



Report avanzamento AC-QUA accesso-qualità Soluzioni per la potabilizzazione in Kenya (al 30 marzo 2019)

Il progetto è stato avviato il 9 luglio 2018, in previsione di una partenza del Project Manager nel mese di settembre. Idrodepurazione infatti aveva intenzione di avvalersi, per la figura di Project Manager Espatriato, di un ingegnere italiano di propria fiducia, il cui CV è stato allegato alla proposta di progetto, disponibile a gestire il progetto e sviluppare la presenza di Idrodepurazione in Kenya alla fine del progetto. Questa persona aveva tre caratteristiche importanti e cioè:

1. come socio della associazione monsignor Romero era garante del partenariato sulla contea di Isiolo.
2. aveva un alloggio nel paese, proprio a Isiolo, dove risiedeva la sua famiglia acquisita.
3. aveva in essere relazioni istituzionali e personali nel paese, e la possibilità di un piccolo ufficio di rappresentanza del progetto a Isiolo.

Purtroppo, la disponibilità di questo ingegnere è venuta meno, in seguito a situazioni famigliari che hanno modificato radicalmente le sue scelte professionali e di residenza. Questo cambiamento ha inizialmente messo in discussione la possibilità stessa di realizzare il progetto. Le attività preliminari del progetto, previste da cronogramma hanno richiesto un notevole sforzo di ridefinizione delle modalità operative. Nonostante questo, sono state comunque già avviate anche alcune delle attività associate ai risultati, come mostrato nell'estratto del cronogramma riportato in tabella, dove le X indicano la tempistica originariamente prevista e il grigio quella effettivamente registrata.

Attività	luglio	agosto	settembre	ottobre	novembre	dicembre	gennaio	febbraio	marzo
Attività "N" non collegate a specifici risultati attesi (per esempio "preparatorie e iniziali" o di gestione del progetto; da declinare nelle righe successive)									
Attività preparatorie (invio PM, MoU partners,...)	X	X	X						
Selezione tecnico locale				X	X	X			
Registrazione Idrodepurazione in Kenya				X	X	X			
Risultato 1 (conseguito entro M36). La formula commerciale incontra le esigenze e la capacità finanziaria delle piccole imprese clienti, sostenendone la crescita e garantendo replicabilità.									
1.1 Identificazione e selezione clienti e supporto alla definizione dei loro business plan				X	X	X	X	X	X
1.2 Follow up della gestione degli impianti.									X
Risultato 2 (conseguito entro M36). L'acqua fornita nei contesti target è accessibile per la popolazione a basso reddito									
2.1 Analisi della domanda di acqua espressa dalla popolazione a basso reddito nelle comunità di riferimento per ciascun cliente	X	X	X	X	X	X	X	X	X
2.2 Definizione e avvio di forme di partecipazione della comunità di utenti del servizio di fornitura di acqua alla gestione e al monitoraggio.				X	X	X	X	X	X
Risultato 3 (conseguito entro M24). L'acqua fornita nei contesti target ha una qualità alta e costante									
3.1 Valutazione delle fonti disponibili e dei fabbisogni e finalizzazione delle soluzioni tecniche (progetto definitivo impianti)	X	X	X	X	X	X	X	X	X





3.2 Costruzione di impianti compatti, trasporto e installazione nei contesti target				X	X	X	X	X	X
3.3 Assistenza tecnica al funzionamento dell'impianto							X	X	X

Attività preliminari

L'attività preparatoria "invio PM" è diventata più articolata. In seguito ad attenta valutazione si è concluso che il budget previsto per la figura di Project Manager Espatriato non risultava sufficiente per un espatriato che già non avesse una base logistica e un alloggio nel paese. Si è per tanto optato per un Project Manager Locale. Si è quindi pubblicata una vacancy (Allegato 1) su due siti locali tra dicembre e gennaio 2018. Sono stati preselezionati 5 CV e svolti altrettanti colloqui via skype. Due finalisti i cui CV sono allegati (Allegato 2) sono stati intervistati e ulteriormente valutati con il supporto di Coopi Nairobi e uno dei due (CV2) è stato selezionato.

Si è anche provveduto alla negoziazione e redazione di Memorandum of Understanding con i partner di progetto e gli accordi sono al momento in fase di finalizzazione (MoU non definitivi in allegato 3). La definizione delle modalità operative del partenariato ha subito a sua volta ritardi a causa del venir meno del Project Manager inizialmente identificato e, con lui, di un partner di progetto chiave, l'Associazione Monsignor Romero. La nuova situazione ha generato incertezza sulla fattibilità stessa dell'iniziativa progettuale ed è anche grazie agli incontri con i partners NGO e alla loro conferma di disponibilità che si è potuto procedere. L'associazione Mons. Romero esce quindi dal progetto e si vuole sostituirla con LVIA per la contea di Isiolo. LVIA inoltre è disponibile a fornire supporto logistico e operativo nel paese con il suo ufficio a Isiolo, come specificato nell'MoU.

Attività risultato 1

1.1 Identificazione e selezione clienti e supporto alla definizione dei loro *business plan*

L'attività di Identificazione e selezione clienti è stata avviata con

- la definizione di un format base per la raccolta dei dati dei clienti (Allegato 4)
- una missione di un agente nella contea di Kilifi e la raccolta di alcune richieste di offerta (Allegato 5).

Malgrado questi risultati siano sicuramente incoraggianti, al momento i rapporti con questi potenziali clienti sono fermi e in attesa di essere trasferiti al referente CAST e al PM locale, appena sarà operativo.

1.2 Follow up della gestione degli impianti.

In linea con il cronogramma di progetto questa attività non è stata ancora avviata.

Attività risultato 2

Le attività relativi al risultato 2 non sono state avviate a causa del ritardo causato dalla riorganizzazione generale. Infatti, si tratta di attività in cui i partner di progetto giocano un ruolo chiave e la riorganizzazione generale del progetto ha ritardato l'avvio della operatività dei partner stessi.

Attività risultato 3

3.1 Valutazione delle fonti disponibili e dei fabbisogni e finalizzazione delle soluzioni tecniche (progetto definitivo impianti)

In assenza di clienti con specifici fabbisogni da valutare, i progettisti di Idro si sono concentrati sul problema della defluorazione, comune a diverse aree di progetto. Era questo un impegno assunto da documento di progetto: "Combinazioni diverse di tecnologie potranno essere effettivamente selezionate in sede di progettazione esecutiva degli impianti, fermo restando il numero minimo di impianti e di utenti. In particolare, è in via di selezione una tecnologia per la defluorazione." I principali risultati e orientamenti riguardo a questo problema sono presentati in sintesi in allegato (Allegato 6)

3.2 Costruzione di impianti compatti, trasporto e installazione nei contesti target

L'attività non è stata avviata a causa del ritardo nell'attività 1.1 di identificazione e selezione clienti.



3.3 Assistenza tecnica al funzionamento dell'impianto

In vista della necessità di fornire assistenza tecnica manutenzione agli impianti che saranno installati, si è proceduto alla preparazione e invio ad alcune aziende Kenyane di una Request for Quotation per tali servizi (Allegato 7). Un eventuale outsourcing potrebbe rendere del tutto superflua la figura di tecnico locale originariamente prevista dal progetto e già resa ridondante dall'opzione per un Project Manager locale. Infatti l'indicatore 1.3 Idrodepurazione crea almeno 1 posto di lavoro locale permanente, sarebbe già soddisfatto da questa figura. Poichè il primo invito a presentare un'offerta è andato deserto, è in corso un secondo tentativo.



Allegato 1: Vacancy

Position Description

Idrodepurazione is seeking a resident Project Manager in the field of Drinking Water Treatment, for an upcoming AICS inclusive business project in Kenya. The project aims at inclusive business development and it will make available compact potabilization technologies to improve safe water access at the bottom of the pyramid and to allow the development of Kenyan small and medium enterprises whose businesses rely on high water quality standards:

- Promoting water treatment technologies among Kenyan small and medium enterprises;
- Assessing water treatment needs of potential customers, including available water sources and their quality;
- Assessing safe water demand by low income population in the areas where the potential customers operate;
- Supporting enterprises in the design of business plan to invest in water treatment technologies;
- Provide the technical office of Idrodepurazione in Italy with all the necessary information to quote, design and build tailored water treatment plants;
- Promoting awareness about safe water use and health risks associated to the consumption of contaminated water;
- Lead and follow up import and clearing procedures for the plants;
- Organize and facilitate field missions by Idrodepurazione technical staff for set of the plant;
- Support Idrodepurazione in the development of partnerships with businesses operating in Kenya with technical skills in the O&M of water treatment plants;

The Project Manager will report directly to Idrodepurazione for strategic choices and project results and to non-profit partner of Idrodepurazione in Kenya for everyday operations sharing their local office structure. This position will lead and contribute to development of project work plans and reports. This is a full-time position based in Kenya. Remuneration based on actual skills and qualification of the successful candidate, but not above € 2,350.00. The position is for two years and is expected to evolve into a collaboration spanning behind the project time-frame as a reference person for Idrodepurazione Srl in Kenya.

Skills and Qualifications

- MPH, PHD, MD, MA or other relevant degree in Water/Environmental Engineering or Business Administration;
- Minimum 7 years' in the water sector in a developing country setting, including willingness to pay and affordability analysis;
- Demonstrated knowledge and background in the markets of informal, small scale water providers and vendors in urban and peri-urban settings;
- Demonstrated problem solving skills, collaboration experience, creativity and willingness to innovate.
- Excellent written and spoken English language skills; knowledge of Swahili language preferred.
- Significant experience and knowledge of Kenya (Kenyan Nationals are encouraged to apply).

About the Organization

Idrodepurazione s.r.l. is part of the consortium IDRO Group, established in 2015. IDRO Group combines companies with over forty years of experience in their sectors and which operate with the latest technologies and with full respect for the environment. The companies making up IDRO Group began operating independently in the Brianza area near Milan, Italy, and experienced constant growth also thanks to the acquisition of renowned companies in the environmental sector, which carried them into international territory. These companies have developed a close and productive collaboration which facilitates financial, commercial, logistical and organizational synergies based on a common strategy focused on quality, specialization, product innovation and strong customer focus. IDRO Group provides efficient and innovative solutions for the treatment of: Water, Air, Energy, Waste.

Idrodepurazione Srl is particularly interested in advancing research in eco-sustainable technologies for air, water and waste treatment focusing on recovering treated elements so as to increase available quantities of that element or resource. The company's objective is to combine respect for the environment with the development of new and increasingly advanced systems that can reduce the costs of such treatments.





Allegato 2: Curricula

Curriculum 1

I am an accomplished business manager with over 10 years' experience in sales, technical, operations and management related roles in the water and energy sectors. I have a strong entrepreneurial mind and hunger for success with an ability to see hidden opportunities. I am an extremely fast learner with an intensive network built over the years.

KEY ATTRIBUTES

- ☐ I see value in sharply different ways
- ☐ Have a wide curiosity and hunger for success
- ☐ Have a passionate commitment, focus and discipline to assist others to excel
- ☐ Compelling leadership skills
- ☐ Ready to go to where the challenge is.
- ☐ Innovative and can think outside the box
- ☐ Tenacious in building new business channels and models, securing client and end user loyalty and forging strong relationships with external partners
- ☐ Possess excellent communication skills
- ☐ Have a great business network built over 10 years
- ☐ Have a great understanding of Kenya, it's various communities and the cultures
- ☐ Have excellent analytical skills

PROFESSIONAL EXPERIENCE

PROJECT MANAGER; September 2014-present

SIX ACRES AFRICA LTD; NAIROBI KENYA

Six Acres are professionals working in the renewable energy, water, and sanitation nexus to provide solutions, support programmes and build infrastructure. They deliver tangible infrastructure and urban/rural development projects which add value to communities and combat the effects of climate change.

Key duties and responsibilities

General office duties

- ☐ Provision of strategic, tactical and operational leadership within the organization.
- ☐ Overseeing budgeting, financial planning and ensuring prudent use of resources within the organization and on projects and programmes
- ☐ Determine needs, recruit and train staff within the organization or for specific projects and programmes and oversee their performance and development.
- ☐ Implementing standard operating procedures throughout the organization, projects and programmes
- ☐ Implementing and overseeing health and safety standards within the organization.
- ☐ Overseeing importation and clearance of goods and equipment
- ☐ Proposal writing, fundraising and actively seeking project and programme partners for various projects undertaken by the organization
- ☐ Provide appropriate support and training for office staff, project staff, communities we work with and external development partners.

Sales, Project Planning and Management Responsibilities

- ☐ Overall oversight and input in the (human centred) design, development, planning, financing, implementation, partner communication, data collection and dissemination of information for projects and programmes undertaken by the organization
- ☐ Identifying various tools to be used for various interventions and working with thematic experts to train and develop the tools within the project implementation teams.



- ☐ Proposal writing, structuring projects and programmes, working with beneficiaries, seeking external partners and ensuring successful implementation and communication of results throughout the project lifecycle
- ☐ Identifying new technologies and market models, including them in our projects and programmes to make them more user friendly to the end user, reduce overall costs, and build more resilient projects and programmes
- ☐ Engaging with various community, state and external actors in the ever changing world of project planning and development to identify emerging issues, learn needs, impacts, failures and successes of already implemented interventions, and use the information to structure our programmes and projects to suit the needs of the end users
- ☐ Undertake extensive studies or already implemented programmes and interventions from around the world and recommend ways of enhancing the end user experience and outcomes of projects and programmes.
- ☐ Contribute to team efforts by actively joining and working alongside staff in various departments in an effort to build open communication, learn from others, encourage them to act boldly and be leaders in their own right.
- ☐ Data collection and analysis to help in planning, periodic and overall check on whether interventions are meeting and exceeding end user needs and set intervention goals, modelling and evidencing as impact outcomes and communication of the same to all partners.
- ☐ Prepare management and project/programme outcome reports for senior management, donors and external partners from time to time
- ☐ Identify emerging markets and market shifts while monitoring new products and the competition status
- ☐ Negotiating with innovators, manufacturers to obtain distribution rights for relevant products within Kenya.

Selected achievements

- ☐ Was instrumental in getting Six Acres appointed as the sole distributor of GIMAT online water analysers, online water probes level/flow metre samplers, remote control waste water measuring stations among many other products for the African market.
- ☐ Together with the Lions Club of Munich and the Bilula Limbuko project, initiated, did the feasibility studies, wrote the project proposal, wrote funding proposal, designed and are in the process of implementing a community water project for the Bissil community to serve 11,000 people. The project employs water analysis and treatment technology using Gimat instruments
- ☐ Was instrumental in obtaining main distributorship of Soleco water treatment technologies from Kazentbar South Africa. Role also involves working with the parent company in designing and building custom water treatment solutions for various clients.
- ☐ Have established a niche market for Soleco products and are in the process of making it a product of choice for many customers in need of water treatment solutions
- ☐ Together with the Rotary of North Carolina, the Ronnie Mdawida foundation and the Rotary of Ngong, I designed, sought financing and implemented a water and sanitation project, setting up of greenhouses and ultimately putting in place a school feeding programme for over 2,000 pupils of Ngong Township primary school and provide water to the over 8,000 residents of Mathare slum within Ngong town.
- ☐ Successfully fundraised, undertook bankable feasibility studies, and did project design and planning for the Mwalui community water project in Wongonyi sub location in Taita. Once implemented, the project will provide treated piped water to homesteads at a fee. The main contaminant in the water is iron which is abundant in the area and dissolved solids as well as biological contaminants
- ☐ Have undertaken various water treatment projects for various clients from informal and peri-urban settlements, organizations, corporates and individuals. The water sources treated are mainly borehole, rain water and river water.



□ Growing Six Acres from humble beginnings of 2 employees to a robust project development and management team of over 15 in-house staff and various external and thematic partners providing solutions across the water, sanitation and energy nexus

ASSOCIATE CONSULTANT; April 2017-Present

SERVITEC UMWELT- CONSULTING, GERMANY

Servitec Umwelt specializes in water, sewage and hazardous materials. Servitec consists of a very experienced, interdisciplinary team of subject matter experts and industry specialists. By bundling the competencies in a company, Servitec positions itself as a successful consulting and planning company in terms of corporate environmental protection and waste water treatment.

Responsibilities

I serve as an associate consultant and the African Lead.

Selected achievements

□ Getting Servitec as an implementing partner in the Bilula Limbuko water treatment and supply project in Bissil, Kajiado which when complete will provide drinking water to over 11,000 residents. LEAD

Owner/ technical sales and support, August 2012-September 2014

ARGGO ENERGY SOLUTIONS; NAIROBI, KENYA.

Arggo Energy Solutions is a supplier and installer of renewable and clean energy solutions in East Africa using a multi-disciplinary approach integrating leading technologies suited for use in the selected areas through our teams with expertise in each of the areas critical to the full implementation of any given project. In August 2012, I left Daima energy services and set up my own firm; Arggo Energy Solutions. Arggo Energy Solutions grew from humble beginnings as a one man operation with a capital of KES. 5000 to become one of the most reputable project implementation firms of renewable and clean energy solutions in East Africa. Within a span of 6 months, it grew from a one man operation to over 9 personnel and with monthly revenues growing steadily to top KES.2.2m /month. The firm is a specialty firm dealing mainly with the implementation of turnkey renewable energy projects in Africa.

Selected achievements

- Growing the company from a one man operation to an efficient business unit employing 26 people at its peak.
- Introduction of new products and solutions to the stable
- Growing the company to profitability in less than 3 months
- Negotiating dealership agreements with various manufacturers and distributors
- Supply and Installation of inverter based power back up units for the 6 branches of FINTEA cooperative growers unions in Kericho, Kenya
- Supply and Installation of hybrid solar-wind solution to power base transmitter stations for Kitui teachers SACCO and Baringo teachers SACCO in Kenya.
- Supply and Installation of solar borehole pumps for Dorcas Aid International in Kenya
- Drilling and equipping boreholes inclusive of water treatment and distribution systems for Child Fund Kenya in Turkana County.
- Supply and installation of solar street lights in Malakal State, South Sudan.
- Project liaison in the supply and installation solar borehole pumps in Liberia in partnership with a local Liberian firm for an Ecowas Renewable Energy Facility (EREF) funded project.
- Drilling and equipping with solar powered pumps over 40 boreholes for various clients within Kenya. Many included the component of water treatment to WHO recommended levels

Senior Technical Sales Executive, Dec 2009- August 2012

DAIMA ENERGY SERVICES LTD, NAIROBI KENYA

Daima Energy services ltd is a renewable energy solutions arm of Daima Energy Solutions UK, a subsidiary of John white and Sons Weighing machines, an old British company dating back to 1715.

Key Duties and Responsibilities



- ☐ Coordinating selling activities within the organisation and with key client accounts
- ☐ Developing and cultivating viable partnerships with financing institutions to form consumer financing schemes for solar consumers
- ☐ Training technicians and financial partners on our consumer financing model.
- ☐ Addressing customer queries, concerns aimed at giving them the best technical solution
- ☐ Developing a marketing and sales strategy for Daima products and services;
- ☐ Undertaking market surveys to determine market size, needs and identify the market niche for Daima's products and services;
- ☐ Working with Lighting Africa Initiative on increasing awareness for small LED based solar systems to the bottom of the pyramid
- ☐ Develop new market areas for Daima and recommend appropriate points of entry outside the delivery model.
- ☐ Writing funding proposals as well as project proposals, coordinating project implementation

Some of my achievements during this time include:

- ☐ Under the Lighting Africa funded project, was instrumental in the establishment of Daima Energy Services Kenya which has grown to become one of the main players in the renewable energy sector in Kenya.
- ☐ Instrumental in the development of 23 profitable consumers financing schemes with various Sacco's and MFIs under the business delivery model.
- ☐ Provided cross functional training for various staff of partner organizations on solar products to be able to advise customers effectively
- ☐ Developed a countrywide training strategy for solar PV installers and up to date, have overseen the training of over 80 technicians across various counties in Kenya
- ☐ Instrumental in the introduction of new product lines like power back-ups, solar bore hole pumps, solar hot water systems ;street lighting solutions to their stable of products
- ☐ Successfully bid for 2 funding proposals to be implemented by the company
- ☐ Based on the consumer financing model, many companies have replicated it increasing further access to lighting products for the bottom of the pyramid.
- ☐ Created a large consumer database to be used by members of the sales team to generate steady sales
- ☐ Participated in key stakeholder meetings aimed at regulating and creating a long term growth of renewable energy in Kenya which culminated in the energy bill 2014

EDUCATION AND PROFESSIONAL TRAINING

Masters in Climate Change Adaptation (MCCA), 2017-Ongoing – University of Nairobi, Kenya

Bachelor of Science (BSc), 2007 – Jomo Kenyatta University of Agriculture and Technology- Kenya

Professional Development Courses:

Leadership and Project Management skills

Training skills

Entrepreneurship and social entrepreneurship skills

Computer skills

Consumer financing

Memberships

Kenya Water Industry Association

Kericho Golf Club

American Chamber of Commerce

Referees

...

Curriculum 2



I have Ten years' experience in Rural& Urban development and in the field of Water, Sanitation and Hygiene. My experience encompasses but is not limited to working with NGOs and donors, Government agencies, Financial Institutions and Local communities to improve Human life. I am a Water & Environmental Engineer with a strong bias in integrated WASH.

Education & Professional Qualifications:

- Mater of Public Policy & Administration, Kenyatta University 2016 (Awaiting graduation)
- BSc. Water & Environmental Engineering, Egerton University 2010
- Post Graduate Diploma in Project Management, Thika Institute of Technology, 2010

Key Professional Skills:

- Excellent communication and interpersonal skills.
- Ability to manage multiple projects simultaneously while meeting all deadlines.
- Demonstrated ability to troubleshoot problems and implement creative, highly effective solutions.
- Ability to withstand pressure, work within short deadlines independently.
- Problem solving and organizational skills.
- Ability to analyse information and data

Work Experience

April 2017-To date: Director of Water and Sanitation Services, County Government of Embu: My work involves the overall guidance, directing, coordinating personnel, resources and activities geared towards improving water and sanitation within the County Government of Embu

August 2014-March 2017: Technical Services Manager-Meru Water and Sewerage Services

My work encompasses the overall goal of providing customers with quality and safe water and sewerage services and efficient utilization of resources through development of production methods, reduction of downtime of equipment and continuous improvement of water and sewerage processes; advising the Management and Board on Technical Issues, fundraising among others. I also serve as a Technical Lead for the JICA Non-Revenue Water Project with 6 Counties In Kenya.

August 2011-July 2014: Project Officer-Water, Sanitation (WatSan), Practical Action Eastern Africa

This was a 3 year CLTS project (2011-2013) funded by Comic Relief UK through Practical Action UK, with the aim of promoting Water Availability, Sanitation and Environmental Health in Nakuru low income settlements.

Main Duties Included Managing partners and cultivating good working relationships among stakeholders, Mobilizing public and private sector resources to support the project implementation; leading in implementation of innovative cost effective WASH technical options focusing on the poor, the elderly, disabled, HIV/Aids patients , Women, Children and other vulnerable groups; Developing models and training curriculum for Sanitation and Hygiene promotion, integration of gender and market approaches in all project activities; Developing and managing partnerships within the WASH sector in Nakuru and Nairobi. I also took lead in development & implementation of community action plans, Budgeting and Reporting; Assisting in improving the adoption of appropriate Environmental, Water, Sanitation and Hygiene policies to inform project implementation and related Poverty reduction; Working effectively with project team members to develop water and sanitation programme in Nakuru-Nairobi cluster and its environs, Support of fundable project ideas and proposal for the WASH programme, Initiating the Kajiado Project with the Kenya WASH Alliance, among other duties.

August 2010-to July 2011: Technical Officer EU/SKILLSHARE/GHARP/Kenya Rainwater Association Partnership Project.

This was a 4-Year project in 11 ASAL districts of Kenya funded by the European Union with the core mandate of promoting Rainwater harvesting and management systems& other complementary technologies for promotion of water, rural health, sanitation and food security. Some of these approaches include construction of Sanitation facilities, hand washing facilities, management of sludge by use of biogas, Construction of greenhouses, installation of Drip Irrigation Systems, Runoff water harnessing, among other technologies.

Sept 2008 to July 2010 : Community Water Development Project Officer , Mt. Kenya East Pilot Project for Natural Resource Management (MKEPP – NRM); IFAD/ GEF/ GOK funded project with the objective to reduce poverty through improved food security, community Health and income





levels of farmers and rural women by promoting an effective Water and Natural Resources Management within the project area.

Duties included: Design and Construction of Water related works such as boreholes, Sand dams, Earth dams, water tanks, Pipelines, Wells and Springs development; and conflict resolution in community projects; Directing, coordinating controlling monitoring and managing all the technical operations, Designing all projects to be undertaken by the Project, Surveying and development of viable proposals for funding, GIS mapping and coding for development of GIS database among other duties.

Oct 2004-August 2006 Water Officer, Japan International Corporation Agency (JICA) where I was involved with Design and Construction of Water Harvesting Structures such as Rock Catchments, Water Tanks, Sand Dams, Earth dams and Water Pans in Mbeere and Embu Districts.

October 2002-February 2004 -Volunteer with the United Nations Environmental Program (UNEP-Nairobi) Water Programme where I was acquainted with International and Regional Water Laws and Standards.

Trainings attended:

- Rainwater Harvesting Techniques and Design of Hydraulic Structures organized by AICAD in Jomo Kenyatta University of Agriculture and Technology in August 2009
- Monitoring & Evaluation Training in Community Projects -Training facilitated by USAID In 2011
- Gender Mainstreaming in Community Projects Training of Trainers facilitated by Practical Action UK In 2012
- Community Led Total Sanitation Training facilitated by AMREF Kenya, Umande Trust and Practical Action in March 2012
- Corporate Governance Training by G.K, Company Secretary in 2015
- Operation And Maintenance of Sewerage Systems organized by JICA in Fukuoka City, Japan in August –October 2016

Affiliations

- Member of the KENYA SOCIETY OF AGRICULTURAL ENGINEERS

Allegato 3: MEMORANDA OF UNDERSTANDINGS

MANITESE

This agreement is made between IDRODEPURAZIONE SRL hereinafter referred as IDRO, and the International NGO MANITESE hereinafter referred as “MANITESE”

1. Preamble

- Whereas the Italian Agency for Development Cooperation AICS appoints IDRO as the lead Agency for the AICS funded project “AC-QUA accesso-qualità. Soluzioni per la potabilizzazione in Kenya”.
- Whereas the implementation of the Project includes activities directly carried out by MANITESE.

2. Definitions and Roles

Parties shall mean MANITESE and IDRO. The Project shall mean the AICS funded project “AC-QUA accesso-qualità. Soluzioni per la potabilizzazione in Kenya”. Other partners shall mean XXX and MMMM.

3. Purpose and Scope of the Agreement

This agreement sets forth the general terms and conditions of collaboration between the Parties during project implementation. The Parties agree to pool efforts and resources and to maintain effective working



relationships in order to achieve the results of the project. The project official document and the attached documents are part of the present Agreement.

4. Duration of the Agreement

The agreement enters into force upon its signature and will last until the end of the project (final report submission).

5. Duration of the Project

The project implementation is foreseen over a period of maximum 36 months. In any case, the budget allocated has to be used before the end of the project, which is now foreseen as the 8th of July 2021. Extensions in the duration of the project granted by the donor will automatically result in corresponding extension in the duration of the present Agreement.

6. Project Description

Access to water by low income families in sub-Saharan Africa is severely limited by quality problems and affordability challenges. Freshwater sources are increasingly contaminated, both in the rural, urban and peri-urban areas, also due to demographic pressure on water resources. Kenyan public utilities reach only 55% of the population in their catchment areas and, out of 84, 60 have unacceptable water quality standards. The situation of the remaining 45% and of the entire population outside their basins is even worse. They get water from private or common wells or from small scale water operators, often not regular nor regulated. When affordability is considered, the so-called "poverty premium" is observed: low-income population without a domestic connection pays the highest prices. In fact, prices at public fountains are higher than for domestic users, and those of informal small operators are even higher.

Idro has the resources to address both problems. On the one hand, it has the technical know-how to solve the most common problems of potabilization at competitive costs with compact plants, on the other it has a business idea to facilitate access to drinking water technology for local businesses and consequently to the low-income population. The project wants to make available high quality water at affordable prices, through the rental of compact water treatment plants. Customers are operators in the water sector, who manage wells and kiosks, but also food processing companies or bottled water production, or residential facilities (clinics, schools, tourist facilities). In cases where the company is not a water operator, its internal use should in any case be combined with supply to the surrounding communities, with public water points adjacent to the facilities that use the excess capacity. The project will start at least 5 pilot experiences and plants.

RESULTS AND ACTIVITIES	INDICATORS
Result 1. The proposal meets the needs and financial capacity of client companies, supporting their growth and ensuring replicability.	
1.1 Identification and selection of customers and support their business planning	1.1 At least 5 local economic operators can develop their business by renting the plants.
1.2 Follow-up of plant management.	1.2 at least 1 permanent local work place (plus one biennial) and 5 inclusive business pilot experiences
	1.3 (SDG target 9 9.3) At least 50% of small businesses without access to credit among clients.
	1.4 At least one enterprise managed by women or young people among client companies.
Result 2. The water provided in the target contexts is accessible to the low-income population.	
2.1 Analysis of the water demand expressed by the low-income population in the reference communities for each client	2.1 (SDG Indicator 6.1.1): the population using safe water services increases at least 3500 units.
2.2 Identification and launch of forms of participation of users' community in water supply service management and monitoring.	2.2 (SDG target 6B): at least 3 community organizations involved in improving water management and monitoring.
2.3 Sensitization of communities on water quality	
Result 3. The water supplied in the target contexts has a high and constant quality.	
3.1 Evaluation of available sources and needs and final design of plants	3.1 (SDG target 6.4.1) 140 cubic meters per day of drinking water made available, reducing the scarcity of fresh water.
3.2 Construction of compact plants, transport and installation in target contexts	3.2 (SDG target 6.4.1): 15% increase in brackish or non-usable waters on total water withdrawal in the catchment area of each plant, improving efficiency of the exploitation of water resources
3.3 Technical assistance for the operation of the systems	

7. Responsibilities of the Parties



Idrodepurazione

IDRODEPURAZIONE SRL

Via Comina, 39 - I-20831 Seregno, Monza Brianza (Italy)

Tel. +39 0362 2751.1 - Fax +39 0362 2751.511

E-mail: info@idro.net - web: www.idro.net

P.IVA: 00762220960 - C.F. 03768380150



ISO 14001
LL-C (Certification)



OHSAS
LL-C (Certification)



ACM CERT
ISO 9001

Certificato N IT16-13803

**MANITESE general tasks:**

1. Provide logistical support to field visits (number of days) by Idro Local Project Manager, whose costs (travel, accommodation) will nonetheless be covered by Idro.
2. Support the collection of project OVI at Baringo and Nakuru County level, particularly undernutrition among U5 children and water related mortality.

MANITESE project activities

The Partner will undertake the activities taking cognisance of the project objectives and expected results.

2.3 Sensitization of communities on water quality

MANITESE will be in charge of the following activities in all the communities where a plant is actually installed, up to 4 reaching 5600 persons (twice the foreseen users of 3 plants):

- Develop produce and disseminate awareness raising materials about water quality and hygiene promotion, targeting different age and gender groups
- Organizing and calling for community meetings to raise awareness about water quality and hygiene promotion, targeting different age and gender groups

8. Reporting and planning

- MANITESE PM will submit a monthly report for the use of the Local Project Manager for MANITESE activities, and the corresponding plan for the coming month.

9. Finances

Whereas the total budget is 282.929 Euro and no indirect cost are recognized, the budget allocated to MANITESE is 9,000.00 Euro for Activities described under paragraph activities;

In case of project amendment extending project duration, the present agreement shall be revised. IDRO will transfer to MANITESE 50% by 30 days from the signature of the present MoU and the remaining 50% upon completion of the project. The payment requests will be submitted to MANITESE through formal request (debit note) and invoiced by MANITESE Kenya/MANITESE Italia.

The funds will be transferred directly to MANITESE bank account in Italy/Kenya IBAN.

10. Coordination and relationship of partners

For purposes of this Partnership Agreement, MANITESE and IDRO are not engaged in an employer-employee relationship, joint venture or agency contract of any kind. Neither MANITESE nor the Partner has authority to create any obligations, express or implied, on behalf of the other.

IDRO reserves all kind of direct communication to the Donor in reference to the program or to the program administrative and financial elements. IDRO shall keep MANITESE informed of ongoing communications with donors affecting its obligations or budget hereunder.

The parties agree to establish an executive committee for coordination of project implementation. The executive committee members are the Idro local PM, the MANITESE PM, and representatives of other project partners. The committee meets on a monthly basis to assess project progress, based on project partners reporting, and to plan for the coming month. Meetings are called by the local PM and can be held on skype. The names of the members and their changes are notified in writings by each party.

11. Visibility

MANITESE will consult IDRO Italia prior to producing of any visibility materials related to the project activities. Similarly, IDRO will need MANITESE Kenya/Italia approval to mention MANITESE and use MANITESE logo within project visibility materials.

12. Ethics

IDRO and MANITESE share the Project Ethics about responsible water supply defined in annex 2.

MANITESE reserves the right to terminate the MoU, if IDRO breaches any of the ethical commitments.

13. Early termination

Either party can terminate or suspend for an indefinite period of time this agreement with 60 days prior written notice with a justified cause, failing the success of consultation between parties to solve the cause of termination. Are considered as justified causes when:

- the Partner is unable or unwilling or otherwise impeded to perform its obligation or meet its responsibilities under the present agreement;



- the implementation of the project has important delays or mistakes and there is a prevision that this could seriously endanger the achievement of the objectives of the project;
- the breach of at least one of the provisions of the present MOU.

Before termination of the agreement, MANITESE has to satisfactorily hand over its project documents and information to IDRO in order to meet the project target.

14. Arbitration

Any dispute, controversy or claim relating to the present agreement shall be settled by direct negotiations at the level of the Italian offices of the parties. Failing this, each party may appoint an arbitrator to represent them. These arbitrators will then appoint a third independent arbitrator who will discuss and solve the problem.

Enclosed binding documents to this MoU:

1. Project Document
2. Project Ethics about responsible water supply

CAST

This agreement is made between IDRODEPURAZIONE SRL hereinafter referred as IDRO, and the International NGO CAST Centro per un appropriato sviluppo tecnologico hereinafter referred as "CAST"

1. Preamble

- Whereas the Italian Agency for Development Cooperation AICS appoints IDRO as the lead Agency for the AICS funded project "AC-QUA accesso-qualità. Soluzioni per la potabilizzazione in Kenya".
- Whereas the implementation of the Project includes activities directly carried out by CAST.

2. Definitions and Roles

Parties shall mean CAST and IDRO. The Project shall mean the AICS funded project "AC-QUA accesso-qualità. Soluzioni per la potabilizzazione in Kenya". Other partners shall mean XXX and MMMM.

3. Purpose and Scope of the Agreement

This agreement sets forth the general terms and conditions of collaboration between the Parties during project implementation. The Parties agree to pool efforts and resources and to maintain effective working relationships in order to achieve the results of the project. The project official document and the attached documents are part of the present Agreement.

4. Duration of the Agreement

The agreement enters into force upon its signature and will last until the end of the project (final report submission).

5. Duration of the Project

The project implementation is foreseen over a period of maximum 36 months. In any case, the budget allocated has to be used before the end of the project, which is now foreseen as the 8th of July 2021. Extensions in the duration of the project granted by the donor will automatically result in corresponding extension in the duration of the present Agreement.

6. Project Description

Access to water by low income families in sub-Saharan Africa is severely limited by quality problems and affordability challenges. Freshwater sources are increasingly contaminated, both in the rural, urban and peri-urban areas, also due to demographic pressure on water resources. Kenyan public utilities reach only 55% of the population in their catchment areas and, out of 84, 60 have unacceptable water quality standards. The situation of the remaining 45% and of the entire population outside their basins is even worse. They get water from private or common wells or from small scale water operators, often not regular nor regulated. When affordability is considered, the so-called "poverty premium" is observed: low-income population without a domestic connection pays the highest prices. In fact, prices at public fountains are higher than for domestic users, and those of informal small operators are even higher.

Idro has the resources to address both problems. On the one hand, it has the technical know-how to solve the most common problems of potabilization at competitive costs with compact plants, on the other it has a business idea to facilitate access to drinking water technology for local businesses and consequently to



the low-income population. The project wants to make available high quality water at affordable prices, through the rental of compact water treatment plants. Customers are operators in the water sector, who manage wells and kiosks, but also food processing companies or bottled water production, or residential facilities (clinics, schools, tourist facilities). In cases where the company is not a water operator, its internal use should in any case be combined with supply to the surrounding communities, with public water points adjacent to the facilities that use the excess capacity. The project will start at least 5 pilot experiences and plants.

RESULTS AND ACTIVITIES	INDICATORS
Result 1. The proposal meets the needs and financial capacity of client companies, supporting their growth and ensuring replicability.	
1.1 Identification and selection of customers and support their business planning	1.1 At least 5 local economic operators can develop their business by renting the plants.
1.2 Follow-up of plant management.	1.2 at least 1 permanent local work place (plus one biennial) and 5 inclusive business pilot experiences 1.3 (SDG target 9.3) At least 50% of small businesses without access to credit among clients. 1.4 At least one enterprise managed by women or young people among client companies.
Result 2. The water provided in the target contexts is accessible to the low-income population.	
2.1 Analysis of the water demand expressed by the low-income population in the reference communities for each client	2.1 (SDG Indicator 6.1.1): the population using safe water services increases at least 3500 units.
2.2 Identification and launch of forms of participation of users' community in water supply service management and monitoring.	2.2 (SDG target 6B): at least 3 community organizations involved in improving water management and monitoring.
2.3 Sensitization of communities on water quality	
Result 3. The water supplied in the target contexts has a high and constant quality.	
3.1 Evaluation of available sources and needs and final design of plants	3.1 (SDG target 6.4.1) 140 cubic meters per day of drinking water made available, reducing the scarcity of fresh water.
3.2 Construction of compact plants, transport and installation in target contexts	3.2 (SDG target 6.4.1): 15% increase in brackish or non-usable waters on total water withdrawal in the catchment area of each plant, improving efficiency of the exploitation of water resources
3.3 Technical assistance for the operation of the systems	

7. Responsibilities of the Parties

Idro general tasks:

1. Ensure full participation of the Local PM in activities arranged for him/her by CAST in Kilifi County
2. Provide CAST with extensive materials and briefings on Idro technologies and management solutions
3. Provide CAST with tools and briefings to develop clients' business plans

CAST general tasks:

3. Provide logistical support to field visits (number of days) by Idro Local Project Manager, whose costs (travel, accommodation) will nonetheless be covered by Idro.
4. Support the collection of project OVI at Kilifi County level, particularly undernutrition among U5 children and water related mortality.

CAST project activities

The Partner will undertake the activities taking cognisance of the project objectives and expected results.

Result 1. The proposal meets the needs and financial capacity of client companies, supporting their growth and ensuring replicability.

1.1 Identification and selection of customers and support their business planning

The partner will be in charge of the following activities until the number of 3 contracts for plants rental is reached (once reached the obligations below cease regardless the number of potential customers met and meetings hold):

- Meeting 100 public and private bodies in Isiolo County, including Municipalities, Chamber of Commerce, Companies in the tourism sector, companies in the food sector, education and health facilities' managers to present Idro technologies and management solutions, based on extensive materials and briefings made available by Idro



Idrodepurazione

IDRODEPURAZIONE SRL

Via Comina, 39 - I-20831 Seregno, Monza Brianza (Italy)

Tel. +39 0362 2751.1 - Fax +39 0362 2751.511

E-mail: info@idro.net - web: www.idro.net

P.IVA: 00762220960 - C.F. 03768380150



ISO 14001
LL-C (Certification)



OHSAS
LL-C (Certification)



ACM CERT
ISO 9001

Certificato N IT16-13803



- Organizing and calling for 4 public meetings for Idro Project Manager to present the project and 8 for CAST staff themselves to present it (at least 50 persons each).
- Collecting basic information on 40 potential customers needs according to the template provided by Idro
- Organizing and calling for 6 community meetings (at least 50 persons) with Idro PM to present the project
- Support 20 potential customers, to develop their business plans, based on the tools and briefings made available by Idro, and share them with Idro.

1.2 Follow-up of plant management.

CAST will be in charge of the following activities in all the communities where a plant is actually installed, up to 3:

- Monthly supervision meeting with the community committees or the body designated by the community within activity 2.2 (minutes of meetings, jointly with incorporation documents, relevant MoUs and internal regulations of the community bodies should also be send to Idro local Project Manager).
- In case of joint participation of communities and private investors in the same plant, facilitate the relationship during operations.

Result 2. The water provided in the target contexts is accessible to the low-income population.

2.1 Analysis of the water demand expressed by the low-income population in the reference communities for each client

CAST will be in charge of the following activities:

- Collecting basic information on needs of communities neighbouring potential 10 clients/investors: number of persons within 1 km, socio-economic characterization of the population (i.e. low/middle income proportions, rural/peri-urban, ...), present sources of water available, are sources regulated and by whom, present prices charged at water sources.

2.2 Identification and launch of forms of participation of users' community in water supply service management and monitoring.

CAST will be in charge of the following activities in all the communities where a plant is actually installed, up to 3:

- Organizing and calling for community meetings to design forms of participation of communities and link them with private investors
- Support processes of registration, obtaining necessary permits and draft MoUs and internal regulations about the functioning of community supply and the collaboration with the private investor, when relevant

2.3 Sensitization of communities on water quality

CAST will be in charge of the following activities in all the communities where a plant is actually installed, up to 3 reaching 4200 persons (twice the foreseen users of 3 plants):

- Develop produce and disseminate awareness raising materials about water quality and hygiene promotion, targeting different age and gender groups
- Organizing and calling for community meetings to raise awareness about water quality and hygiene promotion, targeting different age and gender groups

8. Reporting and planning

- CAST PM will submit a monthly report for the use of the Local Project Manager for CAST activities, and the corresponding plan for the coming month. List and contact details of all the new potential customers met in the reporting period will be attached to keep track (but also timely shared for operational purposes in everyday collaboration during the month).

9. Finances

Whereas the total budget is 282.929 Euro and no indirect cost are recognized, the budget allocated to CAST is 14,500.00 Euro for Activities described under paragraph activities. IDRO will transfer to CAST 50% by 30 days from the signature of the present MoU and the remaining 50% upon completion of the project. The payment requests will be submitted to CAST through formal request (debit note) and invoiced





by CAST Kenya/CAST Italia. The funds will be transferred directly to CAST bank account in Italy/Kenya IBAN.

10. Coordination and relationship of partners

For purposes of this Partnership Agreement, CAST and IDRO are not engaged in an employer-employee relationship, joint venture or agency contract of any kind. Neither CAST nor the Partner has authority to create any obligations, express or implied, on behalf of the other.

IDRO reserves all kind of direct communication to the Donor in reference to the program or to the program administrative and financial elements. IDRO shall keep CAST informed of ongoing communications with donors affecting its obligations or budget hereunder.

The parties agree to establish an executive committee for coordination of project implementation. The executive committee members are the Idro local PM, the CAST PM, and representatives of other project partners. The committee meets on a monthly basis to assess project progress, based on project partners reporting, and to plan for the coming month. Meetings are called by the local PM and can be held on skype. The names of the members and their changes are notified in writings by each party.

11. Visibility

CAST will consult IDRO Italia prior to producing of any visibility materials related to the project activities. Similarly, IDRO will need CAST Kenya/Italia approval to mention CAST and use CAST logo within project visibility materials.

12. Ethics

IDRO and CAST share the Project Ethics about responsible water supply defined in annex 2. CAST reserves the right to terminate the MoU, if IDRO breaches any of the ethical commitments.

13. Early termination

Either party can terminate or suspend for an indefinite period of time this agreement with 60 days prior written notice with a justified cause, failing the success of consultation between parties to solve the cause of termination. Are considered as justified causes when:

- the Partner is unable or unwilling or otherwise impeded to perform its obligation or meet its responsibilities under the present agreement;
- the implementation of the project has important delays or mistakes and there is a prevision that this could seriously endanger the achievement of the objectives of the project;
- the breach of at least one of the provisions of the present MOU.

Before termination of the agreement, CAST has to satisfactorily hand over its project documents and information to IDRO in order to meet the project target.

15. Arbitration

Any dispute, controversy or claim relating to the present agreement shall be settled by direct negotiations at the level of the Italian offices of the parties. Failing this, each party may appoint an arbitrator to represent them. These arbitrators will then appoint a third independent arbitrator who will discuss and solve the problem.

Enclosed binding documents to this MoU:

3. Project Document
4. Project Ethics about responsible water supply

LVIA

This agreement is made between IDRODEPURAZIONE SRL hereinafter referred as IDRO, and the International NGO LVIA Associazione Internazionale Volontari Laici" hereinafter referred as "LVIA"

1. Preamble

- Whereas the Italian Agency for Development Cooperation AICS appoints IDRO as the lead Agency for the AICS funded project "AC-QUA accesso-qualità. Soluzioni per la potabilizzazione in Kenya".



- Whereas the implementation of the Project by Idro will involve active operative and logistic support by LVIA.
- Whereas the implementation of the Project includes activities directly carried out by LVIA.

2. Definitions and Roles

Parties shall mean LVIA and IDRO. The Project shall mean the AICS funded project "AC-QUA accesso-qualità. Soluzioni per la potabilizzazione in Kenya". Other partners shall mean NGOs CAST and MANITESE.

3. Purpose and Scope of the Agreement

This agreement sets forth the general terms and conditions of collaboration between the Parties during project implementation. The Parties agree to pool efforts and resources and to maintain effective working relationships in order to achieve the results of the project. The project official document and the attached documents are part of the present Agreement.

4. Duration of the Agreement

The agreement enters into force upon its signature and will last until the end of the project (final report submission).

5. Duration of the Project

The project implementation is foreseen over a period of maximum 36 months. Since the project has reached its 9th month of implementation, the implication of LVIA in its execution will concern the remaining 27 months, starting from 1st April 2019. In any case, the budget allocated will be used before the end of the project, which is now foreseen as the 8th of July 2021. Extensions in the duration of the project granted by the donor will automatically result in corresponding extension in the duration of the present Agreement.

6. Project Description

Access to water by low income families in sub-Saharan Africa is severely limited by quality problems and affordability challenges. Freshwater sources are increasingly contaminated, both in the rural, urban and peri-urban areas, also due to demographic pressure on water resources. Kenyan public utilities reach only 55% of the population in their catchment areas and, out of 84, 60 have unacceptable water quality standards. The situation of the remaining 45% and of the entire population outside their basins is even worse. They get water from private or common wells or from small scale water operators, often not regular nor regulated. When affordability is considered, the so-called "poverty premium" is observed: low-income population without a domestic connection pays the highest prices. In fact, prices at public fountains are higher than for domestic users, and those of informal small operators are even higher.

Idro has the resources to address both problems. On the one hand, it has the technical know-how to solve the most common problems of potabilization at competitive costs with compact plants, on the other it has a business idea to facilitate access to drinking water technology for local businesses and consequently to the low-income population. The project wants to make available high quality water at affordable prices, through the rental of compact water treatment plants. Customers are operators in the water sector, who manage wells and kiosks, but also food processing companies or bottled water production, or residential facilities (clinics, schools, tourist facilities). In cases where the company is not a water operator, its internal use should in any case be combined with supply to the surrounding communities, with public water points adjacent to the facilities that use the excess capacity. The project will start at least 5 pilot experiences and plants.

RESULTS AND ACTIVITIES	INDICATORS
Result 1. The proposal meets the needs and financial capacity of client companies, supporting their growth and ensuring replicability.	
1.1 Identification and selection of customers and support their business planning	1.1 At least 5 local economic operators can develop their business by renting the plants.
1.2 Follow-up of plant management.	1.2 at least 1 permanent local work place (plus one biennial) and 5 inclusive business pilot experiences
	1.3 (SDG target 9 9.3) At least 50% of small businesses without access to credit among clients.
	1.4 At least one enterprise managed by women or young people among client companies.
Result 2. The water provided in the target contexts is accessible to the low-income population.	



.1 Analysis of the water demand expressed by the low-income population in the reference communities for each client	2.1 (SDG Indicator 6.1.1): the population using safe water services increases at least 3500 units.
2.2 Identification and launch of forms of participation of users' community in water supply service management and monitoring.	2.2 (SDG target 6B): at least 3 community organizations involved in improving water management and monitoring.
2.3 Sensitization of communities on water quality	
Result 3. The water supplied in the target contexts has a high and constant quality.	
3.1 Evaluation of available sources and needs and final design of plants	3.1 (SDG target 6.4.1) 140 cubic meters per day of drinking water made available, reducing the scarcity of fresh water.
3.2 Construction of compact plants, transport and installation in target contexts	3.2 (SDG target 6.4.1): 15% increase in brackish or non-usable waters on total water withdrawal in the catchment area of each plant, improving efficiency of the exploitation of water resources
3.3 Technical assistance for the operation of the systems	

7. Responsibilities of the Parties

Idro general tasks:

- Select a Local Project Manager in collaboration with LVIA, and contract the selected person, in line with Kenyan law and donor eligibility.
- Train and supervise the local project manager about Idro technology and project implementation strategy, and write final ToR.
- Ensure full participation of the Local PM in activities arranged for him/her by LVIA in Isiolo County.
- Provide LVIA with extensive materials and briefings on Idro technologies and management solutions.
- Provide LVIA with tools and briefings to develop clients' business plans.

LVIA general tasks:

5. Collaborate with IDRO in the selection of a Local Project Manager and facilitate the recruitment of the Local Project Manager in line with Kenyan law and regulations
6. Make available to the Local Project Manager the following facilities, among its office in Isiolo: desk; use of office printers and unlimited internet connection, use of other office facilities (like meeting room, water dispenser, coffee, tea and milk).
7. Briefing the Idro local PM about the Kenya Regulations of LVIA (relevant parts attached) and monitor and supervise the Local Project Manager in his/her daily operations ensuring that he/she complies with LVIA employees' standards and LVIA Kenya Regulations about office hours, behaviour rules, quarterly reporting, security procedures.
8. Make available LVIA vehicle and driver, upon preliminary approval of dates and within a maximum number of 10 working days/month at a daily extra cost of 20 euro, fuel excluded.
9. Make available to the project the knowledge, administrative support, institutional contacts and all the relevant information to successfully meet standards and comply with rules and procedures about employment, business, water supply regulations, CBOs registration, customs and clearance, taxes, at the same standards adopted for LVIA projects and Project Managers.
10. Provide logistical support to 3 field visits (globally maximum 24 days) by technicians and staff from Idro Italia, whose costs (travel, accommodation) will nonetheless be covered by Idro.
11. Support the collection of project OVI at Isiolo County level, particularly undernutrition among U5 children and water related mortality.

LVIA project activities

Result 1. The proposal meets the needs and financial capacity of client companies, supporting their growth and ensuring replicability.

1.3 Identification and selection of customers and support their business planning

The partner will be in charge of the following activities until the number of 3 contracts for plants rental is reached (once reached the obligations below cease regardless the number of potential customers met and meetings hold):

- Meeting 100 public and private bodies in Isiolo County, including Municipalities, Chamber of Commerce, Companies in the tourism sector, companies in the food sector, education and health





facilities' managers to present Idro technologies and management solutions, based on extensive materials and briefings made available by Idro.

- Organizing and calling for 4 public meetings for Idro Project Manager to present the project and 8 for LVIA staff themselves to present it (at least 50 persons each).
- Collecting basic information on 40 potential customers needs according to the template provided by Idro
- Organizing and calling for 6 community meetings (at least 50 persons) with Idro PM to present the project
- Support 20 potential customers, to develop their business plans, based on the tools and briefings made available by Idro, and share them with Idro.

1.4 Follow-up of plant management.

LVIA will be in charge of the following activities in all the communities where a plant is actually installed, up to 3:

- Quarterly supervision meeting with the community committees or the body designated by the community within activity 2.2 (minutes of meetings, jointly with incorporation documents, relevant MoUs and internal regulations of the community bodies should also be send to Idro local Project Manager).
- In case of joint participation of communities and private investors in the same plant, facilitate the relationship during operations.

Result 2. The water provided in the target contexts is accessible to the low-income population.

2.1 Analysis of the water demand expressed by the low-income population in the reference communities for each client

LVIA will be in charge of the following activities:

- Collecting basic information on needs of communities neighbouring potential 10 clients/investors: number of persons within 1 km, socio-economic characterization of the population (i.e. low/middle income proportions, rural/peri-urban, ...), present sources of water available, are sources regulated and by whom, present prices charged at water sources.

2.2 Identification and launch of forms of participation of users' community in water supply service management and monitoring.

LVIA will be in charge of the following activities in all the communities where a plant is actually installed, up to 3:

- Organizing and calling for community meetings to design forms of participation of communities and link them with private investors
- Support processes of registration, obtaining necessary permits and draft MoUs and internal regulations about the functioning of community supply and the collaboration with the private investor, when relevant.

8. Reporting and planning

- LVIA will submit a quarterly report for the use of the Local Project Manager for LVIA activities, and the corresponding plan for the coming months.
- LVIA will submit quarterly a list and contact details of all the new potential customers met in the reporting period will be attached to keep track (but also timely shared for operational purposes in everyday collaboration).
- LVIA will validate and send to IDRO Italia the quarterly report by the Local Project Manager, jointly with the necessary comments or notes.
- LVIA will submit a quarterly report and request of payment for the use of vehicle.
- Local PM will submit to LVIA a quarterly plan for the use of LVIA vehicle and a quarterly plan for field visits from Italy.

9. Finances



Whereas the total budget is 282.929 Euro and no indirect cost are recognized, the budget allocated to LVIA is

- 9,500.00 Euro for Activities described under paragraph activities;
- xx Euro per month (excluding vehicles use) for 27 months, summing up to xxx Euro.

The resulting total is xxx. In case of project amendment extending project duration, the present agreement shall be revised.

IDRO will transfer to LVIA 50% by 30 days from the signature of the present MoU and the remaining 50% in line with the donor funds transfer to IDRO. The payment requests will be submitted to LVIA through formal request (debit note) and invoiced by LVIA Italia.

The funds will be transferred directly to LVIA bank account in Italy. Bank account details are the following:

L.V.I.A. Associazione Internazionale Volontari Laici

BANCA PROSSIMA - P.zza P.Ferrari,10 - 20121 MILANO - presidio commerciale 1239 Cuneo - IBAN: IT08W0335901600100000112380 - ABI: 03359 cab:01600 - numero conto : 100000112380.

10. Coordination and relationship of partners

For purposes of this Partnership Agreement, LVIA and IDRO are not engaged in an employer-employee relationship, joint venture or agency contract of any kind. Neither LVIA nor the Partner has authority to create any obligations, express or implied, on behalf of the other.

IDRO reserves all kind of direct communication to the Donor in reference to the program or to the program administrative and financial elements. IDRO shall keep LVIA informed of ongoing communications with donors affecting its obligations or budget hereunder.

The parties agree to establish two committees for coordination of project implementation, an executive committee and a strategic committee.

- The executive committee members are the Idro local PM, the LVIA CR, and representatives of other project partners. The committee meets on a monthly basis to assess project progress, based on project partners reporting, and to plan for the coming months. Meetings are called by the local PM and can be held on skype.
- The strategic committee members are the Idro local PM, the Idro Italia PM, and LVIA country representative, LVIA Desk Officer for Kenya. The committee meets on a quarterly basis to monitor the project progress and the achievements of the Idro local PM.

The names of the members of each committee and their changes are notified in writings by each party.

11. Visibility

LVIA will consult IDRO Italia prior to producing of any visibility materials related to the project activities. Similarly, IDRO will need LVIA Italia approval to mention LVIA and use LVIA logo within project visibility materials.

12. Principles and guidelines of the partnership

IDRO and LVIA will collaborate in the research of the technical and methodological solutions useful to guarantee the affordability of the water produced and a real participation by the local communities in the sustainable management of the water resource (governance), as well as the benefits deriving from the installation of the facilities envisaged by the project, avoiding a governance based on the privatization of water resources.

13. Early termination

Either party can terminate or suspend for an indefinite period of time this agreement with 60 days prior written notice with a justified cause, failing the success of consultation between parties to solve the cause of termination. Are considered as justified causes when:

- the Partner is unable or unwilling or otherwise impeded to perform its obligation or meet its responsibilities under the present agreement;
- the implementation of the project has important delays or mistakes and there is a prevision that this could seriously endanger the achievement of the objectives of the project;
- the breach of at least one of the provisions of the present MOU.

Moreover, referring to point 12 of the present agreement, LVIA reserves the right, these conditions are not respected as meeting their expectations and if the operational choices of IDRO will go in a direction that is





not compatible with the principles and paths of the NGO, to unilaterally terminate this agreement with a 2 months' notice, supporting the decision with a specific written report and the adequate closure of the administrative / accounting elements relating to the project component within its competence.

Before termination of the agreement, LVIA has to satisfactorily hand over its project documents and information to IDRO in order to meet the project target.

16. Arbitration

Any dispute, controversy or claim relating to the present agreement shall be settled by direct negotiations at the level of the Italian offices of the parties. Failing this, each party may appoint an arbitrator to represent them. These arbitrators will then appoint a third independent arbitrator who will discuss and solve the problem.

Enclosed binding documents to this MoU:

5. Project Document
6. LVIA Regulations (relevant parts)



Allegato 4: DATA REQUEST – DRINKING WATER PROJECTS

Complete contacts of the customers

Sector

Raw water source ☐ lake ☐ river ☐ well ☐ sea

Daily capacity requirement liters/day

Available space for plant mq

Power supply Hz v

Is there a budget? ☐ Yes, specify _____ ☐ No

Quality parameters turbidity conductivity tds (total dissolved solid)

Surrounding communities: ☐ Low INCOME ☐ Middle income ☐ High income

number of persons in within a 500 mt ray

present source of water (description)

Allegato 5: LIST OF THOSE INTERESTED IN THE WATER TREATMENT SYSTEM

	Name	Cell: Number	E-mail
1	Dr. Charles Owino	+254 721 382777	dr.cowino@gmail.com
2	Isaac Maira	+254 722 983655	Isaac.maira@gmail.com
3	Evans Omondi Odiero	+254 720237662	evans@kenglobal.it
4	<u>Charles Munge</u>	+254 716897157	info@kenlaysia.co.ke
5	<u>Habil omondi</u>	+254 722519272	info@digital imaging-ea.com
6	<u>Damaris Mgugua</u>	+254 713462813	anjenem@gmail.com
7	<u>Ann Warambo</u>	+254 722310701	wagillo@yahoo.com
8	<u>George Kariuki</u>		gngurekariuki@gmail.com

Allegato 6: Fluorine assesment

In our body, fluorine plays fundamental biological functions but if taken in excessive doses it can have negative effects on health. Excessive intake of fluorine for long periods can cause significant damage to health and in particular to the nervous system, causing behavioral changes and cognitive deficits.

Scientific research has shown that fluoride can be neurotoxic also for the fetus and that after birth, the child can show a reduced IQ (IQ) and behavioral alterations. Even in lower concentrations, fluoride can cause damage to, for example, teeth (stained or even punctured) as excessive fluorine makes enamel more vulnerable to friction and erosion.

In some areas of East Africa, especially in conjunction with the Rift Valley, the geological nature of the soils means that groundwater is polluted by fluorides with concentrations very often higher than those



Idrodepurazione

IDRODEPURAZIONE SRL

Via Comina, 39 - I-20831 Seregno, Monza Brianza (Italy)

Tel. +39 0362 2751.1 - Fax +39 0362 2751.511

E-mail: info@idro.net - web: www.idro.net

P.IVA: 00762220960 - C.F. 03768380150



ISO 14001

LL-C (Certification)



OHSAS

LL-C (Certification)



ACM CERT
ISO 9001

Certificato N IT16-13803



allowed (1.5 mg / l). Idro Group has a good experience in the treatment of these waters with reverse osmosis, but other alternatives were explored for the purposes of servicing low income areas and population. The options considered are:

- chemical-physical removal¹;
- removal with resins²;
- removal with reverse osmosis.

Strengths and weaknesses of the three technologies were assessed by Idro technicians. Chemical Physical removal with bone Char is gaining popularity in Africa but generally remains a point of use technology which is not suited for the scale of the foreseen project plants. Resins, the second option, are more scalable, but the consumables require for operation and maintenance which might challenge smooth functioning of the plant. After having carried out balances that included CAPEX costs, operating costs and plant complexity, we have indeed confirmed an orientation towards Reverse Osmosis systems for fluoride problems.

Allegato 7: REQUEST FOR QUOTATION FOR IMPORT, INSTALLATION AND MAINTENANCE OF WATER TREATMENT PLANTS

Quotation information

Quotation No	Project Name	Deadline for of Submission	Lots
ac-qua001	Import, Installation and Maintenance of Water Treatment Plants	31 December 2018	2 lots: 1. Coastal region of Kenya 2. Central and Eastern Region of Kenya

The quotation must be submitted not later than **31 December 2018** by email or by courier to the address below:

Idrodepurazione Srl

Via Comina, 39, 20831 Seregno MB

Idrodepurazione Srl shall not be responsible for any loss of quotation or delayed of submission. Proof of posting shall not be accepted as evidence for the submission of quotation.

Idrodepurazione Srl is also not bound to accept the lowest or any quotation nor will it be responsible for any cost incurred in relation to this RFQ.

Documentation

The interested company is required to submit

1. Signed copy of this RFQ thereby agreeing to the terms and conditions mentioned herein.
2. Commercial Bid format (Annex 1)
3. Eligibility Criteria (Annex 2) duly filled and signed along with supporting documents.

1. The price stated must be in Euro.

2. The prices must include all expenses during the project including the tax as set by the Kenyan Government and corresponding VAT should be provided separately.

Objective of the contract

Idrodepurazione Srl is expected to supply at least to 5 compact water treatment plants in the Coastal and Eastern/Central regions of Kenya, by July 2021, within the framework of a development cooperation project,

¹ <http://www.ipcbee.com/vol1/105-Z00210.pdf>

² https://www.researchgate.net/publication/260250087_Removal_of_fluoride_ions_by_ion_exchange_resin_kinetic_and_equilibrium_studies



Idrodepurazione

IDRODEPURAZIONE SRL

Via Comina, 39 - I-20831 Seregno, Monza Brianza (Italy)

Tel. +39 0362 2751.1 - Fax +39 0362 2751.511

E-mail: info@idro.net - web: www.idro.net

P.IVA: 00762220960 - C.F. 03768380150



ISO 14001
LL-C (Certification)



OHSAS
LL-C (Certification)



ACM CERT
ISO 9001

Certificato N IT16-13803



supported by AICS. Water Treatment Plants will be rented to Idrodepurazione Srl clients. The contract aims at ensuring proper maintenance of the plants among Idrodepurazione Srl. clients.

Scope of Services

The scope of the contract is to provide all the service to maintenance of at least 5 water treatment plants from Idrodepurazione Srl for a period of 5 years from installation of each plant.

The water treatment plants to be covered under the contract will be mobile and compact potabilization plants belonging to the following three groups of technology:

- Filtration
- Ultra-filtration
- Reverse Osmosis

They will have a production capacity from 2 to 6 cubic meters per hour.

Additionally, some plants can be equipped with the following additional components, whose maintenance is also to be covered by the present RfQ:

- Prepaid systems for taps
- Photovoltaic generation
- Packaging machine (water pouches or bottles)

The number of plants in each group, their exact dimension and the possible additional components are not defined in advance. The RfQ is divided into two lots corresponding respectively to the Coastal and to the Central/Eastern Regions of Kenya. The number of plants in each region is not known in advance. The spares will be directly supplied or refunded by Idrodepurazione Srl.

1. Maintenance of the equipment should be ensured by resident technicians available for Idrodepurazione Srl clients on all working days and if required, on Saturdays and Sundays/Holidays and also after 6 PM on working days. The technicians should visit the client by 24 hours from the client's complain.
2. The bidder should ensure that the equipment reported down on any working day is set right within 48 hours of reporting the complaint and in no case, later than four working days. Repair and servicing of equipment shall be carried out at customer sites. In case the equipment is required to be transported to the bidder's service workshop for repairs, the same shall be undertaken at the risk and cost of the bidder.
3. The bidder shall maintain the equipment's as per the manufacture's guidelines and as per preliminary 4 days training that will be provided by Idrodepurazione Srl.
4. A logbook shall be maintained in which the bidder shall record all the complaints made and interventions for repair and preventive maintenance, to be carried out at least once in twelve months. The bidder shall submit copy of the logbook on quarterly basis to Idrodepurazione Srl.
5. It shall be the responsibility of the bidder to make all the equipment work satisfactorily throughout the contract period and to hand over the systems in working condition to the Client after 5 years of maintenance services.

Annex 1 – COMMERCIAL BID FORMAT <COMPANY LETTER HEAD>

PRICE QUOTE FOR ...

Details of the company

TEL:

FAX:

CELL:

E-MAIL:

CONTACT PERSON

1. Specify LOT (application for both lots are welcome)
1. Lot 1 Coastal Region
2. Lot 2 Eastern and Central Regions
2. Attach CV of the technicians, specifying is they are permanently hired. The higher the number of technicians available the better.
3. Detail Experience of the firm with similar plant (detail manufacturer, plants specifications and contract value)



4. Price of one hour of work for the technician and lump cost per km of distance to the clients (please specify where the technicians are based), as in the table below. For each of the prices please detail taxes separately

Description , inclusive of any tax or any other charge by public authorities	Unit of measure	Unit Cost USD/EURO (excluding VAT)	vat	Other charges	Other charges description	Total Cost
Technician (Normal Hour	1hr					
Technician (After Hour)	1hr					
Transport cost for visits*	Km					
Any other costs						

* Specify location of the headquarter/where technicians are based

Date: Signature_____

Seal of company/firm Name_____

Annex 2 - Eligibility Criteria

The bidder should provide evidence that the firm satisfy the following eligibility criteria:

1. The bidder should be a Company/Firm and should have its own service / repair center in Kenya.
2. Should be in the business of installation and maintenance of water equipment for the last three years.
3. Should have made net profit at least in two years out of the last 3 financial years.
4. The Resident technician whose CV is attached shall be on the direct payroll of the vendor.