

Improved Community Livelihoods and Sustainable Water Management



Presented to

Global Environment & Technology Foundation

By

*Tanzania Coastal Management Partnership
Tanzania*

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I. Overall Summary

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| Project Name: | Improved Community Livelihoods and Sustainable Water Management |
| Country: | Tanzania Dumila, Hale, Kikaro, Madizini, Miono, and Msowero Communities in Wami and Pangani river basins (See Appendix A: Map of Wami River Watershed) |
| Project Duration: | 19 Months January 2007 – August 2008 |
| Activities Summary | <ul style="list-style-type: none"> ▪ Conducting Community Needs Assessment ▪ Constructing Ventilated Improved Pit toilets at schools ▪ Training in PHAST and water supply system management ▪ Conduct EMS of agro-based industries ▪ Initial EFA of Wami River and tree planting initiative with the aim of improving water governance capacity among community based organizations |
| Total Project Funding: | \$575,213 <ul style="list-style-type: none"> ▪ USAID Mission (75,214) ▪ USAID Africa Bureau (\$157,617) ▪ TCCC Foundation – Atlanta (\$40,524) ▪ TCCC Foundation – Africa (\$301,858) |
| Implementing Partner(s): | <p>World Vision Tanzania (WVT)</p> <ul style="list-style-type: none"> ▪ Not for profit NGO ▪ \$175,000 financial contribution ▪ Assess water and sanitation needs in selected villages ▪ Conduct training, implement projects chosen by local leaders ▪ Richard Rugemalira: rukanja@yahoo.com ▪ Amithay Kuhanda: amithay_kuhanda@wvi.org <p>Tanzania Health and Environment Sanitation Association (THESA)</p> <ul style="list-style-type: none"> ▪ Not for profit NGO ▪ \$28,400 financial contribution ▪ Assessment of EMS of agro- based industries ▪ Karoli Njau (Consultant): knjau30@yahoo.com or thesakinga@yahoo.com <p>Florida International University (FIU)</p> <ul style="list-style-type: none"> ▪ University ▪ \$82,000 financial contribution ▪ Design and supervise Environmental Flow Assessment of Wami sub-basin in coordination with Wami-Ruvu Basin Water Office and technical experts from University of Dar es Salaam ▪ Elizabeth Anderson (Consultant): Elizabeth.anderson@fiu.edu <p>Wami/Ruvu Basin Water Office (WRBWO)</p> <ul style="list-style-type: none"> ▪ Government institution ▪ Coordinate Environmental Flow Assessment in Collaboration with the Florida International University that provided technical assistance, WADA Local Coordinator and experts from University of Dar es Salaam ▪ Julius Sarmett: juliusarmett@yahoo.com <p>Coastal Resources Center, University of Rhode Island through the</p> |
| Implementing Partner(s): (cont.) | |

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| | <p>Tanzania Coastal Management Partnership (TCMP)</p> <ul style="list-style-type: none"> ▪ \$290,000 financial contribution ▪ Project management, logistical and technical support, outreach ▪ Tree Planting Initiatives in Wami & Pangani basins ▪ Appa Mandari: appa@tcmpzt.org or apmandari@yahoo.com ▪ Don Robadue: don@crc.uri.edu ▪ Jim Tobey: tobey@crc.uri.edu |
| <p>Coca-Cola and USAID Partners</p> | <p>Coca-Cola East & Central Africa Business Unit (ECABU)</p> <ul style="list-style-type: none"> ▪ Cash funding, regular monitoring ▪ Participation at the start-up workshop, launch events, major hand over of sanitation facilities, and close out-events at Dumila, Kilosa, Morogoro, Tanzania, East Africa ▪ Maina Muriuki: mmuriuki@afr.ko.com or mmuriuki@na.ko.com ▪ Felix Ofulue fofulue@afr.ko.com ▪ Nelson Githinji: ngithinji@afr.ko.com <p>Bonite and Kwanza (local Coca-Cola Bottlers)</p> <ul style="list-style-type: none"> ▪ Provided in-kind contribution estimated at \$400 for meeting expenses and banners ▪ Kwanza bottler representatives participated in the interview and selection of WADA Coordinator, participated in start-up workshop and launch event ▪ Designing and preparations of the launch event <ul style="list-style-type: none"> ○ Bonite Coca Cola bottler representatives participated fully in the planning process and a beneficiary of the EMS assessment whereby, they featured as best example in terms of an elaborate EMS model that would be copied by other local companies in Tanzania and beyond. Bonite bottling company participated fully in almost all partner meetings. ○ Kwanza bottlers participated in field project monitoring with Coca Cola International Public Relations Director, Tom Mattia ▪ Kippi Warioba: kwarioba@ccsabco.co.za ▪ Herieth Koka: hkoka@ccsabco.co.za ▪ Dominic T. Urassa: urassad@bbl.co.tz <p>USAID/ Tanzania</p> <ul style="list-style-type: none"> ▪ Cash funding of \$75,214 ▪ Project oversight assistance, organized launch event and handover ceremony. Played a key role in initiating and designing the WADA Tanzania proposal and work plan. ▪ Project oversight and regular monitoring ▪ Juniper Neill – Team Leader Environment and Economic Growth, USAID (I) mission: jneill@usaid.gov ▪ Gilbert Kajuna- Cognizant Technical Officer, USAID (I) Mission: gkajuna@usaid.gov |
| <p>External Partners(s) and Roles:</p> | <p>Municipal Administrations</p> <p>The following local governments contributed in-kind support for project and participated in planning process:</p> <ul style="list-style-type: none"> ▪ Morogoro Region: Mvomero and Kilosa Districts ▪ Coast Region: Bagamoyo District ▪ Tanga Region: Korogwe and Pangani Districts |

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| | <ul style="list-style-type: none"> ▪ Kilimanjaro: Moshi District <p>Ministry of Water and Irrigation</p> <ul style="list-style-type: none"> ▪ Regular project monitoring and advice ▪ Eng. Elizabeth Nkini <p>National Environmental Management Council (NEMC)</p> <ul style="list-style-type: none"> ▪ Regular project monitoring and attended meetings and events ▪ Batholomeo Tarimo <p>Division of Environment (DoE)</p> <ul style="list-style-type: none"> ▪ Collaborative monitoring ▪ Steven Mkondokaya ▪ Constantin Shayo <p>Chalinze Water Pumping Station</p> <ul style="list-style-type: none"> ▪ Collaborator in the Initial Environmental Flow Assessment (IEFA) and water and sanitation aspects ▪ Eng. Paschal Hamuli <p>Saadani National Park (SANAPA)</p> <ul style="list-style-type: none"> ▪ Collaborator in IEFA <p>Tanganyika Planting Company</p> <ul style="list-style-type: none"> ▪ Tanganyika Planting Company is a sugar Planting Company based along Pangani River basin in Moshi rural district, Kilimanjaro region. It is one of the largest sugar companies with 15,600 ha. under sugar-cane production. In mid 2007, this company started producing 18 megawatts of electricity from Baggase which meets the industrial needs with 7 megawatt surplus. <p>Mtibwa Sugar Factory</p> <ul style="list-style-type: none"> ▪ Mtibwa Sugar Factory is also a sugar planting company located along Wami- sub basin in Mvomero district, Morogoro region. The factory has 5,600 ha. under cane production and 600ha are under preparation. <p>Kigombe Sisal Estate</p> <ul style="list-style-type: none"> ▪ A sisal farming estate under the Amboni Group of Companies. It is located between Muheza and Pangani districts on the coastline of the Western Indian Sea shore. The factory discharges effluents from sisal decortications directly into a stream which empties in the Indian Ocean. |
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II. Project Achievements/Issues & Resolutions

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| <p><i>Increase water and sanitation access</i></p> <ul style="list-style-type: none"> ▪ Develop and improve Wami-Ruvu and Pangani River Basins water supply and sanitation systems. ▪ Promote participatory decision-making processes and the local ownership and management of water supply and sanitation services of communities in the Wami-Ruvu and Pangani River Basins. ▪ Mainstream the participation of both genders to optimize the use of water resources and improve sanitation and hygiene. | <p><i>Achievements:</i></p> <ul style="list-style-type: none"> ▪ Rain water collection facility constructed in Hale Secondary School and Madizini Primary School; Sanitation facilities constructed at schools in Dumila, Msowero, Madizini, Miono and Hale. ▪ 22,000 liter capacity rain water harvesting tank was constructed, benefiting 605 students. ▪ Another rainwater harvesting system was constructed at Madizini with a 5,000 liter capacity and benefited 560 pupils. ▪ Extension of tap water to Kikaro Primary School, Miono, and Bagamoyo benefited 1,244 pupils. ▪ VIP toilets were constructed in Hale, Miono, Madizini, Dumila and Msowero and benefited 5950 pupils. ▪ Educational awareness campaigns in PHAST were conducted and attended by 164 participants (103 males, 61 females) including village leaders. This led to the preparation of village health plans. The trainees were urged to train fellow villagers on better environmental practices and personal hygiene and sanitation. ▪ Males and females participated fully in all WADA planning and implementation processes in the community and benefited equally from the outcomes of the program. ▪ Three Mobile hand washing stations (water tanks) were provided, and were aimed at transforming pupils behavior (those who had no toilets before, not at home even), through building a positive sense of personal hygiene after using toilets. ▪ Two of the Primary schools (Hale and Miono) have running tap water at school premises. The rest have no running water in the school compound. Therefore, the pupils fill water tanks daily with water either from water wells or taps in the morning. |
| <p><i>Strengthen Village Water Committees and local water management</i></p> <ul style="list-style-type: none"> ▪ Instruct courses to help educate sound community water management practices | <p><i>Issues and Resolutions:</i></p> <ul style="list-style-type: none"> ▪ None reported. <p><i>Achievements:</i></p> <ul style="list-style-type: none"> ▪ Five workshops on strengthening and forming water committees were conducted in Msowero, Dumila, Mvomero, Madizini, Miono and Hale. These were attended by 69 (44 males, 25 females) members. Pangani East & Pangani West wards were the only ones with no water committee in place (no specific projects were carried out here); however they did participate in the PHAST training. Dumila and Msowero have water boards. <p><i>Issues and Resolutions:</i></p> <ul style="list-style-type: none"> ▪ In the villages where they existed, the water committees by and large were not functioning. ▪ After the training provided through WADA, the capacities of the village committees were enhanced. In other villages, water agents were responsible for collection of revenues and maintenance of water points. ▪ Community needs assessments were completed in nine villages. |

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| <p><i>Conduct Geological Survey to determine basin boundaries</i></p> <ul style="list-style-type: none"> ▪ Delineate the drainage basins and characterize surface catchments in relation to various dimensions of the Wami River. ▪ Determine credible measures of river basin flows, as well as aspects of usage, and the rates of flow required to maintain biodiversity and ecosystem processes | <p><i>Achievements:</i></p> <ul style="list-style-type: none"> ▪ Team of experts including a Hydrologist, Ecologist, Hydraulic Engineer, Geographical Information System Specialist, and Sociologist assembled, trained, conducted desktop data collection and review for IEFA and shared findings in a workshop organized at Morogoro. ▪ Selected five Building Block Methodology (BBM) sites for data collection in Wami Basin, prepared report and presented the findings to a wider audience in Dar es Salaam. ▪ Produced 155 page Final Wami River Sub- Basin Initial Environmental Flow Assessment (IEFA) Report 2 page summary of the report in Kiswahili and English, and 27 page summary of the Annual Report printed. <p><i>Issues and Resolutions:</i></p> <ul style="list-style-type: none"> ▪ IEFA was conducted during the dry season only: Wet season assessment also would make the report more meaningful. ▪ There is a need to carry out wet season EFA as well. Wet season EFA has been incorporated in follow-on activities funded by USAID in 2008/2009, where the technical team will revisit and resample the five representative environmental sites during the spring rains (February- May). |
| <p><i>Tree planting Initiatives</i></p> <ul style="list-style-type: none"> ▪ 10,000 trees planted in Wami/Ruvu and Pangani Water basins and communities mobilized. | <p><i>Achievements:</i></p> <ul style="list-style-type: none"> ▪ 38,861 trees planted during the reporting period. ▪ Communities sensitized and mobilized to participate in tree planting to ensure sustainable flow of water for human beings and biodiversity conservation. ▪ The community members who participated in tree planting initiatives had an exchange visit/study tour to a more developed site, Mtibwa Teak Plantation, to learn and share experiences on land care issues. <p><i>Issues and Resolutions:</i></p> <ul style="list-style-type: none"> ▪ None reported. |
| <p><i>Sustaining clean water supplies, and implementing green business practices</i></p> <ul style="list-style-type: none"> ▪ Identify sources of pollution and fresh water use. ▪ Advocate for cleaner production practices in agro-industrial water use. ▪ Collaborate with sugar and sisal producers, and Kwanza and Bonite Coca-Cola bottlers to assess environmental management systems. | <p><i>Achievements:</i></p> <ul style="list-style-type: none"> ▪ Assessment of Environmental Management Systems of Agro-based industries in the Wami and Pangani water basins were conducted. ▪ Two sugar estates (Mtibwa Sugar Estate (MSE) and Tanganyika Planting Company (IPC) were assessed, one Coca –Cola bottling company (Bonite) was assessed, and one sisal processing facility (Kigombe) was analyzed. Reports produced by the implementing partner, - Tanzania Health, Environment and Sanitation Association (THESA) - were shared and well received by industries. ▪ Of the four industries assessed, only Bonite bottling company has an elaborated EMS in place that complies with international standards. However, the top management of all industries assessed indicated maximum co-operation. ▪ Follow-up activities with assessed facilities on-going at MSE and Kigombe Sisal Estates with USAID funds. One textile industry (Karibu) in Ruvu sub – basin requested for EMS assessment and subsequent design. |

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| <p><i>Map Generation</i></p> <ul style="list-style-type: none"> ▪ Geomorphological profile zones of the Wami Rivers, including surface catchment maps. | <ul style="list-style-type: none"> ▪ Individual factory reports and a Synthesized EMS report were produced, printed and distributed to key stakeholders. THESA, an implementing partner, produced the reports which were edited by project managers and coordinators. Printing and distribution was completed by the coordinating office, Tanzania Coastal Management Partnership (TCMP). <p><i>Issues and Resolution</i></p> <ul style="list-style-type: none"> ▪ Of the four industries assessed, only Bonite bottling company had an elaborate EMS in place and could be copied by other industries in the country. <p><i>Achievements</i></p> <ul style="list-style-type: none"> ▪ Wami Ruvu Water Basin Office: 14 staff trained in GIS, collected data and produced relevant GIS maps. <p><i>Issues and Resolution</i></p> <ul style="list-style-type: none"> ▪ None Reported. |
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III. Monitoring and Evaluation

| WADA Global Indicators | | Outputs or Outcomes (disaggregated as appropriate) | Measurement Methodology # |
|------------------------|---|---|---|
| # | Indicator | | |
| T1-1 | Number of people in target areas with access to improved drinking water supply as a result of program assistance | | |
| T1-2 | Number of people in target areas with access to an improved sanitation facility as a result of program assistance | | |
| T1-3 | Number of school children in target areas with access to an improved sanitation facility as a result of program assistance | 5,950 in five locations | <ul style="list-style-type: none"> Pupils registered at the schools who now have direct access to the facilities. |
| T1-4 | Liters of drinking water treated with program-supported methods for point-of-use application as a result of program assistance | | |
| T1-5 | Percentage of compounds with absence of visible feces in program target communities as a result of program assistance | | |
| T1-6 | Percentage of compounds in program target communities with a hand washing station as a result of program assistance | 3 | <ul style="list-style-type: none"> The number is derived from sites provided with long term water supply system; Hale Pr. & Secondary School; and Madizini Pr. School & Kikaro Primary School. |
| T1-7 | Number of hectares under improved water resource, watershed, or basin resource management as a result of program assistance | 430,000 | <ul style="list-style-type: none"> Number derived from Wami-River sub basin GIS Analysis from EFA. |
| T1-8 | Number of watershed/basin stakeholder governance groups supported with program assistance | 13 | <ul style="list-style-type: none"> Number derived from water user and health and environment community groups supported. |
| T1-9 | Number of policies, laws, agreements, or regulations promoting sustainable water resources, watershed, or basin resource management and conservation that are implemented as a result of program assistance | 2 | <ul style="list-style-type: none"> Number derived from policies directly implemented by the program – Water Policy and Environmental policy. |
| T1-10 | Percent of operations and maintenance costs for water supply and sanitation services covered through customer charges in program -assisted target areas | | |
| T1-11 | Number of community water and sanitation committees established and trained with program assistance | 13 | <ul style="list-style-type: none"> The committees included, Water Committees/ Boards and Village Environment and Sanitation Committees formed through PHAST. |
| T1-12 | Number of policies, laws, agreements, regulations, or investment agreements promoting sustainable water supply and sanitation that are implemented as a result of program assistance | 3 | <ul style="list-style-type: none"> Existing Environment, Water and Education policies strengthened because of this project. |

| WADA Global Indicators | | Outputs or Outcomes (disaggregated as appropriate) | Measurement Methodology # |
|------------------------|---|---|--|
| # | Indicator | | |
| T1-13 | Funds leveraged for program-supported projects | \$11,400 | <ul style="list-style-type: none"> ▪ Calculations based on man days put in WADA activities by the local authorities at all levels. Assumption made that 2 hours are committed to WADA activities per week for about 40 weeks only per annum. These are based on in-kind support from local authorities. |
| T1-14 | Number of positive external media publications, awards, or public recognition involving the Alliances' activities | 26 | <ul style="list-style-type: none"> ▪ Television and radio programs, Newsletters, news papers, magazines, local government authorities in all participating districts acknowledged WADA's contribution very positively. |

IV. Direct Beneficiaries

| Total Direct Beneficiaries and Explanation [A] | Estimated Overlap and Explanation [B] | Net Direct Beneficiaries [C] = [A]-[B] |
|--|---|--|
| <p>8,592 Total Direct Beneficiaries</p> <p>5,950 students benefited from improved sanitation services.</p> <ul style="list-style-type: none"> ▪ Improved sanitation services were achieved via the installation of VIP latrines in Wami and Pangani water basins. Latrines were installed in 5 different schools each serving up to 2030 pupils. <p>2,409 students benefited from improved drinking water supply</p> <ul style="list-style-type: none"> ▪ Improved drinking water supply was achieved via installation of a rain water harvesting system with a tank of 22,000 l capacity in Hale Secondary Schools in Korogwe, Tanga region, Tanzania; with 605 students, and at Madizini Elementary School with a tank of 5,000 l capacity. That school has 560 pupils. Improved drinking water was also achieved via extension of tap water to Kikaro Primary school in Bagamoyo, Coast region with 1244 pupils. <p>164 community members were trained in Participatory Health and sanitation Transformation (PHAST)</p> <ul style="list-style-type: none"> ▪ Educational awareness campaigns in PHAST were conducted and attended by 103 males and 61 females including village leaders. This led to the preparation of village health plans. <p>69 community leaders (45 males and 24 females) in six villages benefited from training on water management</p> <ul style="list-style-type: none"> ▪ Five workshops on strengthening and forming water committees were conducted in Msowero, Dumila, Mvomero, Madizini, Miono and Hale. | <p>560 pupils benefited from access to improved drinking water as well as access to VIP latrines</p> | <p>7,799 Not including adults trained</p> |

V. Telling Our Story

Story #1:

Hale School Turns on the Tap for its new rainwater collection system

30 April, 2008

It was ululation and celebrations on the handing over of the rain water harvesting facility at Hale Secondary School, Korogwe, and Tanga region.

The school headmaster was head saying *“The rain water is clean and adequate. We are not going to spend hours in search for water any more. Now, more time will be spent in classes to improve on academic performance. Our school compound will remain clean and surrounded with blossoming colorful flowers all over.”* The harvested rain water has raised a lot of expectations to the Hale school community as well as student. Hale is a day school, with students coming from distant villages and even other districts. During lunch breaks most of these student walk around looking for suitable area to buy lunch. The availability of this water facility has enabled the school to organize lunch for students at school.



At a Sanitation facility hand-over event supported by WADA, Korogwe District Commissioner, Inaugurated the rain water harvesting facility at Hale, Tanga.

Story #2:

Mr. Mbaya: A great promoter of tree planting inspires the village of Msowero

A local environmental group comprising 6 women and 2 men established a nursery with 4,000 trees along River Msowero. Msowero Secondary School established a tree nursery at the school premises with 650 seedlings. A private farmer also planted 2000 Cedar tree seedlings. This strong local interest in land care is in part due to the inspirational leadership of Mr. Mbaya Ngajimba, the village chairman of the Msowero village in Kilosa.

The life of the Kilosa people depend on integrated development of the environment of the Wami River in all of its facets. As Mbaya explains: *“Our Kilosa has been blessed by fertile land and well watered by the river. But due to our greed, we are inviting poverty through the size of our environmental footprint.”*

The community leader highly praises the WADA program, which he says has added new ingredients in community participation not only in tree planting, but also in other sustainable activities including health and sanitation activities. He mentions other activities, including the construction of toilets at schools, industrial waste water management, wise use of water and other activities aimed at improving lives of the communities.

One thing that can hardly escape the memory after a visit to the village is the obvious talent of Mbaya in community mobilization. Wherever one passes through a village in the area, the people express without reservation that they were not only committed to Mbaya’s preaching on tree planting, but also worked with great motivation to put vision into action.



Tree Nursery at Msowero Secondary School in Kilosa

Story #3

Local Industries find Environmental Management Systems (EMS) a credible tool

February 22, 2008

The agro-based industry of Mtibwa Sugar Estate in the Wami Basin has stimulated voluntary adoption of the Environmental Management Systems (EMS). The sugar estate has insisted not to let Water and Development Alliance (WADA)'s implementing partner - THESA rest until they get the redesigned wastewater and oil trap ponds in good order. To this effect the sugar estate company is seriously taking actions to effect major recommendations made by THESA. The actions being taken include:

- The formation of an environmental task group headed by the Assistant General Manager and composed by high ranking officials. This is an important step towards establishment and implementation of EMS.
- Processing the employment of an environmental officer (university graduate) who shall oversee all environmental issues of the EMS; and
- Commissioning THESA to re-design the waste water ponds and oil trap system.

These activities are at advanced stages and preliminary designs have been produced.

EMS actions by Mtibwa Sugar Estate have been emulated by the Dar es Salaam-based Karibu Textile Industries. Karibu Textile which, late last year was ordered to close down by the National Environment Management Council (NEMC) due to excessive environmental imprint, has now found the use of EMS as a right answer to the persisting environmental problems. It has invited THESA to introduce the EMS program, with the hope to solve environmental challenges in a systematic and holistic manner.

The EMS format has been championed by WADA, which is part of a global alliance between The Coca-Cola Company (TCCC) and the U.S Agency for international Development (USAID) to promote sound water resources management, sanitation and sustainable service delivery in countries where both partners operate.



Mtibwa Sugar Factory

VI. USAID and Coca-Cola Partner Engagement

USAID Mission Engagement

USAID Mission personnel have been active in the provision of technical support to the project and have made a number of site visits, including escorting the USAID team from Nairobi office to inspect the project. The Mission continues to support the project through its bilateral project, the Environment and Natural Resource Management & Economic Growth program. Approximately \$70,000 have been directed towards the areas served by the WADA Project in 2008 and has indicated further support in the coming financial year. Overall, the Mission has been strongly involved in the project, supporting specific components and offering assistance with both technical expertise and project oversight. Mission representative has been active on monthly phone calls.

Coca-Cola Bottler/PAC Engagement

The team of the Coca Cola East Africa Foundation, Bonite and Kwanza bottlers assisted the project's take off and subsequent implementation and monitoring. For example, Bonite Coca Cola bottler participates in an Environmental Management System and was the only company that has an elaborate EMS in place.

The Coca Cola Africa Foundation supported WADA Tanzania by sponsoring event banners, at the launching ceremony and the Major hand over of the Sanitation facilities. They also participated regularly in meetings and field visits with missions.

VII. Media/Awards

Representative media is attached throughout Appendix B and summarized below. TCMP is attempting to locate the remaining articles to distribute to GETF immediately.

1. A newspaper article from *Alasiri*, Newspaper of April 8, 2008 titled: “An Elementary School Supported with VIP Toilets”. *Alasiri* is one of the fastest selling newspapers with an average daily circulation of three million.
2. An article in October-December 2007 edition of *Kakakuona* featured the leadership and efforts of the village leader and a women's group in tree planting initiatives in Msowero village. (See Appendix B-1: Representative Media).
3. An article in April-June 2007 edition of *Kakakuona* featured the launching of WADA. The ceremony was attended by numerous local media to cover the event.
4. A newspaper article from *Tanzania Daily News* of December 22, 2007 featuring Wami River pristine, *Tanzania Daily News* is a daily newspaper with a circulation of approximately two million.
5. An article from Tanzania's *The Guardian* of February 16, 2007 Featuring “Tanga Regional Commissioner (RC) Urges Public to Protect River Basins” during launching of the WADA program on the 15th February 2007 at Pangani, Tanga. (See Appendix B-2: Representative Media).
6. An article in *Kakakuona* January – March 2008 of the Tanzania Wildlife Quarterly Magazine on Nature, Conservation and Environment Featured EMS initiatives at Mtibwa Sugar Factory in Morogoro, Tanzania.
7. Tanzania Newspaper *Mwananchi*, dated April 16, 2008 featuring “TPC to sell electricity to Simanjiro”.
8. Article from the Tanzania Newspaper, *Majira*, of February 16, 2007 displaying the Director of USAID in Tanzania Ms. Pamela White (left) and the Coca Cola Marketing Manager in East and Central Africa, Mr. Maina Muriuki (right) joining hands in demonstrating the partnership after launching the Community Watershed Partnership Program in Pangani, Tanga.
9. An article from the Tanzania Newspaper *Mtanzania*, dated February 17, 2007 featuring “Mkakati Kutokomeza Kero Ya Maji Waja” meaning “Strategy for curbing water problems in pipeline”.
10. An article from Tanzania Newspaper *Nipashe*, dated March 1, 2007 features “Uharibifu Wa Mazingira Na Madhara Yake” meaning “Impacts of Environmental Degradation.” *Nipashe* is a daily newspaper with a circulation of approximately one million.
11. Video clips for major events are available at TCMP office, Dar es Salaam.
12. Other publications can be viewed at <http://wami.fu.edu/>; and <http://www.crc.uri.edu/index.php?projectid=97>

VIII. Sustainability

Near the end of the implementation period, the local WADA team (bottler, USAID Mission, implementing partners, and other stakeholders) convened to discuss next steps following the close-out of the project. The local USAID Mission and Coca-Cola System bottler expressed an interest in supporting an add-on project with the objective of deploying agricultural technologies such as drip kits and treadle pumps to smallholder farmers so that they could benefit from the expanded water supply and improve agricultural yield. A community member suggested that the local agricultural conglomerate, “Global Sugar, Inc.” might also be interested in supporting such a project as part of their sustainable supply chain initiative. The local government has agreed to contribute labor to help build a canal as part of the project. The local WADA team has scheduled a meeting with “Global Sugar, Inc.” in two weeks.

Following the close –out of the WADA project, USAID Tanzania has agreed to provide funds for follow-on activities to address some of the prioritized community needs at the level of \$620,000 (\$70,000 in 2008 and \$550,000 in 2009.)

Voluntary adoption of local industries to adopt recommended EMS will play an important role in pollution reduction. The team spirit and mobilization efforts expressed by local leaders in tree planting initiatives as means of conserving the environment contributing towards sustainable management of the sanitation facilities sanctioned through signing of Memorandum of Understanding (MOU) during Hand over events, coupled with announcement by local leaders on the outstanding impact of the project and possibility of replicating the same to other schools/public places is bound to improve sanitation and health condition of the entire communities of the two water basins. Furthermore, equitable allocation of water resource both for human consumption and biodiversity will stimulate sustainable use and management of the precious water resources.

IX. Overall Lessons Learned/Feedback

The monthly phone calls were very useful in keeping all project partners on the same page and to hear the latest on the status of the project. We recommend that monthly phone calls be held more regularly for two reasons:

- 1) To ensure agreement on project status throughout the WADA team, and
- 2) To allow for more communication opportunities to raise any issues and discuss each issue and possible solution with the entire team.

Furthermore, as it takes time to obtain data and information locally for WADA's reporting requests, it would be greatly appreciated if these requests were done on a regular schedule, to the extent possible, ensuring ample time locally to collect the relevant materials. This would allow us to provide a full report that exactly meets the desires of GETF and the WADA Steering Committee.

All in all, it is worth mentioning that time is needed to work with communities to realize desired outcomes. In this context, more time is required to gather adequate data for reporting purposes and to successfully accomplish planned tasks.

Clarification of the right Coca Cola logo coupled with Authorization and Release formalities delayed outreach materials development and publication. Most stakeholders were skeptical of signing photo release forms as they were not fully convinced that the photographs would not be used for purposes other than the project.

Appendix A: Map of Wami River Watershed

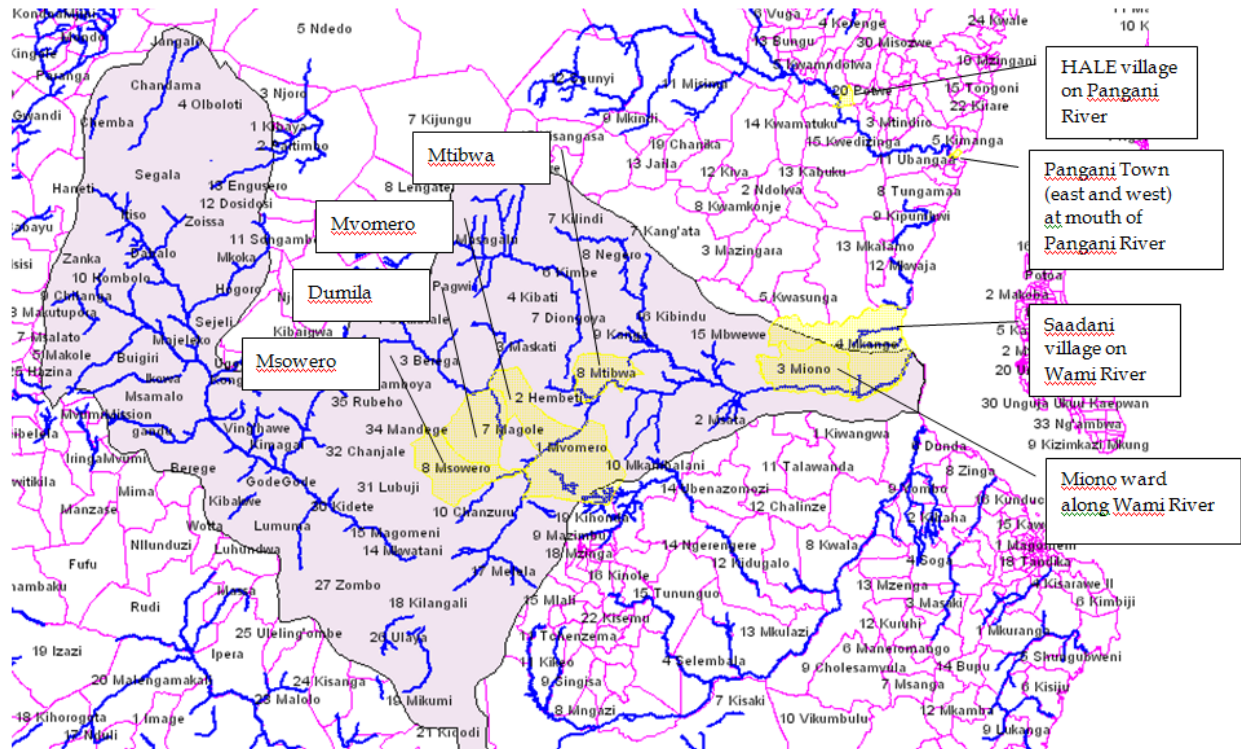
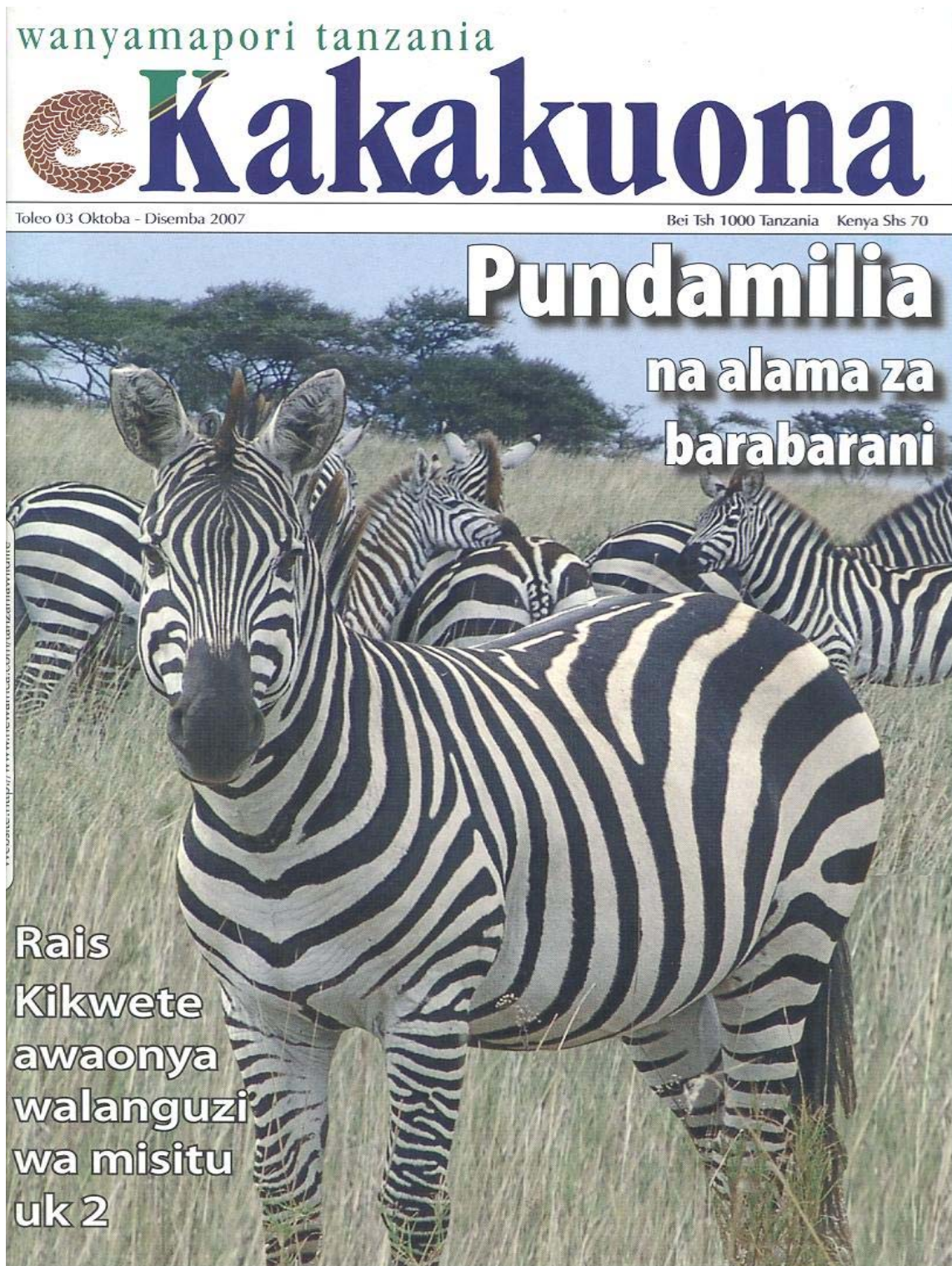


Figure 1. Map of Wami watershed (gray shape) showing wards (yellow highlight) included in the WADA project. Three additional wards in the Pangani basin are located in the upper right corner. Labels refer to wards or villages included in the project.

Appendix B-1: Representative Media

Kakakuona Article, October-December, 2007



NG'IMBA MBAYA: Mhamasishaji mahiri wa upandaji miti

Picha habari, na Gratian Luhikula

NI watu wachache katika hesabu ya watu takriban mia moja, ambao wamejaliwa kuwa na mvuto, kauli na hurka ya kuhamasisha wenzao katika kutekeleza au kutenda jambo lenye manufaa ya kulinda na kuhifadhi mazingira. Mmoja wa watu wa aina hiyo ambaye nimebahatika kukutana naye hivi karibuni ni Bw. Ng'imba Mbaya, Mwenyekiti wa kijiji cha Msowero, katika wilaya ya

Kilosa.

Nilibahatika kukutana na Bw. Mbaya ambaye amejaliwa kipaji cha uhamasishaji wa masuala ya hifadhi ya mazingira, hususan kupanda na kutunza miti, wakati tulipokuwa tunafanya ziara ya kupima maendeleo ya utekelezaji wa mradi wa WADA. WADA ni ushirikiano wa pamoja kati ya wananchi wanaoishi katika mabonde ya Wami na Pangani katika vijiji teule vya wilaya za Kilosa, Pangani, Korogwe, Bagamoyo, Mvomero, na



Ng'imba Mbaya (katikati) akiwaelezea wagani namna anavyohamasisha wananchi kuhusu upandaji wa miti

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Ng'imba Mbaya akiwahamasicha wanawake wa Bagamoyo juu ya upandaji wa miti

Taasisi za umma na za binafsi. Ushirikiano huu umedhamiria kuhifadhi na kutumia maji na rasilimali za mabonde haya ambayo yana umuhimu wa kipekee kwa wananchi.

WADA inatekelezwa na wananchi kwa ufadhili wa Shirika la Maendeleo ya Kimataifa la Serikali ya Marekani (USAID) na Coca-Cola, kwa kushirikiana na Taasisi za Maliasili za Pwani ya Chuo Kikuu cha Kisiwa cha Rhode (CRC/URI) ya Marekani kupitia TCMP, World Vision na THESA. Washiriki wengine ni Ofisi ya Maji ya Mto Pangani, Kiwanda cha Sukari cha Moshi (TPC), Kiwada cha Sukari cha Mtibwa, Hifadhi ya Taifa ya Saadani na Halmashauri za Wilaya na Kamati za Maji za vijiji.

Katika mabonde haya kuna umuhimu wa haraka wa kuimarisha usimamizi wa vyanzo vya maji kwa manufaa ya wananchi ambao maisha yao na shughuli zao za kila siku, yanategemea ukamilifu na Ustawi wa Mazingira Tengefu ya mito Wami na Pangani.

Bw. Mbaya ambaye, kwa kuelewa mantiki na nia ya mradi wa WADA wa kuhifadhi na kutumia maji na rasilimali ya bonde, ambayo yana umuhimu wa kipekee kwa wananchi,

hasiti kutumia kipaji chake cha kuhamasisha wananchi kutambua na kuchukuliwa hatua za kuimarisha usimamizi wa vyanzo vya maji kwa manufaa yao wenyewe.

Katika hali halisi, maisha ya watu wa Kilosa, na maendeleo ya shughuli zao za kila siku, vinategemea sana ukamilifu na ustawi endelevu wa mazingira tengefu ya mto Wami. Kama anavyoelezea Bw. Mbaya: "Hii Kilosa yetu, kama si kumsingizia Mungu, imejaaliwa ardhi nzuri iliyojaa rutuba ya asili. Lakini kutokana na ulafi wa binadamu, tumeukaribisha umasikini kwa kuyachafua mazingira yetu."

Bw. Mbaya ambaye anasifu mradi wa WADA, ambao yeye anaita mradi unaoongeza chachu mpya ya kuhamasisha wananchi, siyo tu kupanda miti, bali pia kujihusisha na miradi na shughuli nyingine endelevu ikiwemo elimu-siha. Anatoa mfano wa shughuli nyingine inayoendelea kuwa ni uchimbaji wa vyoo katika shule, udhibiti wa uchafu kutoka viwandani, utumiaji wa maji ovyo na shughuli nyingine za mradi huo.

Katika ziara hiyo ya Kilosa, jambo mojawapo

ambalo si rahisi kulisahau ni uhodari na umakini wa uhamasishaji wa Bw. Mbaya. Katika sehemu mbalimbali tulizotembelea, siyo tu zinaonyesha kwamba wananchi wamehamasika sana na mradi huu, bali pia wanatekeleza shughuli wanazoelekezwa kwa umakini na hamasa isiyo kifani.

Hali hiyo ambayo hata Bw. Donald Robadue, maarufu kama Don kutoka Marekani katika Taasisi ya Chuo Kikuu cha Kisiwa cha Rhode, ambaye tuliandamana naye katika ziara hiyo ya ukaguzi wa maendeleo ya mradi huo, hakusita kuonyesha kuridhishwa kwake.

Bila kusita Don alimuuliza Bi Happa Madali, kiongozi wa WADA anayesimamia utekelezaji: "Ni ujanja gani aliutumia kuamsha hamasa miongoni mwa wananchi! Kwani kila tunapopita, kila mtu anaonekana amehamasika kupindukia!"

Don hakuwa amekosea. Kwani, kila tulipotembelea kipimo cha hamasa miongoni mwa wananchi kilikuwa cha kufurahisha sana.

Tulianza kutembelea shamba la mitiki lenye ekari nne. Kila mtu kwenye msafara huo alivutiwa na jitihada, ambayo Don baadaye alielezea kama mafanikio ya kushangaza ya mradi wa WADA ambao hata haujatimiza mwaka mmoja. Hakuwa Don tu aliyeridhishwa na maendeleo yaliyoonyeshwa, bali karibu sisi wote tuliokuwa kwenye msafara huo.

Bw. Daffa naye hakusita kuelezea matumaini yake kutokana na mafanikio tuliyoyaona: "Ikiwa moyo unaonyeshwa na watu wa Kilosa utaendelea, nina hakika Kilosa itafanya makubwa katika sekta ya mazingira hususani katika kampeni iliyopo ya kupanda miti inayoongozwa na Tuzo ya Rais ya Kuhifadhi vyanzo vya Maji na Kupanda Miti.

"Hali hii, ambayo inaoneshwa na wananchi, inadhihirisha kwamba wananchi sasa wanathamini ustawi wa mazingira. Huu ni ushindi mkubwa kwetu sisi katika sekta ya mazingira. Kwani unatupa faraja na hamasa tunayoitarajia kutoka kwa wananchi."

Daffa ambaye kwa muda mrefu amekuwa akijishughulisha na masuala ya usimamizi wa mazingira, haachi kuwaza kwamba kama Tuzo ya Rais ingekuwa tayari inatekelezwa, asingesita kubashiri kwa wananchi wa Kilosa, kwani shughuli zao zina uhakika na zinaweza kupimika.

Baada ya shamba la mitiki, Bw. Mbaya aliendelea kutuonyesha maajabu ya rutuba ya Kilosa alipotupeleka kwenye shamba zuri la migomba. Ama kweli lilikuwa shamba zuri ambalo kipimo chake kingeweza kupatikana ama Bukoba au Moshi kama alivyobainisha Bw. Hamisi Ébano, dereva ma msafara wetu.

"Shamba hili lilivyo, utadhani uko Moshi au Bukoba," Bw. Hamis Mbano, ambaye muda wote katika msafara huo alikuwa hasemi jambo lolote, hakuweza kujizuia kulisifu shamba hilo kubwa lililosheheni migomba minene mirefu na yenye kubeba mikungu maridhawa ya ndizi.

Kusema kweli, shamba hilo ambalo lilikuwa na migomba yenye afya na ambayo ilikuwa inaelemewa na mikungu ya ndizi nene na ndefu, ilituacha midomo wazi tukishangaa rutuba wa ardhi ya Kilosa. Mwenye shamba hilo, ambaye ni Afisa Kilimo mstaafu anapanga kukuza shamba lake ili aweze kuwa msambazaji wa ndizi katika mji wa Morogoro. Ama kweli, maono yake ya mbele hayakuwa ya 'kufikirika' bali maono yenye ukweli.

Baada ya kushuhudia shamba la ndizi, Bw. Mbaya alituongoza kwenda katika shamba la katani la New Msoelo Farm. Shamba hilo linatekeleza wito wa kupanda miti kama njia ya kuwahamasisha watu wengine.

Baadaye tulivizungukia vikundi kadhaa ambavyo vilionesha hamasa kubwa katika kupanda miti na kutunza mazingira. Moja wa vikundi hivyo ni kikundi cha wananchi kijulikanacho kama Kikundi Motomoto chenye wanawake saba na akinababa watano, ambao licha ya shughuli kadhaa za kutunza mazingira, kimejikita katika shughuli za uzalishaji ili kwenda na wakati uliopo sasa, wa kupambana na umasikini.

Text of article in English translation:

“NGAJIMBA MBAYA: A great promoter of tree planting in Kilosa”

Gratian Luhikula

I have met very few people who are gifted with the ability of promoting activities related to the environment management. Among those few, I can confidently say that Mr. Mbaya Ngajimba, the village chairman of the Msowero village in Kilosa, easily tops my list.

I was fortunate to met Mr. Mbaya recently, during a visit organized by Water Development Alliance (WADA), which is undertaking several development activities, including tree planting in Kilosa. Without any exaggeration, every moment I was with this man, who is highly respected among the communities due to his leadership qualities, I couldn't stop admiring his 'art of persuasion' in matters related to environmental safeguarding – in particular tree planting.

WADA leader, Ms. Appa Mandari, has been enjoying the great company of Mbaya for over four months now. He has not only demonstrated his leadership quality, but a great campaigner for development activities.

WADA is a public-private partnership program committed to the conservation and sustainable use of Tanzania's water and watershed resources in the Wami and Pangani river basins – from the upper watershed to estuaries where the rivers drain in the Indian Ocean. It works with selected villages in the districts of Kilosa, Pangani, Korogwe, Bagamoyo, Mvomero, as well as public and private institutions.

WADA is primarily being implemented by the communities under the support of the American people through the United States Agency for International Development (USAID) and The Coca Cola Company. Key partners in this partnership include USAID Tanzania, the Coastal Resources Center of the University of Rhode Island through the Tanzania Coastal Management Partnership (TCMP) and World Vision. Other partners include the Tanzania Health, Environment and Sanitation Association (THESA), Wami-Ruvu Basin Water Offices, Kwanza and Bonite Coca-Cola bottlers, the agro industrial sugar companies of Mtibwa and TPC, Kigombe Sisal Estate and village water committees.

In the Wami-Ruvu watershed there is an urgent need to strengthen management of the sources of water for the benefit of the many communities whose lives and livelihoods essentially depends on water and its fragile resources it supports.

Mbaya's realization of this led him to decide to devote his time to work with WADA in its campaign to conserve and promote sustainable use of the water resources. Using his great talents in community mobilization, he succeeded in attracting communities whose results left us amazed.

The life of the Kilosa people depend on integrated development of the environment of the Wami River in all of its facets. As Mbaya explains: “Our Kilosa has been blessed by a fertile land, well watered by the river. But due to our greed, we are inviting poverty through the size of our environmental footprint.”

The community leader highly praises the WADA program, which he says has added new ingredients in community participation not only in tree planting, but also in other sustainable activities including health and sanitation activities. He mentions other activities, including the construction of toilets at schools, industrial waste water management, wise use of water and other activities aimed at improving lives of the communities.

One thing that can hardly escape my memory is the talent of Mbaya in community mobilization. Wherever we passed through a village, the people expressed without reservation that they were not only committed to Mbaya's preaching on tree planting, but also worked with great motivation.

Apparently, Mbaya also highly impressed Mr. Donald Robadue from the Coastal Resources Centre of the University of Rhode Island, who was assessing the WADA project progress. Robadue couldn't hesitate asking the WADA Coordinator, Appa Mandari: “What magic did you use in raising and maintaining motivation among the communities.....wherever we pass every individual seem to be highly motivated!”

Indeed, Robadue was right. Wherever we visited, the evidence of motivation was highly impressive.

Our visit began by visiting a four acre teak, *tectona grandis*, plantation. We were all impressed by the effort being made by the communities, which was later described by Robadue as an 'amazing success' of the WADA project which was hardly one year old.

Supporting Robadue's perception, the head of the delegation, Mr. Jeremiah Daffa, the manager of the Tanzania Coastal Management, said: "If the prevailing spirit is maintained, I am highly convinced that Kilosa will do wonders for the environment sector, in particular in the ongoing campaign in tree planting led by the expected nation-wide Award Scheme introduced by the President.

"The enthusiasm demonstrated by the communities, shows that communities now value sustaining a good environment. This, to us in the environment sector is a great success, since it provides us with feedback on the community response and commitment."

Daffa was so impressed that he predicted that if the much awaited Presidential Award for the Conservation of Land and Water Resources had been in place today, the winner would surely emerge from Kilosa, since their activities are authentic and are so visible.

Mbaya took us to witness one of the most impressive banana plantations that demonstrated the fertile soils of Kilosa. My first glance at the plantation with healthy banana trees, apparently weighed down by heavy bunches of bananas, I was temporarily speechless. The only comparison of the plantation's beauty can be found in Bukoba or in Moshi, as Hamis Mbano, our driver could easily testify.

"This banana plantation provides a picture as if one is in Moshi or Bukoba," said Hamis Mbano, who throughout the drive had been quite, until now.

As a matter of fact, the plantation left all of us speechless. The owner of the plantation, who is the retired agricultural officer, is expanding his plantation with the purpose of becoming the big supplier of bananas in Morogoro town. His vision is becoming reality.

After admiring the bananas, Mbaya revealed to us still one more surprise. We drove up to the New Msowero Farm, which is revitalizing its sisal plantation. Following the example set in Msowero, the farm is now practicing teak tree planting between the rows of young sisal. We concluded our highly motivating tour with a visit to a women group known as Kikundi Motomoto which is undertaking various development activities, including tree planting with the aim to 'kick away' the persistent poverty strains.

Appendix B-2: Representative Media (continued)

Source: <http://www.ippmedia.com/ipp/guardian/2007/02/16/84494.html>

Tanga RC urges public to protect river basins

2007-02-16 09:41:24

By Pascal Shao, Pangani

The public has been urged to protect Wami-Ruvu and Pangani river basins and their environment for the benefit of future generations.

Tanga Regional Commissioner, Mohamed Abdulaziz made the call yesterday while launching Community Watershed Partnership Program at Pangani in Tanga.

Abdulaziz was speaking on behalf of the Minister for Water Dr. Shukuru Kawambwa.

“We are very lucky to have these basins in the country as they are very important resources not only for our livelihood but also for the lives of other living organisms,” he said.

He said the success of the project will depend much on the community’s full participation and adherence to the experts’ instructions in the implementation of the project.

Abdulaziz said that the aim of the project is to ensure availability of safe and clean water as some people living near water sources do not access it due to inadequate and poor infrastructure.

He appealed to the project coordinators to utilize the funds donated for the implementation of the project as it was intended.

He also told them to reduce administrative costs and ensure that the money is directed to the intended purpose.

Speaking during the launch of the program, the USAID Tanzania Director Pam White said the program was going to help women as most of their domestic activities such as cooking, washing; baby care depended entirely on water.

“We are going to make water closer to women to reduce their burden” she said.

White said since the basins are the most populated areas due to their importance then their conservation should be given the first priority.

Senior Operations Manager and the Representative of Coca Cola Africa Foundation, Maina Muriuki said that they were the biggest water stakeholders since more than 400 brands of beverages of Coca Cola Company depend entirely on the commodity.

He said that basins of Wami-Ruvu and Pangani are very important not only to the communities near them but also for the private sector.

Muriuki said the program is set to improve water supply and strengthen awareness creation on environmental management of the basins.

The program which is expected to benefit more than 150,000 people of the selected villages in Pangani, Kilosa and Kibaha districts is funded by USAID and Coca-Cola that has contributed a total of USD 500,000/-

Other partners are Coca-Cola Kwanza, Bonite Bottlers, World Vision Tanzania, Health, Environment and Sanitation Association, the Coastal Resources Centre of the University of Rhode Island through the Tanzania Coastal Management Partnership and Florida International University through its GLOWS program site of Mara River Basin.

Others are National Environment Management Council, Ministries of Water and Regional Administration and Local Governments, Wami-Ruvu and Pangani Water Basin Offices, Village Water Communities, Saadan National Parks, Tanganyika Planting Company and Mtibwa Sugar Company.