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A Three-Year Collaborative Rotary-World Vision WASH Project in Ethiopia

ROTARY REPRESENTATIVES

Rotary District 7680 and Rotary Clubs in North Carolina and Rotary District 5030 and Rotary Clubs in Washington State

WORLD VISION REPRESENTATIVE

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A kebele is the smallest administrative unit in Ethiopia. It is similar to a ward, a neighborhood, or a localized group of people.

Introduction

World Vision has been working in collaborative partnership with Rotary clubs around the world since 2005. In Ethiopia, the first joint project was started in 2010 and completed in late 2012 in three districts: Guraghe, Minjar, and Sibu Sire. More work needs to be done in the Minjar district, and the Rotary Water Task Force in Ethiopia has worked with World Vision's Ethiopia Water, Sanitation, and Hygiene (WASH) team to identify additional areas where there is a great need for water in the North Shoa region.

World Vision U.S. has again agreed to match Rotary funding for a proposed \$750,000 project. The proposed three-year project will complete additional distribution of water in Minjar district as well as help meet the WASH objectives and further increase WASH coverage in the Angollela area in North Shoa. This project will serve 30,000 people over three years (October 2013 through September 2016).

The Need

Every morning, 15-year-old Worke sets out before dawn in the cold to gather water from a distant hole in the ground. During the dry season, she waits up to six hours for her turn to collect the murky, contaminated water that seeps up from the mud. "It takes time," Worke said. "I have no choice but to miss school."

In developing countries like Ethiopia, collecting water is a task routinely assigned to women and girls. The average girl walks nearly four miles, carrying 45 pounds on her head. Even if Worke survives the arduous journey, the water she drinks could kill her. People bathe in this water, and animals drink from it, leaving it highly contaminated.

Ethiopia has Africa's second highest population—82.8 million people. Nearly 40 percent live on less than \$1.25 per day (UNICEF, 2012). Only 26 percent of the rural population has access to clean drinking water, and just 8 percent has access to improved sanitation facilities (World Health Organization/UNICEF, 2012). This reality—along with a lack of knowledge about the dangers of using unsafe water and inadequate sanitation, and practicing improper hygiene—impacts children and families in multiple ways. Besides resulting in many preventable WASH-related diseases, lack of these necessities also contributes to increased malnutrition and decreased productivity. In sub-Saharan Africa, an estimated 40 billion hours every year are lost due to time spent fetching water, and globally, 443 million school days are missed annually due to WASH-related diseases (United Nations News Service, 2010).

The Angollela area and Minjar Shenkora district, where this proposed project will take place, face WASH challenges similar to these. Both Angollela and Minjar Shenkora are located in the North Shoa zone of the Amhara National Regional State.

Angollela is in the Angollela Tera district, about 68 miles from Addis Ababa on the main highway to Dessie. The district has 21 kebeles (see sidebar)—19 rural and two urban. The administrative center of the district is known as Chacha.

Most of the area lies within the highland agro-ecologic zone, with altitudes ranging between 5,500 and 10,000 feet above sea level. About 86 percent of the area is classified as highlands, and 14 percent is lower elevations. In terms of topography,

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ETHIOPIA IS RANKED 174 OF 186 COUNTRIES ON THE 2011 UNITED NATIONS HUMAN DEVELOPMENT INDEX, WHICH MEASURES A COUNTRY'S ACHIEVEMENTS IN TERMS OF LIFE EXPECTANCY, EDUCATIONAL ATTAINMENT, AND ADJUSTED REAL INCOME. THIS SUGGESTS THAT MANY BASIC NEEDS FOR ACHIEVING HUMAN DIGNITY AND DEVELOPMENT ARE NOT MET.

nearly half of the land is plains, 38 percent is undulating terrain, 10 percent is mountainous, and the rest is made up of gorges and valleys. The total surface area of the district is about 308 square miles. The Angollela area is characterized by erratic and inadequate rainfall and degrading natural resources caused by over cultivation of the arable lands and cattle overgrazing. However, it is endowed with perennial rivers and springs.

Minjar Shenkora district is located about 80 miles from Addis Ababa to the southeast. The district has 29 kebeles—27 rural and two urban. The administrative center of the district is known as Arerti.

Most areas of the district have altitudes ranging between 3,400 and 7,800 feet above sea level. About 70.5 percent of the land is midland, 25 percent lowlands, and the rest is highland. The total surface area of the district is about 616.5 square miles.

The table below shows the total population in the woredas (districts) as well as the number of people who need access to water and sanitation.

Woreda	Population	Water Coverage	Sanitation Coverage	Population in Need	
				Water	Sanitation
Angollela Tera	91,189	80%	66%	18,237	31,004
Minjar Shenkora	143,371	37%	12%	90,324	126,166
Total	234,560			108,561	157,170

Source: North Shoa Zone Office of Finance and Economic Development Coordination

World Vision's Response

Our History in Ethiopia and the Project Area

World Vision has been working in Ethiopia for nearly 40 years. In the WASH arena, World Vision launched a five-year Ethiopia Rural Water Project in October 2006 with support from the Conrad N. Hilton Foundation and other major donors. The program sought to prevent WASH-related disease and death by providing safe water to 340,000 people, and helping 170,000 of these individuals gain access to improved sanitation. Also in 2006, World Vision began working as part of the Millennium Water Alliance, an association of international nongovernmental organizations (NGOs) with expertise in rural and semi-urban water supply, hygiene education, and sanitation promotion. By March 2011, through this alliance, World Vision provided 96,000 community members in Ethiopia with access to safe water and 110,000 individuals with improved sanitation.

In October 2010, World Vision launched an expanded Ethiopia WASH Program, which will help approximately 600,000 people gain access to safe WASH over a five-year period (October 2010 through September 2015).

World Vision operates several drilling rigs in Ethiopia that can be mobilized to under-served areas where finding viable water sources can be a serious challenge. This also reduces drilling costs since World Vision does not operate on a profit-making basis. A people-centered, holistic, and integrated development approach, coupled with a policy of maintaining a long-term presence in the project area to



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These students attend classes with 900 other children in a 10-room school near the town of Chacha, Ethiopia. The school has no water. The children hiked more than a mile to get water, which was contaminated.

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Students gather around a shallow well that was constructed at Chelbesa Primary School in Ethiopia.

ensure sustainability, differentiates World Vision from other organizations that provide WASH interventions.

World Vision has past experience implementing WASH projects in collaboration with the local Rotary Water Task Force and host Rotary Club. This proposed project will help meet the WASH objectives of both organizations and further increase WASH coverage in the project areas chosen by Rotary. The geographic proximity of the two project areas will enable the collaborative team to ensure close supervision of activities at Minjar and all communities chosen by the team. World Vision has a regional office in Angollela, so staff can be nearby by at all times, and members of the collaborative team can use this office as a base from which to work.

Project Goal and Outcomes

The goal of the proposed Ethiopia WASH project is to significantly improve child well-being by enabling families and communities to achieve sustainable access to adequate safe water and improved sanitation facilities, and practice good hygiene. The project will serve 30,000 people over three years (October 2013 through September 2016). The expected outcomes of the project are as follows:

- Increased access to sustainable and safe water supply
- Increased access to improved sanitation and hygiene
- Communities and institutions empowered to facilitate sustainable WASH interventions

Methods and Activities

Increased access to sustainable and safe water supply

Access to safe and adequate water supply has a direct impact on health, education, economic development, and overall human dignity. Under this objective, water will be supplied in any of the following ways:

- Shallow boreholes (up to 328 feet deep) equipped with a hand pump
- Surface completion of an existing borehole, including reticulation of pipelines and distribution networks as well as electromechanical work
- New deep boreholes (deeper than 328 feet) with electromechanical pumps, storage reservoirs, and distribution by pipes to water points

Each of these options has its own set of implications regarding cost per capita, extent of community participation, construction scheduling, operation and maintenance costs, and activities.

In Angollela, four shallow wells will be drilled and fitted with hand pumps, and a 50-cubic-meter storage reservoir will be constructed. In addition, a pump house will be built, a distribution pipeline will be laid, and water points will be built for an ongoing project in the area.

In the Minjar Shenkora district, the project will focus on completing electromechanical work on an existing newly drilled borehole and installing a pipeline distribution network to the Hagere Genet area.

What Is Community-Led Total Sanitation?

Community-Led Total Sanitation is an innovative methodology for mobilizing communities to completely eliminate open defecation. It focuses on the behavioral change needed to ensure real and sustainable improvements—investing in community mobilization instead of simply constructing toilets. Community-Led Total Sanitation engages the community's desire for change, propels people into action, and encourages innovation, mutual support, and appropriate local solutions, thus leading to greater ownership and sustainability of improved sanitation facilities.

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Findings from a recent evaluation conducted by local government officials and other stakeholders in Ethiopia revealed there is an urgent need for an additional well in the project area. It was recommended that an additional well be drilled and equipped with a distribution system and water storage reservoir.

Water Quality Analysis

As an organizational requirement for the WASH sector, water quality analyses will be carried out on water samples from all sources/water points that are drilled and constructed. Analyses will include physicochemical (including trace elements) and bacteriological tests to ensure that water provided to the communities is safe and meets World Health Organization guideline limits and national standards. To facilitate this important activity, World Vision has recently provided resources and built the capacity of the government's national water quality laboratory in Ethiopia to assist with water quality analyses.

Increased access to improved sanitation and hygiene

In Ethiopia, several significant initiatives are under way for improving access to sanitation and promoting hygiene-related behavior changes. The leading model is the Community-Led Total Sanitation (CLTS) approach, which seeks to eliminate open defecation. This approach is being combined with a second approach and is now being packaged as Community-Led Behavior Change for Hygiene and Sanitation. The new approach emphasizes behavior change while continuing to promote the construction of pit latrines to eliminate open defecation practices.

This method is closely aligned with the new national approach focusing on behavior change. It utilizes the existing network of government health extension workers who are ultimately responsible for promoting as many as 16 different health messages, seven of which are related to the environment, including WASH. In addition, World Vision's strategy includes the creation of WASH clubs in schools. This strategy is designed to achieve behavior change by providing sanitation and hygiene promotion messages in a variety of formats and venues, including household visits, community activities, model latrine construction, mass media, and school interventions. Mothers and children receive additional attention so they can better care for their own health and the health of their families.

The Ethiopian government has adopted a no-direct-subsidy policy for sanitation infrastructure. The CLTS methodology stimulates families to build household latrines with limited technical assistance. The vast majority of communities participating in CLTS construct pit latrines, which include a floor generally made of wood covered with earth and mud.

Communities and institutions empowered to facilitate sustainable WASH interventions

Sustainability of WASH systems and facilities is based on the ability of local institutions to effectively operate and manage WASH infrastructure after the project ends. A high level of functionality includes the formation of a WASH committee, having written bylaws that state the duties and responsibilities of each functioning unit and the users, and enabling the community to operate

National Approach Focusing on Behavior Change

Below are the health topics disseminated as packages to the health extension workers to use in their work:

Disease Prevention and Control

- HIV, AIDS, and other sexually transmitted infections
- TB prevention and control
- Malaria prevention and control
- First aid emergency measures

Family Health

- Maternal and child health
- Family planning
- Immunization
- Nutrition
- Adolescent reproductive health

Hygiene and Environmental Sanitation

- Excreta disposal - build and use latrines
- Solid and liquid waste disposal
- Water supply and safety measures (storing and using clean water)
- Food hygiene and safety measures
- Healthy home environment
- Control of insects and rodents
- Maintain personal hygiene

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Above are the latrines students previously used at the Chittu Primary School in the Wonchi district of Ethiopia. The latrines did not encourage use as they were not washable, had no hand-washing facilities, and were covered with flies.

Pictured below are the new latrines built through the Ethiopia WASH Program. Two ventilated improved pit latrines with four stalls each were constructed. They are gender-segregated and built to ensure privacy. The latrines also are easily washable and vented to prevent the breeding of flies. These new latrines are helping to improve the health of the students.



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and manage the system independently or with minimal support. As such, a high level of functionality requires capacity building during the implementation phase so the project can be handed over to the community successfully.

A recent evaluation of World Vision's WASH projects across Ethiopia indicated that sustainability is influenced by three main factors:

- Financial and management capacities of the community
- Sociocultural factors regarding acceptability of the projects
- Technical factors such as the ease of use and appropriateness of the technology

To ensure sustained services, project activities have been designed to make sure the important factors of sustainability are taken into account.

To ensure management of water supply projects, WASH committees will be established and trained in the necessary technical skills. They also will be equipped with basic hand tools. The seven-member committees will manage individual wells, and water points along distribution lines. In addition, local artisans will be trained on basic operation and management of water supply projects in their respective localities.

Key Partnerships and Collaboration

For successful project implementation, World Vision and Rotary will achieve optimal results by building on the strengths of key partnerships with local and federal government agencies; the private sector; and civil society, including communities and households. We will work with these sectors either in direct partnership or collaboratively through appropriate joint forums. In addition, World Vision WASH team members participate in district-level WASH forums for information-sharing and joint planning of activities. World Vision incorporates lessons learned from other organizations into project activities, and shares with other organizations our experiences and lessons learned through our WASH projects.

This is an excellent example of why it makes sense for Rotary clubs to leverage the expertise and professional WASH staff of one of the largest NGOs in the area by combining it with the desires and goals of local Rotary volunteers. The thousands of hours required to develop these "soft costs" of creating community water boards, establishing school WASH clubs, providing sanitation and hygiene education, coordinating the work with government agencies, and truly creating the sustainable outcomes we all desire often are not possible through volunteer efforts alone. As one Rotarian recently stated,

"We have been doing WASH for many years, but we just cannot complete the last 25 percent or so of the needed work to make them truly sustainable without an NGO such as World Vision collaborating and coordinating the work with us."

Sustainability Strategy

The proposed WASH project will focus on building local capacity for planning, operating, and maintaining water sources and sanitation facilities (latrines and hand-washing facilities). Community members, especially women, will be trained to repair and maintain pumps, manage water sources, and serve on village WASH committees, which oversee community improvements. WASH committees will be formed in each community where World Vision drills a well.

Community members will be trained on keeping the borehole area clean and on essential health and hygiene practices, including proper handwashing and facewashing to prevent diseases such as pneumonia, cholera, and trachoma. Practical measures, such as training area pump technicians, health extension workers, sanitation and hygiene promotion volunteers, and community-based organizations, ensure community involvement and foster ownership of facilities. Women in villages will be trained in the full cycle of hygiene promotion activities to motivate households to construct latrines and practice good hygiene. Schoolchildren will participate in sanitation and hygiene promotion activities through school WASH clubs. Communities will be empowered to initiate their own development programs, identify and mobilize resources, and manage the projects they begin.

To ensure financial sustainability, communities will contribute cash, labor, and materials during construction, rehabilitation, and maintenance of water sources and sanitation facilities. Community funds will be raised for pump repair and maintenance through the collection of user fees.

To ensure environmental sustainability, the project will emphasize the promotion of appropriate water and sanitation technology options, and the use of locally available materials and services. In this way, the project will maximize effectiveness and efficiency, as well as achieve long-term sustainability of key activities, outputs, and behavioral changes.



You Can Make a Difference

Please join Rotary Districts 7680 and 5030 and the many clubs committed to funding this project, which will help 30,000 people in Ethiopia gain access to safe water, improved sanitation facilities, and hygiene education over a three-year period.

Imagine the potential that will be unleashed when tens of thousands of Ethiopians have access to these necessities. No longer waylaid by the most preventable diseases, they will begin to shape their futures—transforming their communities and their country.

Attachment A: Project Budget

PERSONNEL AND PROGRAM MANAGEMENT	Activity and Budget: Year 1				Activity and Budget: Year 2			Activity and Budget: Year 3			Life-of-Project Amount	Rotary	%	World Vision	%
	Unit	Quantity	Unit price (\$)	Total Budget (\$)	Quantity	Unit price (\$)	Total Budget (\$)	Quantity	Unit price (\$)	Total Budget (\$)					
WATER SUPPLY ACTIVITIES:															
KEY PERSONNEL															
Water Engineer (100% FTE) for Minjar	USD	1	555	3,330	1	611	7,332	1	672	8,064	18,726	-	0%	18,726	100%
Benefits	USD	1	166	996	1	183	2,196	1	201	2,412	5,604	-	0%	5,604	100%
Subtotal				4,326			9,528			10,476	24,330	-	0%	24,330	100%
SANITATION AND HYGIENE ACTIVITIES:															
KEY PERSONNEL															
Sanitation and Hygiene Facilitator (100% FTE) for Minjar	USD	1	555.00	3,330.00	1	611.00	7,332.00	1	672.00	8,064.00	18,726	-	0%	18,726	100%
Benefits	USD	1	166.00	996.00	1	183.00	2,196.00	1	201.00	2,412.00	5,604	-	0%	5,604	100%
Subtotal				4,326			9,528			10,476	24,330	-	0%	24,330	100%
APPLIED TO CROSS-CUTTING ACTIVITIES															
KEY PERSONNEL															
WASH Finance Manager (20%)	USD	1	200	1,200	1	220,000	2,640	1	242,000	2,904	6,744	-	0%	6,744	100%
WASH Manager FECC (20%)	USD	1	200	1,200	1	220,000	2,640	1	242,000	2,904	6,744	-	0%	6,744	100%
Sanitation and Hygiene Coordinator FECC (20%)	USD	1	150	900	1	165,000	1,980	1	182,000	2,184	5,064	-	0%	5,064	100%
ADP Accountant (50%)	USD	2	275	1,650	2	303,000	3,636	2	333,000	3,996	9,282	-	0%	9,282	100%
Benefits and Allowance	USD	1	250.0	1,500	1	275	3,300	1	303	3,636	8,436	-	0%	8,436	100%
Staff Travel	USD	1	4,334	4,334	2	4,767,000	9,535	2	5,244,000	10,488	24,357	-	0%	24,357	100%
Subtotal				10,784			23,731			26,112	60,627	-	0%	60,627	100%
PROGRAM MANAGEMENT															
Office Supplies	USD	1	627	627	1	743	743	1	743	743	2,113	-	0%	2,113	100%
Vehicle Operation and Maintenance	USD	0.5	874	437	1	874	874	1	874	874	2,185	-	0%	2,185	100%
Fuel and Lubricant	USD	1	1,432	1,432	2	1,432	2,864	2	1,432	2,864	7,160	-	0%	7,160	100%
Vehicle Purchase/Rent	USD	4 months	4,000	16,000	6 months	4,000	24,000	6 months	4,000	22,997	62,997	-	0%	62,997	100%
Vehicle Insurance	USD					0			0		-	-		-	
Miscellaneous (bank charges, electric, telephone)	USD	0.5	817	409	1	817	817	1	817	817	2,043	-	0%	2,043	100%
Monitoring and Evaluation	USD	0.5	1,000	500	1	1,000	1,000	1	1,000	1,000	2,500	-	0%	2,500	100%
Subtotal				19,405			30,298			29,295	78,998	-	0%	78,998	100%
Total Personnel and Management				38,841			73,085			76,359	188,285	-	0%	188,285	100%

Attachment A: Project Budget

PERSONNEL AND PROGRAM MANAGEMENT	Activity and Budget: Year 1				Activity and Budget: Year 2			Activity and Budget: Year 3			Life-of-Project Amount	Rotary	%	World Vision	%
	Unit	Quantity	Unit price (\$)	Total Budget (\$)	Quantity	Unit price (\$)	Total Budget (\$)	Quantity	Unit price (\$)	Total Budget (\$)					
NON-PERSONNEL															
ACCESS TO IMPROVED WATER SUPPLY															
Study and design of water supply systems	Number	6	500	3,000	4	500	2,000				5,000	5,000	100%	-	0%
Completion of pipe laying and electromechanical installations to already drilled borehole at Minjar	Kilometers	10	120,000	120,000							120,000	120,000	100%	-	0%
Shallow well drilling and development @ Angollela	Number				4	9,000	36,000				36,000	-	0%	36,000	100%
Reservoir construction (50 cubic meter) at Angollela	Number	1	24,590	24,590							24,590	-	0%	24,590	100%
Distribution network at Angollela	Kilometers	10	25,683	256,830							256,830	256,830	100%	-	0%
Water points @ Angollela					8	2,430	19,440				19,440	-	0%	19,440	100%
Pump house construction at Angollela	Number	1	8,196	8,196							8,196	-	0%	8,196	100%
Water quality testing	Number				2	54	108	2	54	108	216	-	0%	216	100%
Subtotal				412,616			57,548			108	470,272	381,830	81%	88,442	19%
ACCESS TO IMPROVED SANITATION AND HYGIENE															
Facilitate Training of Trainers on Community-Led Total Sanitation (CLTS) for health workers and grass-roots-level staff	Number	105	43	4,520	55	43	2,368	50	43	2,152	9,040	-	0%	9,040	100%
Implement CLTS	Villages	12	184	2,210	12	184	2,210	12	184	2,210	6,630	1,316	20%	5,314	80%
Follow-up to CLTS and conduct additional sanitation promotion in participating communities	Visits	200	17	3,371	100	17	1,688	100	17	1,688	6,747		0%	6,747	100%
Facilitate experience-sharing between Minjar and the best-CLTS-performing community in Angollela	Number	96	27	2,618	96	27	2,618	96	27	2,618	7,854	7,854	100%	-	0%
Support celebration of Open Defecation Free villages	Villages	12	150	1,800	12	150	1,800	12	150	1,800	5,400	5,400	100%	-	0%
Conduct School-Led Total Sanitation training	Schools	8	100	800	8	100	800	8	100	800	2,400		0%	2,400	100%
Conduct hygiene campaigns in communities	Campaigns	10	73	734	10	73	734	13	73	954	2,422		0%	2,422	100%
Train women, children, and families on improved hygiene practices including handwashing, facewashing, bathing, sanitary disposal of infant feces, and safe water transport and storage	Number	170	19	3,200	100	19	1,882	70	19	1,318	6,400		0%	6,400	100%
Conduct hygiene orientation for teachers and parents	Number	200	12	2,400	200	12	2,400	200	12	2,400	7,200	3,600	50%	3,600	50%
Form school WASH clubs, and conduct capacity building and activities	Number	18	222	4,000	12	222	2,667	6	222	1,333	8,000		0%	8,000	100%
Subtotal				25,653			19,167			17,273	62,093	18,170	29%	43,923	71%
SUSTAINABLE WASH SERVICES															
PARTNERS CAPACITY DEVELOPMENT															
Establish and train WASH committees in WASH system operation, maintenance, and management	Committees	5	400	2,000	10	400	4,000	10	400	4,000	10,000	-	0%	10,000	100%
Train committees on WASH principles and approaches, including the description of key WASH benefits	Number	185	12	2,275	100	12	1,230	85	12	1,045	4,550	-	0%	4,550	100%
Train households on multiple/productive uses of water	Number	75	31	2,300	36	31	1,104	39	31	1,196	4,600	-	0%	4,600	100%
Provide water treatment support (chlorinating/treating water supplies)	Number	1	900	900				1	900	900	1,800	-	0%	1,800	100%
Provide maintenance tool kits to WASH committees	Number	4	500	2,000	4	500	2,000	4	500	2,000	6,000	-	0%	6,000	100%
Conduct capacity building of artisans for water system maintenance and repair, construction of hand-dug wells, and latrine slabs	USD	2	600	1,200	1	600	600	1	600	600	2,400	-	0%	2,400	100%
Subtotal				10,675			8,934			9,741	29,350	-	0%	29,350	100%
Total Non-Personnel				448,944			85,648			27,123	561,715	400,000	71%	161,715	29%
GRAND TOTAL				487,785			158,733			103,482	750,000	400,000	53%	350,000	47%

Attachment B: Map of Project Location



Legend

Twon

- Zone Capital
- Other Towns

Boundary

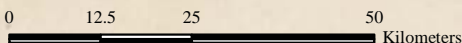
- International
- Region
- Zone
- Wereda

Road

- Asphalt
- All-weather Roads (Gravel)
- Dry-Weather Roads

Woredas

- Proposed Woredas
- Other Woredas



Prepared by: World Vision Ethiopia-SSD-ICT-GIS Department
 Source: Amhara N.R.S., BoFED
 N.B. The boundary limitations are not official!!