

a global voice  
for women



# WOMEN, WATER & LEADERSHIP

**SROPTIMIST INTERNATIONAL  
PRESIDENT'S APPEAL  
2017-2019**





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# FOREWORD

In the following pages, you will be introduced to the projects of the 'Women, Water & Leadership Appeal' (WWL), 2017-2019. As the title suggests, the advancement of women, safe and equal access to water and sanitation, and the empowerment of women and girls in leadership, are the stand-out topics of my life. This Appeal responds to one of the top five global risks indicated by the World Economic Forum: water scarcity, and is focused on delivering specific contributions towards Sustainable Development Goal (SDG) 4, *Quality Education*; SDG 5 *Gender Equality*, and SDG 6 *Water for all, for all purposes*. The projects, established in Kenya, Bulgaria, Indonesia, and Malaysia, seek to overcome long-held stereotypes of women as the 'victims' and 'beneficiaries' of the water and climate crisis, through programmes which actively support access to water, whilst crucially, working with women within their own communities, to advance education, and to empower them to take up positions in leadership, as the innovators and decision-makers, and the key-providers and drivers of water, food and economic solutions.



Through the 'Women, Water & Leadership' projects described in the following chapters, we create the conditions and environment for women and girls to participate fully, and to develop sustainable, long-term solutions. Women and their communities gain better access to clean water and sanitation, and to improved food security. With the introduction of new technologies, and improvements in infrastructure, and with vocational skills and training such as sustainable farming techniques – we see confidence and competencies increase, and women are empowered to break the cycle of poverty.

The women are fully engaged in creating sustainable, affordable solutions to meet many of their greatest challenges. I am delighted that we have implemented all these superb projects with the involvement of Soroptimists. Their enthusiasm, commitment, and drive have made this SI President's Appeal the most wonderful experience, with an impact for all to see. We look forward to following the progress of all projects, as they continue to thrive and develop going forward.

*Mariet Verhoef-Cohen*  
*SI President, 2017-2019*



## ABOUT SOROPTIMIST INTERNATIONAL

### VISION

Women and girls will achieve their individual and collective potential, realise aspirations and have an equal voice in creating strong, peaceful communities worldwide

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### MISSION

Soroptimists transform the lives and status of women and girls through education, empowerment and enabling opportunities

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### PRINCIPLES

The advancement of the status of women; High ethical standards; Human rights for all; Equality, development and peace; and, The advancement of international understanding, goodwill and peace

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For almost 100 years, Soroptimist International (SI) has advocated for human rights and gender equality, through education and empowerment. Although women and girls make up half of the population they remain consistently discriminated against, and their human rights are often ignored.

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## 72,000 CLUB MEMBERS IN 121 COUNTRIES

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Founded in 1921, SI is a global volunteer movement with a network of around 72,000 club members in 123 countries. At the heart of Soroptimist International's advocacy work is its activity at eight United Nations Centres, in which Representatives ensure that the voices of women and girls around the world are included in international decision making.

On the ground, Soroptimists take action through project work, awareness raising, and lobbying of governments to support and realise equality for women and girls; to achieve individual and collective potential, realise aspirations, and have an equal voice in communities worldwide.



## ACKNOWLEDGEMENTS

Soroptimist International (SI) and the Women Water and Leadership Appeal (WWL) recognises the valuable contributions of the Soroptimist Federations, Clubs and Soroptimist membership, without whom the results we now witness within the pages of this report would not have been achieved.

### THE WOMEN WATER & LEADERSHIP TEAM



**Mariet Verhoef-Cohen**  
*Soroptimist International  
 President 2017-2019*



**Hafdís Karlsdóttir**  
*Chair of the President's  
 Appeal 2017-2019*

### PRESIDENT'S APPEAL COMMITTEE

Dona Gaddis Wolf  
 Inge Withof  
 Naina Shah  
 Di Lockwood  
 Catherine Evans  
 Sue Biggs

### PROJECT CO-ORDINATORS

**Indonesia:** Isla Winarto  
**Malaysia:** Joanne Yeoh, Saradha Narayanan,  
**Bulgaria:** Diana Iskreva,  
**Kenya:** Rose Mwangi, Asha Abdulrahman, Sophie Koch, Elizabeth Nyadwe



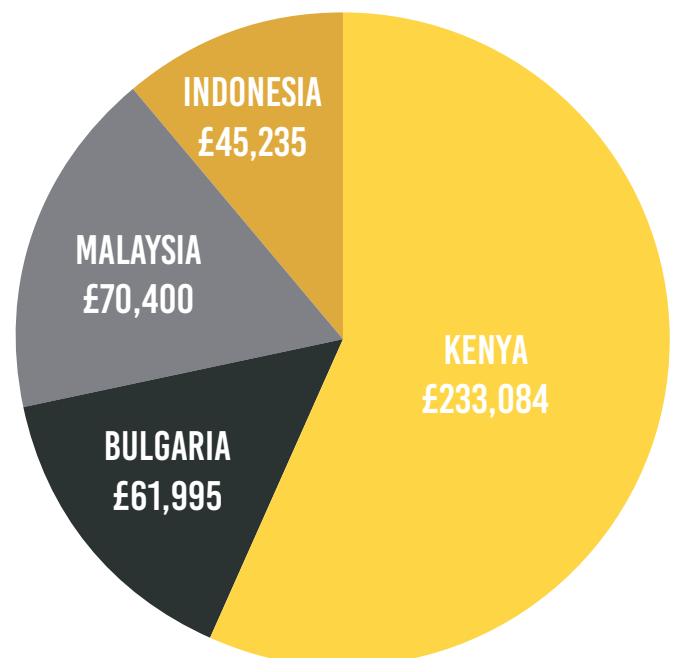
## EXECUTIVE SUMMARY

The very first Soroptimist International (SI) President's December 10th Appeal, was established in 1982 under the direction of SI President, Catherine Salt, supporting refugee women and children on the island of Pulau Bidong, Malaysia.

Thirty-five years on and the SI President's Appeal continues to advance priorities for women and girls, and in 2017, SI President Mariet Verhoef-Cohen, established the 'Women, Water & Leadership Appeal', to *Educate, Empower and Enable* women and girls to manage water resources, and to gain professional careers in the water Industry.

Four projects were initiated, spanning Indonesia and Malaysia, Asia; Kenya, Africa; and, Bulgaria, Europe.

### GRANT PROVIDED PER PROJECT (£)

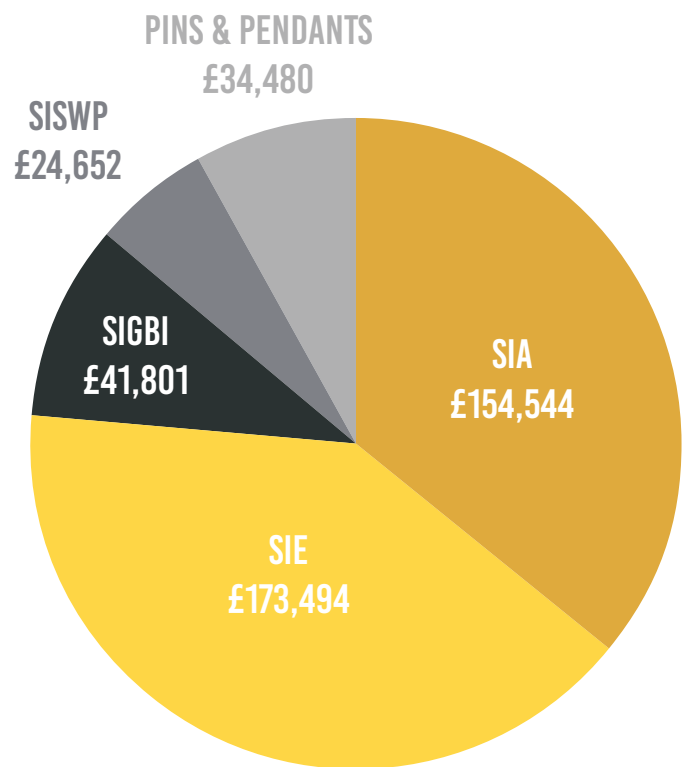




## EXECUTIVE SUMMARY

Essential to the success of the Appeal, and a thread evidenced throughout the design, implementation, and the monitoring phases of all projects, is that of the inclusion, participation and leadership of women.

Women and girls would not only be the receivers, but the directors of Appeal solutions. To actively participate in all streams of project development, and take on leadership positions, that utilise their experience and knowledge of water, food, health and sanitation. The women would be involved in the design and the implementation of solutions; and be empowered with the tools and education required to ensure effective, sustainable responses are delivered that respond to key challenges; mitigate environmental and socio-economic future risks; and effectively build resilience, for themselves, their families, and communities.



**DONATIONS RECEIVED (£) £428,971**



**The Women, Water & Leadership (WWL) programme focuses on the implementation of the United Nations Sustainable Development Goals (SDGs).**

The Agenda 2030, adopted in 2015, represents an unprecedented effort by member states to implement a holistic plan for peace and prosperity, for people, and the planet.

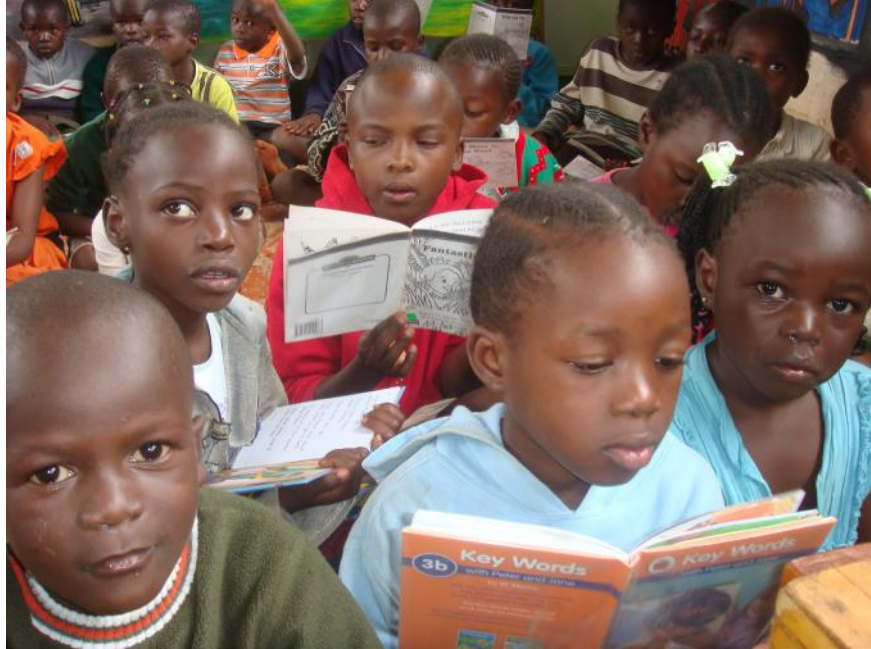
Contributing primarily to SDG 4 - Ensure inclusive and equitable quality education and

promote lifelong learning opportunities for all, SDG 5 - Achieve gender equality and empower all women and girls, and SDG 6 – Ensure access to water and sanitation for all. Results were also achieved within SDG 1 - End poverty in all its forms everywhere; SDG 2 - Zero hunger, targeting food security and improved nutrition, and promoting sustainable agriculture; and, SDG 3 - Ensure healthy lives and promote well-being for all at all ages.





# SDG



## ENSURE INCLUSIVE AND EQUITABLE QUALITY EDUCATION AND PROMOTE LIFELONG LEARNING OPPORTUNITIES FOR ALL

Economically, women's under-representation in emerging roles is considered a priority factor in closing the gender gap and yet, within education, only 35 countries are considered to have achieved gender parity.

Educated women are more likely to hold greater decision-making power within their households, and yet, women make up more than two-thirds of the world's 796 million illiterate people (UN Women).

Globally, gender parity stands at 68.6%, and although substantial progress has been made towards achieving gender parity within both primary and secondary education (UNESCO, 2019), numbers vary geographically, and across age groups and educational levels. Parity is said to be achieved in two out of three countries during the primary schooling phase, one in two at lower secondary, and one in four countries within upper secondary education level.

The gender parity education index in Central and Southern Asia is improving, whilst sub-Saharan Africa lags behind at all levels, particularly within upper secondary education, and Northern Africa and Western Asia within primary education. Overall, gender influences education, with girls disadvantaged in lower-

income countries, and boys in upper-middle-income countries. Reports suggest that in the majority of countries, it is girls who are found to be twice as likely to be involved in child domestic work.

From a young age, discriminatory and exclusionary norms influence attendance in schools. Child marriage, pregnancy, inadequate sanitation facilities and hygiene management, school-related gender-based violence, all impacting the participation of girls and young women in education.

Gendered norms and discrimination continue at university level, with graduate education perceived in many countries and cultures to be more important for males than females. Programmes and careers in the science and technology sector, although not exclusively, are traditionally male dominated, with little over a quarter of all those enrolled in engineering, manufacturing and construction, and information and communications technology, reported to be women, influenced greatly by creating environments within schools where gender stereotypes can be deconstructed and fought. Lifelong learning, particularly vocational training for adult women is necessary and valuable.

If we are to fully achieve both SDG 4 and SDG 5, and reach gender parity within the education system, girls must be able to remain in school, and equal opportunities must be afforded to graduates.



## EQUAL REPRESENTATION – WITHIN THE WATER SECTOR

**Case studies evidence women's leadership in water governance and active participation in water projects to be important.**

As far back as 2006, an investigation by UNICEF and other organisations found placing women at the centre of water, sanitation and hygiene (WASH), leads to better service provision, concluding that women's participation results in better health for all, greater dignity, and an improvement in the status of women; with skills and knowledge recognised, voices strengthened, gender-stereotypes challenged, and greater opportunities for women to earn an income.

A study by the International Union for Conservation of Nature (IUCN), found that where women have a role in decision-making, benefits show increased attention to social and environmental factors, and the Asian Development Bank found that water projects designed and implemented with the full participation of women were more sustainable and effective than those without. Findings are similarly supported by the World Bank, and the International Red Cross.

Despite such reported advantages, the numbers of women involved in water projects remain modest, with progress slow, and barriers persisting. Under-representation in science, technology, engineering, and mathematics decreases the social and political power of women, allowing stereotypes to persist,

with women systematically excluded and marginalised within the water industry. The World Water Development Report 2016, found women to hold just 17% of the paid jobs within the water sector, including administration roles, and that a clear divide exists between domestic use of water, an area dominated by women, and further more productive uses of water, such as waste water management, which continues to be male dominated.

Women's professional and traditional roles represent a significant social capital to be utilised in achieving SDG 5 and SDG 6. Women are experts, leaders and agents of change, performing an important role in achieving equitable access to water for all, for all uses, including sanitation. It is therefore vital and effective to ensure that women participate at all levels of decision-making, through the design, implementation and evaluation of projects, in order to remove barriers and discriminatory practices. Allocation of sufficient means is necessary to equip women for such roles, particularly vocational training.

Women represent one-half of the population, and yet a persistent lack of data muddies our knowledge on the state of women's participation in the water sector. The role of women as users and sharers of water is not sufficiently recognised, and power differences continue to result in a limited number of opportunities for women to participate in decision-making processes.

# SDG

## 6 CLEAN WATER AND SANITATION



## ENSURE ACCESS TO WATER AND SANITATION FOR ALL

**Thriving economies, secure and stable communities, healthy populations; water is a human right and a valuable resource, interlinking with almost all of the seventeen SDGs.**

The Synthesis Report 2018, a review of progress made towards achieving SDG 6, concluded 'that the world was not on track', with billions lacking access to safe water, sanitation, and handwashing facilities. Due to a combination of population growth, socio-and economic development, changing consumption patterns, intensified agricultural production, climate change, and extreme stressors, including the COVID-19, the use and demand for water is rapidly increasing worldwide. Already over 2 billion people live in countries experiencing high water stress, whilst around 4 billion suffer severe water scarcity during at least one month of the year, with 3 out of 10 people globally without access to safe drinking water. Furthermore, almost half of those drinking water from unprotected sources, live in Sub-Saharan Africa.

In Africa and Asia, women and children walk an average of 3.7 miles per day to collect water. For many rural women, water sources are distant, and women often have to walk for up to two hours. In urban areas, and when water is from shared water facilities, women may have to

wait in line for over one hour. Survey data for 25 Sub-Saharan countries indicate that women spend a total of 16 million hours a day collecting water - 16 million hours which cannot be spent on other activities, such as education or income generation.

Moreover, six out of ten people do not have access to safely managed sanitation services and one in nine practice open defecation. Women and girls across the world living without toilets spend 266 million hours every day seeking a safe place to relieve themselves. Every ninety seconds, a child dies from a water-related disease.

Substantial inequalities exist between slum and non-slum households in regard to access to water and sanitation facilities. The wealthier often enjoy high-levels of service at low cost, whilst those less wealthy, pay a much higher price for a service of similar, or lesser quality.

In agriculture, water infrastructure in rural areas remains scarce, and yet, smallholder family farmers constitute the backbone of national food supplies, contributing more than half of the agricultural production in many countries. More than 80% of all farms globally are considered family farms (those smaller than 2 hectares), and the majority of the work is conducted by women; their contribution often unrecognised. Approximately 80% of the global cropland is rainfed, and 60% of the world's food is produced on rainfed land. However, supplementing irrigation into rainfed agricultural systems can double or even triple rainfed yields per hectare for crops such as wheat, sorghum and maize.



Above: Handwashing Event

# WOMEN'S EMPOWERMENT THROUGH WATER, SANITATION AND HEALTH (WEWASH), BULGARIA

**Location:** Sulitsa, Hristiyanovo, and Kalitinovo, Stara Zagora District, Bulgaria.

**Duration:** 1 May 2018 – 30 November 2019



**“A CHANGE IN ATTITUDE IS VISIBLE; WOMEN UNDERSTAND THEY HAVE RIGHTS TO WATER, AND HAVE LEARNED HOW TO CLAIM THESE RIGHTS; BECOMING VOICES WITHIN THEIR COMMUNITY. SOME WOMEN HAVE ALSO GAINED PLUMBING SKILLS, AND SET UP THEIR OWN BUSINESSES.”**  
**MARIET VERHOEF-COHEN**

## CONTEXT

In Europe, access to safely managed sanitation services remains a challenge in many countries, particularly in rural areas of Eastern Europe, and furthermore, many in Western and Central Europe face inequitable access to water and sanitation services. Bulgaria, situated in Southeastern Europe, has around 6.3 million inhabitants, and joined the European Union (EU) in 2007. With one of the highest unemployment rates in Europe, particularly for youth, Bulgaria additionally has the highest child mortality rate, and poverty rate, including poverty amongst children. Permanently represented in the bottom six of the least developed EU regions, every year, many young Bulgarians migrate to Sofia, or further afield to find work, and since 1989 the population has reduced by more than 30%, with the Bulgarian diaspora standing at more than three million.

Bulgaria strives to meet EU requirements for water and sanitation, however, in many areas, water closets are unaffordable, similarly for both central sewerage, and conventional wastewater treatment plants. Particularly in rural communities there is limited financial and human resource, and people dependent on water resources, are challenged by vast seasonal variations, and highly vulnerable to the effects of climate change. Within rural areas, many women and girls are without jobs whilst others have never been employed. Older women, having often migrated from costly cities to rural locations to make a new life, find themselves facing retirement on minimal pensions, reliant on subsistence farming for food. Many become isolated, some widowed, with children moving away in search of a better life.



## OBJECTIVES

Women Empowerment through Water, Sanitation and Health (WeWash), commenced May 2018, and was established to empower, build capacity and encourage women’s participation and leadership within their communities, address ongoing water, sanitation, health and hygiene challenges, and to support the delivery of healthy food for women and girls living in rural communities. Addressing the Sustainable Development Goals (SDGs), WeWash focuses primarily on the following:



Although somewhat restricted by existing legislation and the often powerful arm of water and sanitation companies, the project employed a bottom up approach, the onus placed on community ownership in the creation of sustainable solutions, with relationship building a key objective of the WeWash business model, and the active encouragement of stakeholders, including local mayors, community centers and schools, government institutions, utility companies, civil society, and the media. Central to achieving project objectives, was the establishment of a series of awareness raising programmes, with

broad capacity building and learning-by-doing vocational training, to generate opportunities for women and girls to take on leadership roles within the water and sanitation sector.

WeWash was implemented in the villages of Sulitsa, Hristiyanovo and Kalitinovo, three communities in Central-South Bulgaria, varying in size, access to natural resources, and in ethnic and demographic structure, status and capacity. Villagers in the Kalitinovo were mainly of Roma origin, often leaving school early at around the age of 12-14 years. Cultural challenges were apparent including child marriage, with many Roma girls married by the age of 14 or 15 years, with girls graduating high school the exception rather than the rule. The birth rate amongst the Roma ethnic group is considered high, whilst life expectancy is low, and many more find themselves surviving on social benefits.

An extension and diversification of an earlier initiative implemented by the Earth Forever Foundation (EFF), a successful non-governmental organisation based in Stara Zagora, Bulgaria, the WeWash project would benefit from the involvement and EFF experience within the alternative sanitation sector, and this knowledge would help with the construction and design of the training programmes and promotional materials, supported by further expert trainers and consultants. Soroptimist International Club Ancient Plovdiv, took the role of monitoring, supported by a number of respective rural communities who were actively engaged throughout the project term.



## IN ACTION

The awareness raising and capacity building programme was implemented during meetings, held not only to introduce and explain the WeWash strategy, but as an opportunity to discuss specific local needs, allowing for community and stakeholder contribution, and coordination and synthesis with existing processes and the acceleration of planned programmes, such as a drainage system in Sulitsa, and the building of a community centre in Kalitinovo.

Community project groups were established, and flexible work plans defined allowing for future adaptation and flexibility, ensuring topics of importance could be responded to as the project progressed. As an example, in Hristiyanovo and Sulitsa concerns were raised regarding the quality of drinking water, subsequently addressed, together with agency, and effectiveness and capability when liaising with institutions to solve issues such as microbiological pollution, and the persistent flooding of water sources. In Kalitinovo, drinking water is permanently polluted with nitrates and attention was therefore given to devising treatment solutions, which were discussed at length within the meetings. Management of waste was a big topic in Hristiyanovo, with concerns relating to the main water source, which was particularly close, just 500 metres away from an old dump site in Stara Zagora.

Previous experience had shown EFF that community cultural centers and village schools were often prime candidates for ownership of infrastructure; sustainable structures in regular receipt of finance from

local government or the state. For this reason, these would act as knowledge centres or hubs; central to information management and skill dissemination. With the help of videos, developments were documented and disseminated to the villagers over the course of the WeWash programme, widely shared on the internet, through social media and webinars, and in presentations and speeches at national and international events.

Training programmes included the safe reuse of treated water and biological waste for natural agriculture, and the fundamentals of soil fertility, including safety in handling, composting, and the safe reuse of biological and plastic waste. Communities were educated in storm water and flood management, safe drinking water and sanitation, and how to build a model ecological sanitation system. Challenges included limited public transport for attendees, and variable access to the internet. It was additionally important to build trust within the community, and respond specifically to the needs of local women, with many inexperienced in a learning environment, or when dealing with local authorities and decision makers at municipal and regional level. Training programmes were carefully structured, with patience and repetition, and set within a framework of learning-by-doing to achieve best results. Strong female role models supported women in training for traditionally male-dominated roles and intensive and well-planned communication developed to increase understanding amongst villagers of the vital role of women as experts and leaders in water, sanitation and food security programmes.

ACTIVITIES	NO. OF PARTICIPANTS	NO. OF WOMEN
Community awareness raising	350	270
Summer Camp	10	8
Handwashing event	310	200
Vocational training		
Alternative Sanitation intensive training for jobs and meeting confidence	26	20
Water and sanitation - Learning by doing programme	180	156
- Further training programmes	40	30



In three village communities more than 350 participants were made aware of alternative sanitation opportunities, and 160 women and girls received vocational training in the field.

Mentored by consultants, trainees constructed an alternative sanitation system at a local children's centre in Kalitino, and completed the tiling of a toilet at the Community Cultural Center.

90 rural women attained the skills to find a job in the sanitation sector and were empowered to raise their voice in meetings. Women were specifically trained on their rights, how to address authorities, and how to submit complaints.

180 participants joined learning-by-doing events on water and sanitation, with 120 women able to construct, manage, monitor and market alternative sanitation planning.

80 rural women and girls gained knowledge and skills to advise community members and families on the safe reuse of treated water and biological waste for natural agriculture to feed their families.

30 women were able to plan, implement and monitor small alternative sanitation projects and to run small-scale water and sanitation businesses.

10 girls from the Technical High School of Construction in Stara Zagora participated in a summer camp to learn about water and sanitation facilities for domestic and agricultural use.

156 people attended leadership training events, whilst 20 women participated in leadership and coaching programmes, with 80% completing the programme, empowered to act as community leaders in water, sanitation and nature-based agriculture projects.

270 women and girls participated in awareness programmes.



## Case Study

Ivanka is a 2nd mandate Mayor of Sulitsa, and an active participant in all activities implemented by the project in Sulitsa. The knowledge and experience she gained helped her better advocate at the Municipal Council for the needs of her village, and to meet the demand for a new drainage system, which would prevent erosion from rain and melting snow. As a result, the municipality renovated the current system of drainage ditches in the village and Ivanka supervised the workers employed by the municipality, to ensure the quality objectives of the work were delivered.



## Case Study

Penka from Hristiyanovo, became a role model amongst the women of her village, using her knowledge gained through the awareness raising and training programme to commence the building of a sanitation system at her home. For the first time in her lifetime, her family had an indoor flush toilet and shower.



## CONCLUSION

Skills training opened doors to jobs and career opportunities, establishing learning opportunities for entrepreneurship in small-scale alternative sanitation. Although there is still much to be done to overcome the barrier of viewing water jobs as a predominantly male arena, WeWash awareness raising increased understanding of the valuable role of women as experts and leaders in water, sanitation and food security programmes.

Following a survey of 22 participants in the WeWash programme, (14 from Sulitsa, and 8

from the village of Kalitinovo), Soroptimists found that: The construction of alternative sanitation solutions in the villages were highly appreciated; Ecological and hygiene developments allowed for sufficient wastewater treatment in households, whilst improving the health and general wellbeing of families; and, inhabitants showed 100% readiness to building the toilets if personal financial means allowed for this - all signs of the significant impact of WeWash.





# EARTHQUAKE RECOVERY THROUGH WATER, SHELTER AND CAPACITY BUILDING IN INDONESIA

**Location** Indonesia, Island of Lombok, Rembitan area, and Rebuk Satu village

**Duration** 1 February 2019 – 31 December 2020



**“WE ARE GRATEFUL THAT OUR VILLAGE HAS SUFFICIENT WATER FOR OUR DAILY NEEDS. OUR CHILDREN CAN BATHE, AND WE WOMEN CAN GO TO THE TOILET WHENEVER WE NEED TO. WE ARE MORE SKILLED AT WEAVING AND HOPE TO SELL OUR PRODUCTS IN THE FUTURE, AND MANY WOMEN NOW HAVE THE CHANCE TO LEARN TO READ AND WRITE”**

**IBU AMINAH, REPRESENTING THE WOMEN VILLAGERS**

## CONTEXT

Indonesia, Southeast Asia is made up of more than 17,000 islands and over 267 million people, the 4th most populous country in the world.

Challenges include high levels of poverty (10.9%), unemployment (5.4%) and unequal resource distribution, with around 27 million Indonesians lacking access to clean and safe water, and 57 million without access to improved sanitation. Women face challenges in all spheres of life, and for women living in rural locations, attaining quality education is particularly difficult.

Approximately 49 percent of agricultural households comprise of women farmers according to the 2018 Agriculture Census, and the women, involved in almost all agricultural processes and vital functions, often lack recognition. Their agricultural work is perceived as secondary to their domestic responsibilities and to men’s involvement in agriculture, yet with agriculture generating income for numerous households and proving critical to Indonesia’s economy, it is imperative that the role of women in agriculture should be acknowledged, supported, valued and developed.



## IN ACTION

Soroptimists implemented the project using a variety of strategies. Relationship-building proved key, and stakeholders such as the Ministry of Public Work were included, together with local religious organisations. The community was embraced and participation encouraged during all phases of the project.

Written statements from the heads of 31 families in the village were received ensuring continued support and further endorsement was obtained from local authorities. As co-implementers of the construction work, villagers were taught maintenance, and a team of 'champions' selected, to actively promote health and hygiene practices, effective water use and management, and the 'user pays principle' (people pay for the water they use and the electricity to run the pumps); new ways of doing old things, which were driven and embraced by all villagers. Transparency was vital and the focus on relationship-building generated opportunities for free services and support in relation to the distribution of water, with project status and progress regularly discussed in meetings with the broader village community.

Water was extremely scarce in the region, and the construction of a water well initially proved unsuitable for drinking, and the flow of water too weak to cater for villagers needs. Temporary measures were soon adopted, and solutions sought through testing which found the presence of water close by. Boring was initiated, and although setbacks were encountered, piping was eventually laid directly to Rebuk Satu, and water tanks successfully filled on a daily basis.

Two 5,500-litre capacity water tanks have since been installed underground, ensuring increased security in the event of further earthquakes. A new well now provides the village with its main source of water and the construction of toilets and bathroom facilities benefit 25 families. With a second small borehole functioning well and with the provision of waste disposal systems, villagers now enjoy access to good, clean water.

## OBJECTIVES

Following the earthquakes in Palu and Lombok, SI Clubs in Indonesia were providing family tents, emergency kits and many other basic goods to communities. It was subsequently decided that 'Women, Water & Leadership' would extend this support, with the construction of a water and sanitation project in the village of Rebuk Satu, Rembitan, Central Lombok. The village is home to 31 families, around 124 people, 60 of whom were women. Implementing a whole community approach, the sustainability of the project would be assured through a dedicated programme of skills and vocational training, together with awareness raising within the community.



Implementing the Sustainable Development Goals (SDGs), SI Club Jakarta initiated a series of meetings with local women and villagers to discuss strategy, assign levels of participation, and design a programme. A field officer was recruited to work as a liaison between the Soroptimists in Jakarta and villagers in Rebuk Satu. Working committees were established, led by local women, and the project was officially launched in February 2019.



Villagers have been provided with education to better understand the link between climate change, water and hygiene. The risks of child marriage and child exploitation on young girls and women have been explored, and the positive attributes of learning and education encouraged. A community-based skills survey highlighted a need for literacy classes, and basic finance training. Through education women and girls were empowered with opportunities for increased participation, and to take on leadership roles in WASH management, and to generate a revival of local and traditional business, increasing economic stability. Low levels of educational ability, meant that teaching utilised visual aids and storytelling, and question and answer sessions ensured equal opportunity to learn, and increased understanding. Further learning covered topics such as health, waste management, sanitation, and family nutrition, and weaving workshops were established to increase opportunity for business.

A train the trainers weaving course was developed and seven of the most experienced female weavers became highly skilled in the use of yarn, colouring with natural dyes, the weaving of fine cloth, of complex design, and the use of specific weaving equipment. A three-month course with lessons conducted twice weekly was followed by a monitoring programme, with weavers sharing their skills with less experienced women weavers.

In partnership with the Titian Foundation, (currently constructing a community centre in the village to deliver extended training programmes), women were taught the basics of organic farming, with many going on to successfully grow their own corn and peas, and to plant seeds for their vegetable gardens, with a view to selling their produce at market.

## RESULTS

The table below summarizes the results:

ACTIVITIES	NO. OF PARTICIPANTS	NO. OF WOMEN
Community awareness raising	124	60
Access to water and sanitation	100	50
Waste disposal	100	50
Vocational training:		
Adult literacy	20	16
Training of weaving trainers		7
Organic farming		18

25 families, (50 women), participated in awareness raising activities, in health, hygiene, sanitation, and waste management.

25 toilets with bathing facilities were developed on land donated by the villagers, benefiting 100 villagers.

Four 1,500-litre water tanks were installed above ground level, so water flows down easily due to gravitation.

Household and village disposal systems were introduced to encourage better hygiene and environmental management practices.

## CONCLUSION

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There is now access to clean and safe water for the villagers of Rebuk Satu, Rembitan, Lombok, all year round. Both young and old are becoming increasingly aware of the relationship between clean water, hygiene and the prevention of diseases. The village is cleaner due to better and more responsible waste management, and many new skills have been acquired. Women are eager to take on leadership roles in committees, and with a tangible change in mind set, attitudes are beginning to change in relation to women's roles in the village. Prior to the project, many of the villagers believed that poverty and lack of basic needs was their fate, and that changing this situation would be impossible. Now, they have a vision for their village and their future. Rebuk Satu villagers have participated so enthusiastically throughout, seeing themselves as a model village for others in their region.

Numerous lessons have been learned, with challenges faced and overcome. Having the community involved and local knowledge, was vital in creating a sustainable project. Encouraging women to participate, to raise their voices, to take on leadership roles and to embrace training - was an important part of the empowerment process, which takes time and patience, and is dependent on inclusion, something often hampered by a woman's household chores. 'Champions' from the village helped to introduce and influence new ideas. Furthermore, partnerships with local stakeholders encouraged and supported overall success. Soroptimists showed perseverance, particularly when water proved insufficient, when drills broke down, or when contractors failed to deliver. New plans were made and together with the villagers and stakeholders, solutions were always found. Monitoring facilities to ensure they met standards, and were built in time, was key, whilst further challenges were faced such as varying levels of workmanship, the quality of building materials, and a hesitance by some families unwilling to share their land for community facilities (toilets/bathrooms).



### Isla Winarto, SI Club Jakarta, Project Director:

"This project has been a pleasure to manage. Using approaches which the villagers are comfortable with, SI Jakarta Club has been able to implement both phases of the Project (water and WASH construction; and capacity building/income generation training programmes), with the full support of the villagers. The enthusiasm shown has been most heart-warming, as has the welcome given to the Soroptimist project team.

The progress made at each phase of the project has also been most satisfactory, observing women who had never had much say in what happens in their lives, to women, young and old, now managing Village Work Committees, learning how to read and write, and weaving exquisite pieces of cloth suitable even for overseas markets.

With many projects and programmes at village level, there needs to be flexibility and a 'Plan B', all executed with a sense of humour. Smiles go further than frowns! Not everything will go according to the project proposal. However, this should not act as a deterrent as there are always other ways and means to achieve the same results."



# WATER, CLEAN ENERGY, AGRICULTURE AND FOOD SECURITY IN KENYA

**Location:** Kenya: Nakuru, Kisumu, Kilifi, Machakos, Uasin Gishu and Kakamega. counties

**Duration:** December 2017 – December 2019



**MARY GICHURU, KALYIET WOMEN GROUP IN ELDORET STARTED AN AVOCADO TREE SEEDLING NURSERY, AND NOW HAS 7,000 AVOCADO TREE SEEDLINGS WHICH CAN BE SOLD FOR KSH 150.00. “THE WATER TANK MEANT WE WERE ABLE TO COLLECT ENOUGH WATER FOR WATERING THE SEEDLINGS, AND WHEN FULL, I CAN ALSO SHARE WATER WITH MY NEIGHBOURS”**

## CONTEXT

Kenya, Africa has a diverse population of around 48 million people. Bordered by South Sudan, Ethiopia, Somalia, Uganda, Tanzania, and the Indian Ocean, agriculture represents the primary commercial sector, with tea and coffee traditionally cash crops, and fresh flowers a fast-growing export. The service industry is additionally a major economic driver, particularly tourism.

In 2010 the SI Union of Kenya began work with 22 women of the Mwhoko Women Group. The key objective was to improve access to safe water, and a project was established by the Women for Water Partnership, of which SI President Mariet Verhoef-Cohen, is the President.

Following this, a second women’s group was formed with 30 women, all of whom practiced subsistence farming. The farmers needed a training centre, and raised funds to purchase 2.5 hectares of land through the Nakuru council. With the training centre built, the women developed a crop demonstration plot, gearing this towards improving their own agricultural practices. Living in a volcanic area such as Nakuru County, the women were highly dependent on subsistence farming, and poor nutrition, a lack of access to markets, and constantly unreliable rainfall proved a continued barrier to growth and sustainability.

Women make up 60% of the subsistence farmers in Kenya, and produce 70% of food in comparison to large-scale farmers. Many men leave the region to find jobs in the city, and typically, agricultural extension services, such as resources and advice, education and information, generally provided by the government, prove insufficient. Drought delivers challenges both economic and environmental; whilst conversely, excessive and erratic rainfall results in dangerous flash floods, eroding gulleys and soil. Climate change has become a prevalent issue threatening the lives and livelihoods of rural women and their communities. In Sub-Saharan Africa, a lack of water management infrastructure, safe drinking water and sanitation services, causes poverty, particularly in rural areas, where 60% of the population resides.



## OBJECTIVES

Funding from the SI President's Appeal addressed a lack of agricultural efficiency and food security, and looked to improve access to clean water and energy in the counties of Nakuru, Kisumu, Kilifi, Machakos, Uasin Gishu and Kakamega.



A 'Women, Water & Leadership' project was implemented by SI Clubs in Kenya, and began in December 2017. Contributing to Sustainable Development Goals (SDG) 1 through to 6, in addition to SDG 13, the project would *Educate*, *Empower* and *Enable* 500 women farmers, increasing access to clean water, nutritious foods, and support the commercialisation of farming practices, to generate income and help raise villagers out of the poverty trap. A key strategy would be to establish and promote ownership, by involving the women throughout the decision-making process, and all phases of the project. Supporting the original vision of the 'Women, Water & Leadership' Appeal, women would be empowered to take on leadership roles and engage fully in the implementation process.

## IN ACTION

Learning through participation, particularly during the vocational training programmes, was a deliberate approach to achieve objectives. Encouraging commitment, the training was not provided free, and those women unable to contribute monetarily, would be given the opportunity to commit additional time on the project, thus calculated as a contribution to the course.

An intensive training programme was offered at the Egerton Agricultural University in Nakuru, to improve sustainability of agricultural practices. Bespoke training and materials were developed responding to the needs of women farmers, and the course was followed up by working conferences, encouraging the sharing of knowledge and experience. Women were taught the value of growing traditional vegetables, techniques for production, seed sowing, and beekeeping. Further skills were gained in agro forestry-principles, water management, climate-smart agriculture, farming business skills, and in finance. On-location visits to farms provided women with opportunities for hands-on training, and best practices in sustainable farming were encouraged, together with irrigation and water saving training, marketing skills, and post-harvest management techniques.



140 women farmers joined training programmes at the Mwioko Women's training centre. With an improved demonstration plot for farming, a water tank was also installed. Training covered methods of sustainable farming, including clean seed production, conservation agriculture, greenhouse training, and multi-story gardening. The centre was equipped with demonstration kits for drip irrigation, energy saving devices including stoves and cooking baskets, and solar lanterns, in addition to multi-story vegetable gardens. Security was also increased with the installation of fencing, a gate, and electricity.

Teaching aids were purchased such as a blackboard, whiteboard, a flip chart, and writing material. Income generating tools were also developed to sustain the centre going forward, including 10 beehives, and a kitchen was also constructed to be used for center activities.

The greenhouse was erected to promote water smart farming and pest control, and two water pans collected rainwater for irrigation. Seed nurseries were established, and two open drip irrigation systems installed, together with an array of wonderful fruit trees.

In several farms the soil was tested, and tree and vegetable seedlings distributed, with the farmers investing 20% of the funds required for

the project. Seeds and fertilisers for each of the women farmers proved sufficient for one acre of land.

With 1,300 trees planted, the quality of the soil improved, and continues to improve overtime. The women, now better educated in processes and solutions to cope and mitigate the impact of climate changes, both drought and heavy rains, grow maize, beans, vegetables and herbs; sunflowers, pineapples, strawberries, and bananas. Specialised storage bags for maize were provided to the Mwioko women, and the surplus is now being sold at neighbouring markets. With increased income and armed with new marketing skills and a better awareness of demand and pricing, women are utilising this information to make decisions on what to grow, sell and at what price; women becoming both efficient, and effective entrepreneurs.

Throughout the project women were encouraged to raise their voices, to learn and succeed when negotiating with authorities, and to understand their rights, their responsibilities, and to increase their confidence and ability to get things done.

## RESULTS

4,226 people, of which 448 were woman, actively participated in the project.

20 schools and institutions received a 10,000-litre water tank with access for 6,871 persons.

329 households (women) gained rainwater harvesting tanks, gutters and taps, providing a total capacity of 1,847,000 litres.

A member of Mwhoko Women Group was elected as Chairperson of the local water community project.

140 women farmers were educated at the training centre in sustainable farming.

53 women participated in a six-day farming clinic held at the Egerton Agricultural University in Nakuru.

Yields from smart farming tripled increasing food security.

670 solar lanterns were provided and 324 Chepkube stoves constructed.

Energy saving devices reduced indoor pollutions improving health of the inhabitants and solar lanterns have extended the opportunities for learning.

ACTIVITIES	NO. OF PARTICIPANTS	NO. OF WOMEN
Total number reached	4,226	
Active women		448
Schools & institutions	6,871	
Access to water		329
Vocational training		
Farm clinics		53
Sustainable farming		140
Energy saving		377

377 women were trained in energy saving technics such as the construction of energy saving stoves and smoke-free cookers as well as solar lantern management.

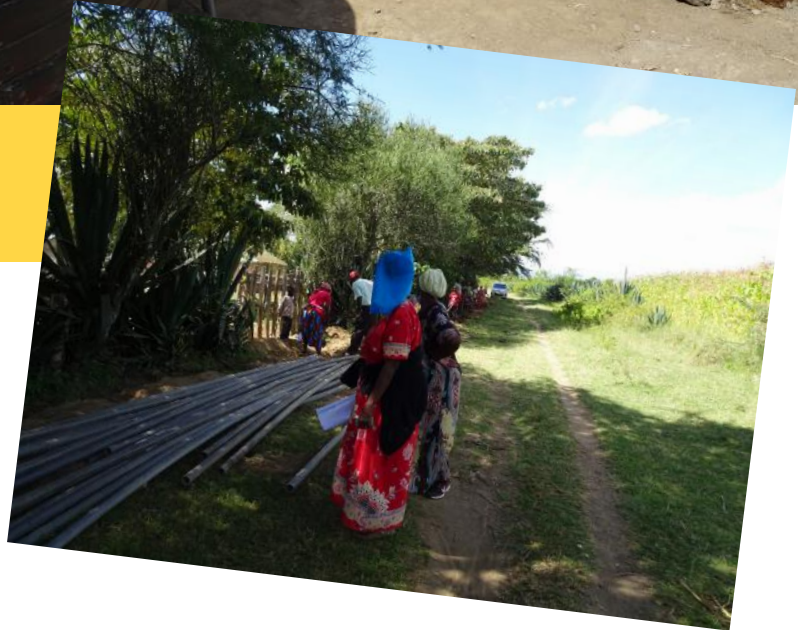
Water connecting pipes were laid for 307 homesteads in total serving a population of 1,842 with piped clean water. The project provided the pipes and the community contributed their labour by digging the water pipe trenches throughout the area covered by the pipes.



### Case Study

Milka, a farmer in one of the villages, practiced what she learned during training, and increased her yields - from five to 20 x 90kg bags of maize. Milka markets her produce, storing some for future use, and is now able to feed her family with a continuous supply of fresh vegetables from her multi-story garden, which requires just small amounts of water, essential due to the dry seasons. 'Women, Water & Leadership' has empowered Milka - both economically, and socially.





## CONCLUSION

Patience, persistence, and a multifaceted approach to the management of the project means results have proved exemplary. Women's access to technical and financial inputs has increased, and raised skill levels, particularly in relation to agricultural and sustainable practices, which have proved highly influential to the women's success. The Mwhoko Women Group played a key role in the design through to the implementation of the project, showing leadership skills, ample ambition and strong commitment to ensuring future sustainability for themselves, their families, and community.

With increased capacity and the fully-equipped training centre, it is expected that the women will continue farming, using energy-saving activities, and utilise the now improved agricultural extension services.

The learning-by-doing strategy proved successful, shown when women in neighbouring households, replicated the art of multi-story gardening.

Groups often benefit from a stronger position at market and the women farmers have organised themselves in entrepreneurial groups - farming together, conducting joint marketing, and buying inputs collectively. This model also helps increase access to credits to expand farming activities, such as the Mwhoko women group, who have applied for a loan from the Women Enterprise Fund.

The commitment shown by the programme management team of Soroptimists in Kenya who, together with the Mwhoko Women Group designed the project, developed the training programme, and worked to involve the agricultural extension services, was paramount, and many attended training themselves.

All project management group members have installed the moist bed and Chepkube stoves in their own homes and others practice the farming skills acquired during the project.

# CLEAN WATER FOR RURAL COMMUNITIES IN MALAYSIA



**Location** Malaysia; Long Tanyit, Belaga District, Sarawak and Kampung Gana, Kota Marudu, Sabah

**Duration** April 2018 – April 2020



**“WE ARE PROUD TO BE THE FIRST PENAN VILLAGE TO BE RECIPIENTS OF THIS WONDERFUL PROJECT. OUR WATER SUPPLY USED TO COME FROM THE HILLS, AND WE WERE UNSURE WHETHER THE WATER WAS CLEAN OR HEALTHY. THE WHOLE VILLAGE NOW BENEFITS FROM GOOD FOOD, CLEAN DRINKING WATER, AND ENOUGH WATER TO WASH OUR CLOTHES - WE ARE VERY GRATEFUL” VILLAGE HEADMAN OF LONG TANYIT**

## CONTEXT

Malaysia, Southeast Asia has a population of over 32 million and is home to many cultures, with an economy fuelled by its natural resources. The country has seen expansion in the sectors of science, tourism, commerce and medical tourism.

Sarawak and Sabah are situated on the island of Borneo, the third largest island in the world north of the Equator. Sarawak is known for its rugged, dense rainforest and Sabah for its 4,095-metre-tall Mount Kinabalu.

Long Tanyit has a population of 300, and is a remote Penan village deep within the Belaga District of Sarawak, close to the Kalimantan border. Within a forest area and accessible via logging tracks, many of the villagers are women and young children, as the young men have migrated for jobs in the cities.

Children are often found to be undernourished, suffering from sore eyes, skin diseases and diarrhoea, known to be a leading cause of death in children under five. The village lacks electricity, clean water, and sanitation, and the clinic and primary school are in Sg Asap, which is some four hours away.

The village of Kampung Gana in the district of Kota Marudu in northern Sabah, has over 3,000 residents and is made up of indigenous groups including Dusun, Rungus, Bajau and Orang Sungai. This area suffers prolonged periods of drought from June through to September, and both Long Tanyit and Kampung Gana are additionally challenged by climate change, logging, deforestation, and mining - polluting the air, sources of drinking water, and threatening the rich biodiversity of the area. The logging activities in particular continue to deprive the people of their much valued land and livelihoods.

Soroptimist International had nurtured good relations in the region: SI Damansara provided 'Work Readiness' training to young people in Sarawak and Sabah over three years, whilst SI Kota Kinabalu worked with residents in Kampung Gana on a village kindergarten, and adult literacy classes for women. A youth group from Long Tanyit approached Soroptimists hoping for assistance with many of the services that they lacked access to, such as clean drinking water, electricity, and medical services.

## OBJECTIVES

The SI President's Appeal was an opportunity to address the gaps in services in both Long Tanyit, and Kampung Gana. The project would deliver clean water to the two communities, improving health and well-being whilst increasing opportunities to generate income through the cultivation of lands. The project would help preserve the biodiversity through sustainable organic farming, and the villagers would be empowered through education and vocational training.

Commencing in April 2018, Soroptimist International Region of Malaysia (SIROM) established a committee consisting of members of six Soroptimist clubs: SI Damansara, SI Kota Kinabalu, SI Kuching, SI Bangsar, SI Shah Alam and SI Petaling Jaya.



Above: The project addressed SDGs 1,2,3,4,5, and 6

## IN ACTION

A pilot project was set up in Long Tanyit, and replicated in Kampung Gana. Soroptimists established a water committee, and assigned roles and responsibilities for project management and fundraising.

Sponsorship was received from Heineken Malaysia, who helped fund a gravity water system in Kampung Gana, whilst villagers, particularly women, were encouraged

to participate in all phases of the project to establish ownership and increase empowerment, with learning-by-doing again determined as a valuable strategy. Educational partnerships were nurtured, with five girls studying for a diploma at the Welding Academy, each receiving a loan of RM7,000 to fund their course, with additional funding supplied by Soroptimists.

The existing dam was upgraded, and the rainwater harvesting systems were installed, together with gravity-fed water pipes which would connect homes to a steady supply of clean water for drinking and cooking. 15,000 litres would be available at any given time, invaluable to the villagers and the day-to-day lives during drought season.

Skilled contractors provided technical support in setting up of clean water systems and women were taught the fundamentals of good hygiene and sanitation. Further training covered water conservation, organic composting and organic pesticides, together with an understanding of market skills, product distribution channels, and transport.

Sites were identified for organic farming, and decisions made regarding preferred crops and the division of labour. Pipes were laid to irrigate the fields, and fencing put up to protect and secure farmland from wild animals and poachers.

Greenhouses were constructed, and seeds and netting purchased and the women of Kampung Gana planted an array of vegetables including spinach, leafy greens, cabbage, tomatoes, chili, corn and yams. An oyster mushroom farm was also established. Villagers in Long Tanyit cleared two plots of land (4-5 acres) creating their own organic farm. A greenhouse was erected to plant and protect seedlings whilst plans are in place to build a shelter for the women, and to store farming equipment.



## RESULTS

ACTIVITIES	NO. OF PARTICIPANTS	NO. OF WOMEN
Access to safe water	3,300	
Vocational training		
Welding		5
Organic farming		61
Establishing organic farms		295

The villagers enjoyed and benefited from a true sense of community. Women set up committees, creating rotas, taking turns to farm, cook, or look after children. Six project participants in Long Tanyit, passed some of the skills they had learned on to 20 other women in the village, whilst the women of Kampung Gana, formed a Women's Association, a cooperative, to manage their farming activities. Soroptimists from Kota Kinabalu plan to help them open a bank account, and offered advice on book-keeping and how to set-up a business.

By providing access to clean water right to the doorstep, women found opportunities to better utilise their time, previously spent travelling to, and carrying water from the river. They engaged in organic farming activities, and providing healthy food for themselves and their families. They took the time to learn and develop their understanding of marketing, determined to increase their opportunities to sell their products, and increase economic independence and generate income.



120 women and girls in Long Tanyit, and 175 women in Kampung Gana, participated and benefited from farming activities,

300 men, women and children in Long Tanyit were provided with clean and safe water, and in Kampung Gana, more than 3,000 villagers now enjoy a steady supply of water through the dry season.

Five Penan girls graduated with their diploma in welding, and were supported by a mentoring programme. They were able to give back to their community by constructing the rainwater harvesting system. Each gained a job following graduation, earning a monthly salary of RM 2000 (440euro) which was used to supplement their family's income.

35 women in Kampung Gana learned organic farming techniques, including composting, making organic fertilisers and pesticides, and learning the skills of crop rotation, from trainers at the Kivatu Nature Farm in Penampang. They will also learn to produce foods such as yam and banana chips, chili sauce, and pineapple jam and how to package and market their products.

Six women and a man in Long Tanyit completed a 10-day course in organic farming at the Frangipani Organic Farm in Gombak, Kuala Lumpur. They learned about composting, making organic fertilisers and pesticides, setting up a nursery for plants, and of a new system in planting padi - the SRI method (System Rice Intensification - a system that requires less water, that can double or even triple yield.

## CONCLUSION

With every challenge comes learning; and the project met with multiple hurdles, particularly due to the remote locations of the villages. Furthermore, heavy rain and thunderstorms tested construction timelines, and gaining approval for the farmland met delays. The lack of electricity and internet made communication difficult putting pressure on the project coordinator to travel to report on progress, or to simply organise the purchase of equipment and resources, which impacted on the budget. However, the planning and commitment shown was excellent and if there is a lesson to be learned, then the lesson is that there will always be surprises, but if you look hard enough, and if you are determined enough - around every corner you may perhaps discover a solution.

Women and girls were *Educated, Empowered and Enabled*. They made their own decisions and were active participants and leaders within their own communities. Their voices were heard, and their confidence raised.

Soroptimists intend to build a distribution network for the sale of organic produce, including transport over the coming months. Results indicate that the incidence of water-borne diseases and sore eyes have decreased, something ongoing monitoring will show in the days and years to come.



