

FOUNDATION PLAN for

(English version)

‘Our Water Our Life’: water- and school projects in Homa Bay/Kenya

PROJECT HISTORY

After a request for help of the Kenyan lobby network *Our Water Our Life* in Homa Bay/Kenya, the Tilburg partner foundation *Our Water Our Life: water- and school projects in Homa Bay/Kenya* is set up for a first project phase running from January 2020 to July 2021. In this timeframe the foundation wants to support two schools in the area Homa Bay County, specifically the western part of the constituency Karachuonyo where *climate change* caused bigger droughts, with a strong drought in 2013 and an extreme drought phase from November 2014 until March 2015. In 2014 the information lobby *Our Water Our Life* (OWOL) was set up in Kenya, specifically for Homa Bay County. My former

West-Karachuonyo is part of the constituency Karachuonyo. Homa Bay County has eight constituencies in which 964,000 people do live. Kendu Bay Town is part of Karachuonyo. Since the forties of the last century the thick, rough, original tree cover of the region has disappeared by small scale farming and cattle breeding. Besides there is a lot of tree cutting for firewood for cooking at home. Also the rainwater from the Homa Hills streams over the plains to Lake Victoria. The powerful stream takes away the top soil of the farms which causes life danger for the inhabitants and children on their way to school. What is left in the landscape are deeply eroded, crater arm like gullies. Water loss and soil loss do lead often to forced evacuations. OWOL works with the authorities on priorities for Water Safety Plans, without losing its independence as an information network. By doing so, the network realises one of the Sustainable Development Goals.

colleague at the East African Standard newspapers in Nairobi, Okech Kendo, senior journalist, university lecturer journalism and community developer, started the lobby network in his area of birth Homa Bay County. *Our Water Our Life* (OWOL) is a non-governmental lobby which works information based on an integrative approach for the storage and distribution of water. Together with the local and national authorities and the communities the lobby network has made up priorities to improve the water facilities in the region. Examples are rainwater storage, water tanks, de-silting ‘water pans’, installation of dams for water storage, etc..... The goal is a better and smarter water storage and distribution network, improved water facilities to care for the effects of drought for all people in the region.

The periods of droughts in 2013 and 2015 caused several outbreaks of bilharzia and diarrhoea in different places in West-Karachuonyo. Also at St. Bernard’s Otaro Secondary School, near Kendu Bay Town. In 2017 and 2018 on the basis of Luxembourgian funding by the NGO Padem (*Programmes D’aide Et De Développement Destinés Aux Enfants Du Monde*) the project *Access to water and sanitation facilities for children in Homa Bay County* was successfully achieved for the

school population of St. Bernard’s with 765 children. (see website realisation project

Padem: <https://padem.org/en/projects/kenya/>)

In August 2018 Jeannette Veninga (chair of Tiburg foundation) and her husband Dirk Wascher visited the projects at St. Bernard Otaro Schools, when the project was still going on. In the mean time *Our Water Our Life* has built up good experiences at St. Bernard's Otaro Secondary School with a realised waterborehole, a waterpump, watertoptanks, rainwaterstorage in watertanks, water supply system, watertaps, child rights- and hyiene programmes. These experiences OWOL wants to use for the improvements at a new school, which consists of a primary and a secondary school plus a day care facility:

- **Adhiro Primary School and Ojijo Oteko Secondary School**, near Kendu Bay Town. Adhiro has in total 297 children enrolled of which 154 girls and 143 boys. In total 7 teachers of which 4 male and 3 female. The board of Adhiro exists of ten members. Victor Otieno Randiga is the deputy head teacher. Ojijo Oteko Secondary School has a total of 121 students of which 72 male and 49 female. A total of six teachers of which half is male, other half is female. The board exists of 12 members. Mr. Frank Atei Ondigo is the principal of the secondary school.

An extra primary school has been added to the actionlist of the foundation for the realisation of a Solar Kitchen with the creation of a schoolgarden, namely:

- **Ndhole Primary School**, a primary school in the rural area between Kendu Bay and Homa Bay. This school is in a poor, rural area, with families who have on average five children. The family income is often not higher than five dollar a day. Malnutrition is a big problem in this area around this specific school. With a staff establishment of eleven teachers, 66 in ECDE establishment and 139 pupils attending the school, of whom 80 boys and 59 girls. With a board of 13 members, of whom 5 female.

Our Water Our Life (OWOL) is a lobby network which was set up as a consequence of the long drought in West Karachuonyo, a region of Homa Bay County. The drought got national media attention in March 2015, during a media campaign in which the impoverished and thirsty communities were portrayed. The only watersource left, was then Kobondo Dam (costs about 45.000 euro), an initiative by the retired Anglican Bisshop Haggai Nyang with support of community mobilisation. This dam became the oasis of hope in the dry area, which served water for a population of 18,000 during the drought periode, lasting six months a year, with a drought peak, between januari and march. Sometimes the amount of people grows to 25,000 when also drought has appeared in other constituencies. Woman, children and herders do travel sometimes 12 – 15 kilometer to fetch water. They get up at 4 am in the morning, to collect water. Travelling through rough and dusty terrains, they carry water in tons on their heads, jerrycans on mules and strollers; it is a strenuous, exhausting journey. The first trip to fetch water is ending at 7:45 am, the moment children are hungry and tired from the trip, knowing they need to school by then. The woman make another walkway that day before the cattle from the region comes at 10 am to waterpans and makes it difficult to collect the water. The available water is mostly no clean water, but a greenish, brownish, dirty liquid, which needs treatment, cooking or chemicals whenever used at home. The town council of Homa Bay distributes chemicals to clean the water. A lot of woman do collect water for the ommunities during the whole day. Children do miss school because they are tired or ill because of the water fetching, or they drop school by lack of motivation at that time of the day. School dropout, truancy and absence is routine in the region. Most of the waterpans are dried out by november, the rainy seasons are not so regular anymore through global warming. Also the de-siltification of the water, is lowering the watercapacity.

BACKGROUNDS

In the region West-Karachuonyo drought is causing school dropout during the largest part of the year. Because of *climate change*, less rain is falling, which causes regularly water shortage in the region. The normal 'dry seasons' are december until mid-march and june until september. Most of the 'waterpans' (low waterareas with rainwater) supply the waterneed for the people surrounding the pan. A 'waterpan' serves a radius of five to fifteen kilometer on average. Traditionally woman, children and mules collect the water for a household. It means they get up at 4 am to start a walk with 'strollers' (rolling watercans mostly for the older women), jerrycans which hang on both sides of a mule and closed cans on top of the heads of the women. Depending on the distance to be made, the group is three to five hours underway. Arriving at the 'waterpan', the plastic cans and strollers are filled up with water. The water needs cleaning before consumption, only the animals can drink the water of het pan without additional treatment. After filling up the cans, the group is returning home. By then, many of the then exhausted children need food and a good rest. The choice is often made to stay home and to skip school. When drought is there, the waterpans dry up quickly. The waterneed in the area is high and the distances to water accumulate. To add some reality: the waterwalks often need to be made twice in the morning, to get enough water for a family or 'extended family'.

Black Cotton Soil is the fertile top soil of the ground in West-Karachuonyo and Homa Bay County. Two thousand years ago this area was part of Lake Victoria. The left behind lake sedimentation makes the soil fertile for all kinds of crops farming. Until the '40's of the last century the area was densely forested.

Since the '40's of the last century, the natural forestation of the region has vanished. People have developed the grounds for small scale farming, larger monoculture production and cattle breeding. Mais and beans are the main growing crops, with 74% of the total production of the area. Also sorghum, fruittrees (mango and others), small scale commercial crop and other small scale farming products define the agricultural character of the area. Part of the population lives from the catch of fish, predominantly Tilapia and Victoria perch. Deforestation, by monoculture in the agrosector, plains for cattle and logging of fire wood for cooking, has exhausted the fertile *Black Cotton Soil* enourmously. The original roots of the foresttrees kept the soil together during heavy rains. Now, without the roots, rainfall gives on some places heavy erosion of the top soil. The fertile soil and the layers underneath are a prey for heavy rains during the rainy season starting mid march until the end of may (long rains) and from september until november (shorter rains). From the Homa Hills, the rainwater streams powerfull to the lower plains of West-Karachuonyo, ending in Lake Victoria. Through the power of the streams the fertile top soil is teared loose from the deeper sediments of the plains, leaving behind sometimes up to ten meter deep ditches in the soil. The strong, sudden waterstreams during the rainy seasons cause often life threatening situations for people underway, like children on their way to school. Also women on the way for a water source are endangered. From 1985 to 2019 a total of 14 children has been killed by the swelling waterstreams coming from the Homa Hills (Kenya Education Survey 2018). The area has a percentage of 14,3% urbanisation, which means that most children do walk longer distances to go to school, a way where water- and mudstreams can overwhelm them. Reforestation of new trees is necessary to give children a safe way to school, but also to secure the fertile soils between Homa Hills and

Lake Victoria for vegetation and agriculture. Programmes for reforestation are facilitated by Groasis, selling special tree planting buckets. This programme is recommended by the Dutch ministry of foreign affairs. New trees are planted and rainwater is caught up sustainably. During the time of this project until August 2021, possibilities for replanting and reforestation will be examined and possibilities for realisation will be discussed and negotiated. Through working experiences of students to be sent to the region or by a thesis about this theme. A group of students can work upon reforestation in practice. Possibilities can be investigated and examined during this project timeframe.

Education is very important for progress in a community. Children visiting a school and enjoying education, do have a better chance to serve the community as a whole later on in the future. Often they are role models for others within the 'extended family' (close family and broader family members of the same tribe). To educate one child, is giving progress to a much broader system. Excellent children developing themselves after secondary school, do move regularly to the cities. This group has a bigger chance to gain an independent income than children who skip school. In Kenya the silent obligation to, but also the connection with the 'extended family' is still valid. When young adults start to earn their money, a lot of the starters do give part of the money to family members for doctors visits, medicines, or other extra's needed for daily life, necessary to stay healthy or alive. Young people from the rural areas give about 1/5 of their income back to the community/family where they originate from.

Drought and the fetching of water are above mentioned reasons for dropout at school for children in primary and secondary classes. But there are more reasons for school

Homa Bay County is an area with 964,000 inhabitants. There are 1000 primary schools for 283,162 students, 235 secondary schools for 31,317 students in Homa Bay County. The teacher/student ratio is 1:45 for primary schools and 1:27 for secondary schools. The classes are full.

dropout, truancy and absence. According to USAID Kenya about 83,2% of the 15 to 18 years old children do visit school. That percentage is quite high. This is based on the registrations at the school entry. Informally, officials say that around 70% of the registered childrens does visit the schools regularly. The schoolpopulation which forms the 70% is a fluctuating group. Once this child, than the other will appear at school, continuation of the school curriculum is a problem. Necessary are programmes

against truancy and dropout at schools. Anppcan, the *African Network for the Prevention and Protection against Child Abuse and Neglect*, works specifically on awareness at different schools in Homa Bay County. Children are made aware of child labour, neglect, early marriages, unwanted pregnancies by young girls, child abuse, sexual exploitation of children, drugs- and drinking abuse in families, domestic violence and other causes for absence and school dropout. A child which learns to stand up for him/herself through empowerment programmes, is better able to say no or to say what he/she wants. Anppcan has already worked on several succesfull programmes at schools in the regions. One of this programmes is paid by PADEM at St. Bernard Otaru Secondary School in Homa Bay County, close to Kendu Bay Town.

Poverty is not named yet, but is a major cause for school dropout. When a family with average five children, is earning less than five dollars a day, the household budget is not sufficient for healthy food. Malnutrition plays an important role by beginning illnesses

and concentration loss at school. At Ndhole Primary School, in the middle of the rural plains of West-Karachuonyo, a lot of children are malnourished at the moment of entering the school in the morning. The poverty percentage is 44,1% in this specific area. In the morning children do get some strong tea or a melange of maisflour with water. Nutrition value is almost zero. A sustainable Solar Kitchen – a schoolkitchen working on solar energy – offers a solution to serve healthy, nutritious meals to students/pupils of Ndhole Primary School. A lunch and/or a breakfast at school can make a huge difference to the concentration level of the children and prevent school dropout. When the school has a *Solar Kitchen*, with a schoolgarden with fruits and vegetables for a healthy meal for all pupils, that means a good start for a continuous, healthy mealsupply. Through schoolprogrammes about nutritious, healthy food, children learn to compose a good meal. Attention will be paid to hygiene during the cooking process. A cook and an assistant will manage the new kitchen and introduce the children to a healthy, nutritious cooking- and foodart. A *Solar Kitchen* is also wished at another school near Kendu Bay Town, namely at the Adhiro Primary School and Ojijo Oteko Secondary School. This schoolyard also enhances a day care facility for the 0 – 5 year old children. When children do install a schoolgarden for fruitsshrubs, fuittrees and vegetables, they learn a lot about nourishment in relation to health, knowledge which might be handy at home too. A kitchen working on solar energy is sustainable. Sun is abundant in the region. Another advantage for solar cooking is the lack of fire wood of valuable trees in the region. Also the school does not need to buy fire wood from the local markets. A *Solar Kitchen* on solar energy does not need fire wood, is a good solution against malnutrition caused by poverty, gives a lot of sustainable knowledge and is therefore a sustainable investment for a primary- and secondary school, for a nutritious mealsupply.

Clean water is essential for everyone! Also for the population in the cities and the rural areas of Homa Bay County. The necessity of clean water starts at simple proceedings as washing hands after a toiletvisit. Illnesses get spread fast when people do not wash their hands with clean water. This strongly counts for schools, where specifically the younger children do have a lot of body contact through playing. Most of the schools in the region do not have clean, running water. When a school does not have clean, flowing water, outbreaks of contagious diseases are more prevalent than at a school with a solid, clean water system. At St. Bernards Otaro School, in 2015 an outbreak of cholera, caused a lot of dropout. Since the end of 2018 this school received a clean, running watersystem connected to sanitary facilities and the watertaps in the schoolbuildings. A watertap on the edge of the schoolyard gives additional water to the surrounding communities. It seems to be naturally to wash hands after a toiletstop, but it is not in the rural areas of Kenya, because of lack of clean, running water.

Education about contagious diseases and the prevention of contagious diseases and personal hygiene is organised by Education & Health, a NGO from Nairobi, also active in Homa Bay County. When a school gets a clean watersystem, education programmes about prevention of health risks are necessary additionally.

This action plan is meant for two schools who are situated on one schoolyard, surrounded by hedges and trees against visits of wild animals. These two schools and a day care facility will be supported by this action plan. Whenever succesfull, the approach can be used at other schools in the county.

The two schools meant in this projectproposal are:

- **Ndhole Primary School**, a public primary school, in the poorest, rural area of Homa Bay County. The school is situated between small scale crop farmers and small farmer communities between Homa Bay and Kendu Bay, in Karachuonyo Constituency, Kanjira Location. The school is a dayschool (no boarding school) for normal boys and girls. The Kenyan curriculum is being taught. Ndhole Primary School, P.O. Box 66 – 10304, Kandiego, Kenya
- **Adhiro Primary School & Ojijo Oteko Secondary School** situated on one schoolyard also enhances a day care facility for 0 – 5 year old children. Ojijo Oteko Secondary School is a public sub-county secondary school. Both schools are situated in West Karachuonyo, near Kendu Bay Town in Homa Bay County, P.O. Box 223 – 40301 Kendu Bay, Kenya.

The intention is to finish both projects at both schools within the **project management realisationtime of januari 2020 – july 2021**. The projectmanagement can be used as an example for upscaling or copying later on for other schools in the area of Homa Bay County. In the prephase of the project, there is a lot of attention to fundraising and the organisation of studentsprogrammes (exchange and working experiences) to the region. Projectmanagement realisation time **prephase is running from june 2019 – januari 2020**.

GOAL OF THE FOUNDATION:

The goal of the Tilburgian foundation ‘Our Water Our Life’: water- and schoolprojects in Homa Bay/Kenya, is:

- *To improve the sustainable, continuous and safe participation of children to day care facilities, primary and secondary schools in the district Homa Bay, Kenya, by;*
 - 1) *organising clean, running water at schools;*
 - 2) *providing of healthy, nutrituous and sustainable meals at schools;*
 - 3) *enlarging the sanitary hygiene & health of schoolchildren;*
 - 4) *enlarging the food hygiene and knowledge of healthy, nutrituous, sustainable food;*
 - 5) *organizing sustainalbe and safe schoolbuildings;*
 - 6) *empowering children of their rights;*
 - 7) *organizing safe schoolways by replanting/reforestation of the schoolsurroundings*

PROJECTMANAGEMENT:

The start of the project will be at **Ndhole Primary School**, a school in the poorest area of Homa Bay County. The first project will be the realisation of a *Solar Kitchen*, working on solar energy. *Our Water Our Life* received in march 2019 the helpquestion from this primary school for a schoolkitchn with a schoolgarden with vegetables and fruittrees. **Adhiro Primary School & Ojijo Oteko Secondary School** share a huge, common schoolyard with trees, surrounded by hedges protecting against wild animals. There are schoolbuildings for primary education (5 – 15 year old children), for secondary education (15 – 18 year old children) and a day care facility (0 – 5 year old children). Furthermore the school has sanitary facilities for boys and girls separately, houses for schoolteachers and a lot of space for the organisation of a *Solar Kitchen* and a schoolgarden. The board of the two schools has asked for a clean, running watersystem. The request for support is a waterpump on the fringe of the schoolyard (like St. Bernard Otaro Schools), so that the

Detailed description of projectactivities to attain the goals:

- soil survey to places for best access according to soil structure
- hydrological survey to places of underground current water stream
- survey to the best ways of water storage for schools (aquifers?)
- digging of waterboreholes at schools
- installation of a waterpump with a double function, namely:
 - 1) running, clean water for schoolchildren and teachers and
 - 2) wateraccess for the communities surrounding the schools
- building of waterpipes tot he sanitary facilities, the schoolbuildings and the schoolgarden *Solar Kitchen* with hygienic watertaps
- optimizing of sustainable collection of rainwater
- renovation of watercollector plus connection to running watersystem behind Adhiro Primary School and the installation of a cover on top
- building of *Solar Kitchens*. schoolkitchens on solar energv

families around the school can fetch water at the school. A water borehole with a pump close to the school means less distance to a watersource for many families. For many children this means they do not need to collect the water early in the morning, but they can sleep normally and go to school. Through waterpipes, running water can be distributed to the sanitary facilities and watertaps in the schoolbuildings. Clean water can be used to prepare healthy meals, to wash hands, to drink and to wash whenever necessary. Collection of rainwater can be more efficient by watertanks and special roofs on the buildings. Additional the school would like to have a *Solar Kitchen* with a schoolgarden, educational programmes about healthy, nutrituous food, food hygiene, health and prevention of contageous diseases. Another request are programmes on empowerment of children by Anppcan. Many children in this region suffer unfair

treatment by child labour, early marriages, unpredicted pregnancies, sexual exploitation, abuse, domestic violence and a other unequal situations. Awareness for these situations and an early warning system are the first necessary steps to prevent maltreatment of children. The schoolboard wishes for the day care facility – in summer of 2018 not more than a mud, corrugated iron roof – childfriendly toys and childfriendly furniture for the youngest children. One of the schoolbuildings of Adhiro Primary School has ruptures in the material of the floors and the walls. This building can not be used in the actual condition. Renovation or a new building is on the wishlist. Behind the school a watercollector has been dug from cement. But the collector needs to be connected on a running watersystem and it needs to have a cover.

PROJECTMANAGEMENT TIME:

The idea is that after the here above described first phase of projects until the end of august 2021 (with evaluation period in september 2021), the experiences can be copied to other schools with comparable needs. Eventually upscaling is possible after september 2021, when the projectorganisation and the funds are enough for a continuation.

- Projectmanagementtime for above mentioned projects at two schools:
 - **januari 2020 until september 2021**
- Prephase planning and fundraising proposals:
 - **juni 2019 until mid december 2019**
- Evaluation first phase projects and experience periods of students:
 - **september 2021**

DETAILED PLANNING:

Juni 2019 until mid September 2019:

- Writing and tendering projectproposals for financing by funds, subventions, budgetlines, finance by corporations or wealthy organisations, etc...:
 - Survey of funds and deadlines
- Marketing for the projects of the foundation

- Enlisting donors/supporters/contributors/benefactors of the foundation
- Growing of the network; more boardmembers for voluntary work and growing network of supporters
- Approaching schools for working experiences and exchange programmes supporting the goals of the foundation
- Package safety, cultural differences, travel advice, country information for students
- Clear, solid and sustainable working experiences for schools supporting the goals of the foundation
- Searching for CSR support on the Dutch market – creative approach (watercompanies and other waterrelated markets)
- Contact with secondary school in Tilburg and a primary school in Tilburg for the exchange with students on primary and secondary schools in West-Karachuonyo
- Contact with a day care facility for toddlers (0 – 5 year olds) in Tilburg to optimize the day care facility at Adhiro & Ojijo Oteko Schools. In exchange with families in Tilburg care for childfriendly toys and furniture – sending in a container
- Prepare pitch for ‘Een Wereld Te Winnen’ from town council of Tilburg in september 2019, deadline 27 august 2019
- Travel marketing for the region: package for Lake Victoria, schoolvisits, dispensaries, Homa Bay Town/Kendu Bay Town programme, area visit, Homa Hills, recruiting families to stay and recruitment of guides for the region, etc...
- Developing programme to raise ambassadors for the region (predominantly travellers and students who go to the area) – marketing and eventually specific fundraising

September 2019:

- New pitch for town council Tilburg ‘Een Wereld Te Winnen’

Eind October 2019 done:

- Hydrological survey to the best places for running, clean water
- Soil survey to the places with best acces for waterborehole and watercollection looking at soil- and sedimentstructure

- Overview of CSR projects in Tilburg and further about water (what is possible with companies working on water)
- Overview of the students who want to go to the area from januari 2020
- Elaborate on marketingcampaign until juli 2020
- Inform about Groasis contacts and investigate what is possible on the exchange basis with students, working experiences and funds
- Overview of fundraising and possibilities in cofinancing projects:
 - a) Sharp overview about deadlines and calls for proposals
 - b) Local subventions, regional
 - c) National subventions education, exchange, watersupply, childrights (Plan Nederland – adoption of children?), health education, food and foodhygiene, education about nutritious food, replantation, reforestation (Groasis a.o.), building of schools (Habitat for Humanity) and Wilde Ganzen (for waterprojects at schools)
 - d) European subventions, funds and budgetlines (eventually Padem Luxembourg)

End Juni 2021 done:

- Waterborehole, waterpump, watertaps, waterpipe system connection to sanitary facilities and schoolbuildings at Adhiro Primary School & Ojijo Oteko Secondary School; access to clean, running water for surrounding communities and for schoolchildren and teachers by hygienic watertaps
- Watertanks for collection of rainwater of the roofs
- Renovation of schoolbuilding Adhiro Primary School
- Running programmes of Anppcan (empowerment and awareness rising of childrights for children) at Adhiro Primary & Ojijo Oteko Secondary School
- Two *Solar Kitchens* plus plants, fruittrees, vegetables, herbs and other ingredients plus maintenance of schoolgardens for nutritious, sustainable, healthy breakfast and lunch at Ndhole en Adhiro & Ojijo Oteko schools, including cook and assistant cook
- Toddler and preschooler childfriendly schoolmaterials and toys for day care facilities at Adhiro & Ojijo Oteko Schools; for a good pre-school programme

- Renovation watercollector and connection to clean, running watersystem behind Adhiro Primary School; renewal cover to protect this waterfacility
- Healthprogramme's at school, hygiene education and education about health and prevention of contagious diseases
- Educational programmes about healthy, nutritious and sustainable meals at schools
- Working experience projects for students on the theme of safe schoolways for children through replantation/reforestation of the area, eventually a thesis written about the subject

End Augustus 2021 realised concerning working experiences for students:

- 4 working experienceperiods for students in the months:
 - a) januari t/m maart 2020 and another in 2021
 - b) juni t/m augustus 2020 and another in 2021
- working experiences for students media and journalism in the months:
 - all months except during the april/may rainy season (heavy rains)
- working experiences for students forestry or agrosector for reforestation/replantation of area safeways to school

End September 2021 done:

- evaluations done about working experiences, projectevalutations done plus recommendations for continuation