _____ Berber _____ French _____ English _____ Spanish _____

29. Do you read?

Yes _____ No _____

30. If yes, in what languages?

Arabic _____ Berber _____ French _____ English _____ Spanish _____

31. If yes, what type of material?

Newspapers _____ Books _____ Journals _____ Women's magazines _____ Comics _____

32. What type of books do you read?

Comics _____ Poetry _____ Plays _____ Religion _____ Politics _____ Culture _____ Other _____

33. If no, are you taking any literacy courses?

Yes _____ No _____

34. Of these activities, which do you perform?

Walking _____ Arts/Crafts _____ Television _____ Cooking _____ Traveling _____ Camping _____

35. Which programs do you watch the most on television?

Science _____ History _____ Culture _____ Religion _____ Variety/game shows _____ Animal _____ Politics

_____ Sports _____ Erotic _____ Social _____ Documentary _____ Western films _____ Moroccan films _____

Egyptian films _____ Indian films _____

36. Do you have any sporting activities?

Yes _____ No _____

37. If yes, what kind?

Athletic _____ Soccer _____ Basketball _____ Volley _____ Martial Arts _____ Boxing

_____ Weightlifting _____ Other _____

38. What languages do you use during sports?

Arabic _____ Berber _____ French _____ English _____ Spanish _____

39. Do you have any social activities?

Yes _____ No _____

40. If yes, what languages do you use during these activities?

Arabic _____ Berber _____ French _____ English _____ Spanish _____

41. What written languages are used in these activities?

Arabic _____ Berber _____ French _____ English _____ Spanish _____

42. Do you have any cultural or artistic activities?

Yes _____ No _____

43. If yes, what kind?

Theatre ___ Music ___ Dance ___ Painting ___ Other _____

44. What language do you use during these activities?

Arabic ___ Berber ___ French ___ English ___ Spanish _____

45. What can you read in the following text?

All the text _____ Parts of the text _____ Few words _____ Few letters _____ Nothing _____

46. What do you understand of the following text?

Nothing _____ The words _____ The sense _____ The implication _____

47. What do you see (sign)?

.....

48. What do you see (indication)?

.....

49. What numbers do you remember from the following text?

Nothing ___ One number _____ Two numbers _____ Three numbers _____ **Four numbers** _____

50. What calculations are you able to do?

Nothing _____ Addition ___ Subtraction _____ Multiplication ___ Division _____

51. What do you understand of this schematic?

Nothing _____ Percentages _____ Growth _____ Comparison _____

52. Do you have a regular income?

Yes _____ No _____

53. If yes, what is your monthly income?

Less than Dh 300 _____ Between Dh 300 and Dh 1000 _____ Between Dh 1000 and Dh 2000 _____
Between Dh 2000 and 3000 _____ Between Dh 3000 and Dh 5000 _____ More than Dh 5000 _____

54. If no, what is your means of subsistence?

Family support _____ Odd jobs _____ Microenterprise _____ Other _____

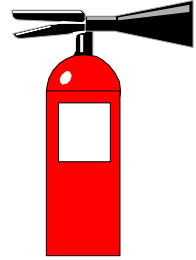
55. If other, please be precise.

.....

What can you read in the following text?

What do you understand of the following text?

What do you see ?



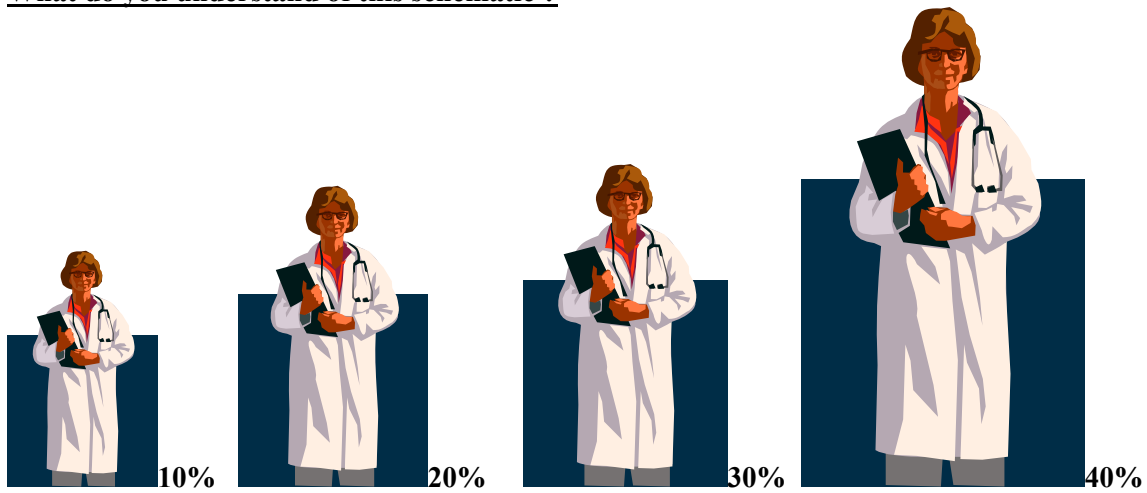
What numbers can you identify?

5
83
694
4921

Which calculations are you capable of doing?

$15 + 3 =$
 $19 - 6 =$
 $7 * 3 =$
 $12 : 3 =$

What do you understand of this schematic ?



Appendix H – Diagnostic Report Casablanca

Due to the length of the final diagnostic report, it will be attached as a separate file. Below is the interim diagnostic report.

Jamal Khalil
Sociologist

Consultant

F. Literacy Study April 1 to May 7 2004

Report – First stage – April 1 to April 21, 2004

Objective

- Develop a profile of people with low education levels residing in targeted districts
- Determine the literacy levels of this population
- Produce ideas about the actual education system and its effectiveness
- Better understand the scholastic discrepancies of the targeted population
- Make several practical recommendations

Process

Once the contract is signed, I began work on a sampling study as well as recruiting investigators to carry out the study.

The districts in Casablanca selected for the study are: Bernoussi and Sidi Moumen. They were chosen due to their density, their size and the heterogeneous nature of their populations.

The investigators chosen are current students or former students. They have both practical experience and experience in the field.

Once the draft version of the questionnaire was completed, I reviewed it twice resulting in a second and third version of the questionnaire.

The third version was subjected to review and approval by the investigators who made corrections and recommendations before the first focus group meeting on April 11. An Arabic version of the questionnaire was produced by that meeting date as well. The translation was checked for consistency and refinement of Arabic words and expressions/idioms.

After the focus group meeting on April 11, the pre survey suggested a need for a 3 stage questionnaire for each investigator to complete by April 14.

At the same time, I finalised the sampling criteria and the compensation rates for each investigator per study completed. I also produced a 4th and 5th version of the questionnaire. The 5th version underwent a few changes to detail at the focus group meeting on April 16th.

An advance was given to the investigators at this focus group meeting

The work schedule for the investigators is as follows:

April 11	Focus group meeting
April 11	Beginning of the pre study
April 14	End of the pre study
April 15	Verification
April 16	Focus group meeting
April 16	Beginning of the study
April 24	End of the study
May 26	Meeting for final analysis
End of May	Meeting for completion post study

The work guidelines for the investigators given at the focus group meeting are as follows:

- Each investigator should complete and return the completed questionnaires according to the schedule so the data can be processed and analyzed rapidly.
- The questionnaires should be returned to the Atlas School (7 Rue Mallarme val Fleuri, Casablanca. Tel: 022 25 65 39)
- If a questionnaire is not completed correctly or contradictory, the investigator will have to redo it.
- Incomplete questionnaires will be voided
- Each investigator will perform interviews in Sidi Moumen and Bernoussi
- Each investigator will have 51 questionnaires to complete
- Each investigator will be paid DH25 for each valid questionnaire completed
- Questionnaires returned after April 25 will not be considered
- Each investigator will have an exact quota to fulfill, no more no less.

Sampling and Methodology

The sampling sum for this study is 300 people; the investigators will perform 350 interviews in the event certain questionnaires are incomplete and so we do not lose time.

The interviewees will be asked 55 questions
The method chosen is one of random sampling
The questionnaires will be administered over a period of 8 days.

The variables used to determine the sample group are the following: gender, district and employment.
The sample pool is based on a 1994 census

According to the 1994 census. The population ratios are as follows:

The district ratios are: Bernoussi 3/5 Sidi Moumen 2/5

The gender percentage is 50%

The percentage of those employed is 33% and unemployed is 66%

Two discriminatory variables chosen are the 15 – 24 age range and the level of education: no schooling to 6th grade of primary school

With regard to the questions posed, 22 focus on oral and written language, numbers, signs and letters of which 7 questions will be qualitative. 11 focus on space and dwellings and 7 on family structure, the other questions are related to social class and behaviour.

The quotas for each investigator are as follows:

- 3 Bernoussi + Male + employed
- 7 Bernoussi + Male + unemployed
- 3 Bernoussi + Female + employed
- 7 Bernoussi + Female + unemployed
- 5 Sidi Moumen + Male + employed
- 10 Sidi Moumen + Male + unemployed
- 5 Sidi Moumen + Female + employed
- 10 Sidi Moumen + Female + unemployed

Casablanca, April 18 2004

Appendix J – Action Plan Chicago-Casablanca

CHICAGO-CASABLANCA ACTION PLAN FOR PILOT PROJECT				
ACTION	OBJECTIVES	RESULTS	WHO	WHEN
Project organization in Chicago	<ul style="list-style-type: none"> • Create a Literacy Committee (SCI Chicago – Casa committee, representation from literacy, education, international management & marketing organizations) • Define general purpose and objectives of pilot and city-to-city collaboration; identify milestones and timelines; identify MDG goal selected • Identify literacy issues in Chicago and share current status with Casablanca • Generate questions and feedback for Casablanca counterparts • Identify resources for Casablanca on program elements • Collaborate with Casablanca on the implementation plan for increasing literacy and expanding services 	Formation of Literacy Campaign Committee for Chicago – Casablanca Sister Cities	See attached contact list Literacy Campaign Committee Co-chairs: Dana Rice Judy Klikun	March – April, 2004 April 1, 2004 first meeting
Project organization in Casablanca	<ul style="list-style-type: none"> • Introduce SCI WBI pilot to Casablanca Committee • Identify MDG goal ... Goal #2 and Indicator #8 • Form a Literacy Committee with members representing NGO's, government leaders, researchers, sociologists and activists • Define the scope of literacy issue in two low income areas • Conduct a diagnostic in two Casablanca communities; Sidi Moumen & Bernoussi • Develop a literacy program design to be implemented in Casablanca 	<ul style="list-style-type: none"> • Formation of Casablanca-Chicago Sister Cities Committee, Literacy Commission • MDG Literacy Project presented to Casablanca NGO's • Chicago Committee hires research consultant • Casablanca officials agree on target research areas 	Commission members Casablanca officials Casablanca Social Science research assistants	March - April, 2004
Diagnostic	<ul style="list-style-type: none"> • Define the purpose of diagnostic 	<ul style="list-style-type: none"> • Profile of target 	Casablanca	May, 2004

	<p>II) Meet Executive Steering Committee counterparts as well as the corporate, government and volunteer representatives who support the literacy initiative.</p> <p>III) Meet with the NGOs involved in the literacy initiative to:</p> <ul style="list-style-type: none"> • better understand the local needs and issues, and identify what has worked in Casablanca to promote literacy • gain knowledge about the grass roots organizations involved • investigate ways that have been used to reach and engage the 15-24 year old population. <p>IV) Draft elements of the literacy program design and a plan for implementation of expanded literacy services in Casablanca.</p> <p>V) Tour the neighborhoods involved in the pilot to better understand the environment in which participants live, play and work.</p> <p>VI) Meet with sociologist Dr. Jamal Khalil (and possibly his team) to better understand the challenges, survey results and discuss their views on the best hooks and methods for improving literacy in both Casablanca neighborhoods.</p> <p>VII) Visit Rabat and meet with NGO's that are effective in improving literacy among women.</p> <p>VIII) Plan for the study tour in Chicago .</p>	<p>demographics, behavior patterns, attitudes and skills</p> <ul style="list-style-type: none"> • Broaden perspective of visiting team • Gain knowledge of effective, quality literacy projects • Create the draft of a long term action plan • Identify elements for program design and implementation • Draft objectives for and plan the elements of the Study Tour to US schedule in July 		<p>July, 2004</p>
		<p>Complete long term action</p>	<p>Boubker Mozoz,</p>	<p>July, 2004</p>

Study Tour to US	TBD based on results of trip to Casablanca	plan and program implementation plan	Mohamed El Amine Moumine, and Dr. Jamal Khalil. Chicago Literacy Campaign Committee	
Capacity Building/Training in Casablanca	TBD based on results of trip to Casablanca and Study Tour to US.	Be ready to begin the program implementation plan	Casablanca – Chicago Literacy Committees	
Fundraising	<ul style="list-style-type: none"> • Develop plan for literacy program design, implementation and expanded services • Identify existing resources (people, projects, research etc.) available in Casablanca • Identify existing resources (people, projects, research) available in the US • Create a budget with objectives & milestones • Identify sources for funding the Casablanca literacy initiative... government, corporate and private • Develop marketing strategies to reach potential funders and gain support in the US and Morocco • Present plan to Government of Morocco, Municipal or National agencies and ministries • Apply for funds • Develop a plan for funding sustained literacy efforts and expanding impact 	<ul style="list-style-type: none"> • Create a budget reflecting needed funds • Contact potential funding sources • Secure funds for the literacy initiatives in Casablanca 	<p>Casablanca Literacy Commission</p> <p>Chicago SCI Casablanca and Literacy Committees</p> <p>Sister Cities International</p>	<p>June, 2004 – September, 20 04 for immediate funding</p> <p>12-24 months to develop sustained funding</p>

Appendix K – Monitoring and Evaluation Report Casablanca

I. Introduction

During the Chicago Week in Casablanca and following the initiative of the World Bank Institute and Sister Cities International, the local NGOs working in the field of literacy, sister cities committee members from both Chicago and Casablanca, Casablanca local government officials and World Bank Institute representatives met at Dar America-Casablanca and decided to launch a pilot program on Literacy in Casablanca. The aim of this program is as follows:

- Organize a survey on literacy rate of 15-24 year olds in poor areas of Casablanca.
- Communicate data and findings of the survey allowing good decision making for future development projects.
- Design qualitative research to identify and understand motivations of the group for overcoming their literacy issues (Focus Groups, Personal Interviews, etc.)

While designing the current pilot study, several basic methodological decisions have been made. They concern the selection of the social variables, the sampling the target population, the manner of collecting the empirical data and structuring the interview questionnaire, the selection of the research team and the administration of the interviews.

1. The Social Variables

1.1 Dwelling Area

In the present research, the dwelling area has been taken as a starting point to establish the socioeconomic status. This decision has not been taken arbitrarily but receives further support from the social structure and the housing system of the two target districts under investigation: Sidi Moumen and Hay Bernoussi. The decision also coincides with the social stratification proposed by the National Censuses (1982, 1994) and by some socio-geographic and urban studies carried out in Casablanca (see Adam 1968, Escalier 1981, and Benzakour 1983; see Appendices I and II).

Thus, the dwelling areas in the target districts can be divided into three distinctive dwelling zones, depending on the socio-cultural structure of each zone: “zone maison-economique” (ZME) “working-class dwelling areas”, zone bidonville (ZB) “slums areas”, “zone immeuble” (ZI) “apartment houses areas”. Each of these dwelling zones has its architectural peculiarities.

1.1.1 Zones Maison Economique

Communities in ZME are smaller social groupings to which people feel they belong. These communities have strong territorial attachment and a clear sense of localism. The members of these communities very often share similar social networks and show mutual social solidarity.

In these dwelling areas *Derb* “the district/street” is the public arena of the small community. It is the extension of the home. Women often sit on their door-sills doing household tasks or talking to each other. Small children play in the street and run errands for almost anyone in the neighborhood. *Derb* is the scene for public quarrels, weddings, and funerals. Everyone is known and every family is assigned a nickname often related to the origin or to the occupation of the family breadwinner. Strangers are often asked by one person after the other about the family or the person

they are looking for. The inhabitants of *Derb* are considered to be members of the extended family, and the notions of solidarity, loyalty and mutual-respect among people are regarded as social values.

Concerning the architectural aspects, ZME are only brick houses, two or three storeys tall with one or two small apartments on each floor. The façades usually have very simple decoration and except for the main arterial roads, there are no pavements, though the streets are wide enough for the movement of vehicles. This architectural style is qualified by the colonial civil-engineers (cf. Prost 1928, Ecochard 1955) as “neo-traditional”, because it is meant to reconcile the traditional aspects of houses in the old Moroccan *medinas* “cities” with the modern infra-structural equipment of the modern city (Dethier 1970:8).

ZME are also known for their high demographic density --more than ten thousand inhabitants per square kilometer. Before the 1970’s, a single family might have occupied an entire building, but with the proliferation of the population, families of three to ten members live in one or two-room flats. Consequently, space is rigorously organized to cope with the situation.

1.1.2 Zone Bidonville

In ZB most of the houses are dilapidated and lack adequate plumbing and running water. The inhabitants of slums have very low incomes; several families may live in one dwelling unit, which explains the high demographic density in these areas. Surprisingly enough, some families living in slums may have color TV, satellite receiver and a refrigerator... The occupants of ZB share exactly the same solidarity and social values as the inhabitants of ZME.

1.1.3 Zone Immeuble

ZI were originally designed for civil servants and employees to live in. Many Moroccan low-middle class categories have settled in these areas. Quite often, a typical building in ZI, in Sidi Moumen and Hay Bernoussi, is four to six floors, usually without a lift and on each floor there are two to four flats. Each flat has a lounging room, a separate *salon* for formal receptions, bedroom, modern bathroom, and kitchen with an oven and a refrigerator. Streets in ZI are relatively larger than those in ZME, with pavements and shop-windows. Social ties between the inhabitants are less apparent than in ZME, especially outside the apartment-building.

1.2 Occupation

In the present research, occupation is taken as an “objective” criterion to establish the socio-economic status of the informants. Thus, following the occupational classification proposed by Escalier (1981, also adopted in the National Censuses of 1982 and of 1994), the population is divided into two major occupational groups : active (employees, workers, small business owners, handicraftsmen,...) and inactive (see Appendix III).

The Distribution of the Population by Occupation

	N° of informants	%
Active	112	33,73
Non-Active	220	66,27%

1.3 The Sex Variable

In the present pilot work, the sex variable is selected to test its importance in relation to illiteracy problem. The hypothesis here is that girls are more affected by illiteracy than boys, and this is due to some socio-cultural reasons. The table below shows the distribution of the target population with respect to the sex variable.

The Distribution of the Population by Sex

	N°	%
Males	167	50,3%
Females	165	49,7%
TOTAL	332	100%

2. The Population

In this pilot study, careful consideration has been given to the size of the population, particularly to the representativeness of the sample and to the choice of the informants. But given the very limited time available to the research team it was neither possible nor necessary to interview a large population from the target districts .

To avoid the under-representation of the social categories defined in the design, the diagnostic consultant (DC) adopted the goal-oriented-sampling method, which is often more efficient to obtain a representative sample for predetermined social categories than random sampling (see Wolfram and Fasold ,1974). The table below illustrates the distribution of the target population according to the design of the present research project.

The Distribution of the Population by Sex, District, and Occupation (N 350)

	Active		Inactive		Total
	Male	Female	Male	Female	
Hay Bernoussi	21	21	49	49	140
Sidi Moumen	35	35	70	70	210
Total	56	56	119	119	350

3. The Middleman

The pre-pilot study proved that the informants were often suspicious about the researchers' intentions and became, as a result, reluctant to talk to them about their own private life. To solve these problems, the investigators were advised to use a *middleman* while conducting the research. A *middleman* is a term originally used in ethnographic research to refer to the person who serves as an intermediary between the researcher and the informant. The *middleman* is often a friend, a colleague or a member of the family who necessarily has strong social ties with informant (a friend, a relative or an acquaintance of the informant). It is the *middleman* who would call an informant and ask if he would be willing to talk to the researcher , or introduce him to someone and explain what he is interested in. The use of this strategy is

highly recommended in anthropological and ethnographic literature. Spradley and Mc Curdy (1972), for instance, strongly argue that

... working through a middleman has a very important advantage besides getting in touch with an informant. It places the informant under a social obligation to trust you... Time and again we found that those who make contact with an informant through a middleman have the easiest time establishing trust and gaining cooperation.

(Spradley and Mc Curdy 1972:49)

4. The Interview

In the present research great care has been given to the data elicitation techniques. Fifty-five questions were used in a series of interview situations and each interview took between 30 to 40 minutes. The questionnaire itself was written in French, but the interviews were all conducted in Moroccan Arabic. The ultimate goal of the interview was to guide the face-to-face interaction between the interviewer and the informants towards eliciting the target information and obtaining the specific answers proper to the questions themselves.

The design of the questionnaire was inspired from the principal dimensions of the literacy survey questionnaire designed by the World Bank Institute. Obviously, the DC took into consideration the socio-cultural peculiarities of the population under investigation. Thus, 22 questions are related to the oral and written language skills (including numbers, signs and letters); 7 questions seek to illicit qualitative information; 11 are designed to determine the dwelling areas of the informants; 7 concern the social structure of the target families and the remaining 8 are related to the social stratification and social behavior of the population. (for further illustration, see Appendix I)

5. The Research Team

The research project was carried out by the DC and seven of his assistants, two girls (Fatima and Zhou) and four boys. Four of the assistants were chosen by the DC himself; they had already worked under his direction in previous research projects. The remaining three were recommended by the Chicago-Casablanca committee. The seven assistants have had some experience as fieldwork researchers, but some of them have relatively less experience than others. The table below provides the profile of the assistants:

The Profile of the Research Assistants

First name	age	N° of Field projects already carried out	Educational Level	Present Situation	N° of Unsuccessful Questionnaires by Assistant
Mahmoud	31	2	H. school diploma + two yrs at the university	Student	0 out of 50
Hamid	38	3	H. school diploma + two yrs at the university	Employee	2 out of 50
Amine	28	3	H. school diploma + two yrs at the university	teacher	0 out of 50
Fatima	21	2	H. school diploma + two yrs at the university	Student	0 out of 50
Yassine	25	4	H. school diploma + four yrs at the university	Student	0 out of 50
Youssef	25	3	H. school diploma + four yrs at the university	Student	0 out of 50
Zhour	23	5	H. school diploma + four yrs at the university	Student	18 out of 50

The first contact the assistants had with the DC was on April 11th. During this meeting the DC gave the assistants a general presentation about the design of the project and the task they had to carry out. He also put a particular emphasis on the timetable and the deadlines for each phase of the project. He then discussed with them the first version of the interview and encouraged them to provide suggestions to improve it.

The Timetable for the Different Phases of the Investigation

April 11	Focus group
April 11	Starting the Pilot Study
April 14	Ending the Pilot Study
April 15	Checking
April 16	Focus group
April 16	Starting the investigation
April 24	Ending the investigation
April 26	Validation Meeting
May	Post- investigation Meeting

The assistants were all able to respect the deadlines agreed upon, but the quality of their work varied from one assistant to another, given the relatively limited experience they have.

6. The Administration of the Interview

In a preliminary investigation each assistant was asked to conduct three interviews in order to test the questionnaire and to record the reactions of the informants. In the light of this pre-pilot experience, the structure of the interview as well as the field strategies adopted were duly revised and improved to cope with the socio-cultural peculiarities of the areas under investigation.

Then, three hundred and fifty informants were interviewed by the seven research assistants (each one of them interviewed 50 informants). The interviews were conducted over a period of nine days, from April 16, 2004 to April 24, 2004 . All the interviews were conducted in the street.

Out of a final total sample of 350 interviews, 332 completed interviews were finally selected and the unsuccessful cases were rejected for the following reasons:

- Contradictory answers in the questionnaire.
- Blanks in the questionnaire not well filled in.
- Missing answers to key questions.
- The survey design constraints not fully respected by the assistant.

Taking into account the length of the interview and the stringent constraints imposed on the design for interviewing, this can be considered as an acceptable rate of success .

7. Transparency

Transparency includes the availability and access to information.

So far, all the participants in the project have access to information; the common means of sharing information is through informal meetings and written reports.

8. Accountability

Accountability includes the use and application on information.

As the pilot study is still being carried out and the raw preliminary results have not been analyzed and interpreted yet, there is little to suggest about the level of accountability.

9. Inclusion and Participation

So far, the local associations working in the field of literacy, sister city committee members from both Chicago and Casablanca, Casablanca local government officials and the investigation team have been involved in the project in different degrees. They have been sharing information and commenting on various aspects of the project.

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Appendix I – Questionnaire – see report Appendix G.

Appendix II

Urban Planning Activities in Casablanca

Modern history of Casablanca indicates that urban planning and municipal reform movement emerges during the second decade of the 20th century (Adam1968, Robinow1989). In 1913, a very crucial date for Casablanca, Hurbert Lyautey, the French general in charge of the running of the country under the French protectorate (1912-1956), decided to enlarge the Port of Casablanca to world-class standard and make the city the economic pole of attention for the whole country. This vital decision gave birth to the first modern urban planning activities not only in a Casablanca but also in all of Morocco. These activities were carried out under the administration of the French architect Henry Prost, a Prix de Rome winner, with an interest in social planning. Prost's plan put much emphasis on the economic infrastructure and on the circulation network of the city. He gave strategic importance to direct connection between the commercial/industrial zones and the port by means of railways.

However, he has frequently been criticized for neglecting Moroccan housing needs (Ecochard 1956). In 1917, as the Old Medina was completely saturated (1400 inhabitants per hectare, in Benzakour ,1982:57), Prost proposed the plan for the New Medina "the new city", some two kilometer from the old one. Around 1920 and with the acquisition of more space adjacent to the New Medina, planning of new construction was overrun by a mixing of population and insufficient green space.

The second major urban planning activities that Casablanca has undergone took place in 1940's . Around this period (between 1936 and 1952) the city received not less than 414.000 people both from various parts of Morocco (Noin, 1965:34). This huge number of new settlers created serious housing problems for the colonial administration. Thus, in 1946 Michel Ecochard, a famous French architect-urbanist, was appointed 'to fight anarchy' in building. His first objective was to maintain a strict zonal policy similar to the one introduced by Prost in the second decade of the 20th century . To achieve this task, he divided the urban perimeter of the city into zones . His second objective was to provide housing for a maximum of people, particularly for working classes. The solution was a square tram of 64 m², called later on Ecochard tram (8mX8m) This solution allowed a minimum of spatial organization (i.e. two rooms, kitchen and a toilet) but ignored the socio-cultural peculiarities of the Moroccan population.

The Ecochard urban planning was carried out even after the independence of the country. However, since then the demographic and the socio spatial make-up of the city have changed enormously. The population of the city has increased from less than a million in 1956 to over four million today. This increase required a parallel urban extension and a definite resolution of some related problems, particularly the hygiene and the security and the literacy of the inhabitants and the organization of the newly acquired urban space. It was not until the early 1980's that a solution was finally adopted: the city was divided into administrative zones and an urban agency was created to organize and orient the urban planning activities in a systematic way.

Today, Casablanca is the second largest city in north Africa, with almost four million inhabitants , that is around 30% of the urban population of Morocco (projection of the national census 1994). This metropolis is today the industrial, commercial, and financial capital of the kingdom; it embraces 70% of the industrial infrastructure of the country, 65% of the foreign trade, one third of the banking network and more than 42% of the total investment in economic projects.

Appendix III The Population and Socio-Spatial Make-up of Casablanca

The socio-spatial make-up of Casablanca has changed dramatically after the second half of this century with an accelerated population growth due mainly to the city's absorption of rural migration. Casablanca received over a million of new settlers in the last century. With recent modernization et urbanization, great contact has developed between Casablanca and these rural areas. Industries have concentrated around the city and a good number of these rural population migrated to the industrial suburbs like Sidi Moumen and Hay El Bernoussi to work and even to live. In addition, small numbers of migrants from other urban and rural regions of the country headed towards the city in search of a better socioeconomic situation. As a result of this intense migration, Casablanca has become a melting pot of different rural urban populations .

On the basis of some socio-geographical research (Adam 1968, Escalier 1981, and Benzakour 1983) the population of Casablanca can be divided into three rough types depending on the origin, the place of birth and the settlement history of the inhabitants : rural, modern/industrial urban, and traditional urban .

First, there are rural sections of the population, especially along the periphery of the city. With recent industrialization of Casablanca, particularly from 1930 onwards, and with the great demand for labor force, a considerable number of the rural population from the neighboring plains migrated to Casablanca and settled around the peripheral industrial districts of Roches Noires, Ain Sebaa, Sidi Moumen and Hay El Bernoussi. Up to 1971, more than 57 % of these migrants came to Casablanca from the rural areas of Schawiya, Dukkala and Shiadma .

Thus, new dwelling areas-originally slums-were born, namely Ben M'sik, Side Othman, Hay Mohammadi and Hay El Barnoussi and Sidi Moumen (Adam, 1968; and Escalier 1981). However, it should be noted that a good number of the rural emigrant population settled in some core districts of the city like the New Medina.

Secondly, there is the modern/industrial population which constitutes upper middle and upper classes. This portion works in modern sectors of urban economy and lives in places of broad residential streets, small parks and villa: Anfa, Oasis, and California districts. Some of the inhabitants of these areas are natives of the city, but many others are bourgeois coming to Casablanca from other Moroccan cities, especially from Fes (Benzakour 1983:56).

Thirdly, there are the traditional urban sections of the population, who have settled in the Old and New Medina since the end of the 19th and first decades of the 20th century, respectively (Adam 1968).

On the basis of the settlement history of the population, in addition to the socio-spatial make-up of Casablanca, El Barnoussi and Sidi Moumen districts were chosen to conduct this pilot study , as they both represent originally rural and poor population.

Appendix L – Boulder City Council Resolution (attached separately)
Appendix M – GDLN PowerPoints (attached separately)