BLUE CARBON CLIMATE ACTION with human dignity.



Planting millions of miracle blue carbon mangrove trees and igniting solar lights to brighten young minds, shares the same value. Nature and people can only survive together.



WIF PROGRESS REPORT 2022



MOVING AHEAD WITH 3,000 PLANTERS

2022: THE YEAR OF CRITICISM

2022 was a booming year for natural climate solutions. Never before has WIF experienced this exceptional interest in offsetting carbon footprints with blue carbon climate solutions.

At the same time, this was also a year of increased criticism of carbon trading, labeled 'greenwashing'. One of our partners, VERRA, has been on the undeserving end of this onslaught.

Not denying that every project is perfect, the skeptics may have some points. There is always room for improvement, but to generally criticize all kinds of carbon projects, is grossly overshooting the target. This risks harming a critical mechanism for funding and scaling nature based solutions.

Our experience with VERRA is that the stringent rules in nature-based projects like ours, do not allow any deviation from the facts. The annual follow-up by professional auditors is the highest guarantee of quality. This is one of the reasons for the high price of our blue carbon, purely based on facts.

No one can deny that around 40% of yearly CO2 emissions are naturally mitigated by the mighty oceans and forests. By focusing on mangrove blue carbon, mitigating up to 5 times more CO2 than terrestrial trees, WIF is effectively restoring nature's own capacity, tested over millions of years. For this, we are rewarded with high-quality VCUs strictly validated by VERRA. The financial reward is topped up by sharing 50% of CO2 mitigation with vulnerable coastal communities for livelihoods and sustainable development, equally documented.

Neglecting people's share as active partners is denying their rights to development in their own homeplace. This is nothing less than a violation of basic human rights. WIF is proud of its people-oriented commitment and delivery of high quality climate, social and biodiversity impact. Communities in our projects have realized that living forests are better than dead ones. WIF invites skeptics to experience first-hand the wonders of natural climate solutions, based

on all 17 UN Sustainable Development Goals. That is why we proudly call our achievements *Blue Carbon Climate Action with Human Dignity*.

Welcoming partners to join our nature-based success.

Arne Fjortoft, Secretary General WIF



2022 Planting Record on 6,279 hectares.

True to tradition, WIF increased its yearly mangrove restoration by 40% in 2022, to 6,279 hectares (ha), ready to make an all-time high of 10,000 ha mangrove restoration in 2023, targeting 100 million planted trees since 2012.

The 2022 planting was done on 9 different sites. The latest counts of survival rate was completed in January 2023, reaching over 96% in 7 of the 9 sites. For the remaining 2 sites, additional scheduled planting in 2023 will ensure they achieve the 96% target for healthy growth.

HIGHLIGHTS OF 2022 ACHIEVEMENTS

Mangrove Restoration

- Completed 6,870 ha mangrove restoration projects with 8 international investment partners for further expansion to a new record of 10,000 ha in 2023.
- Established a complete carbon unit with competent WIF staff to develop new PDD's, and listing of new VERRA projects with specialists on all carbon issues.
- Expended development of partnerships with 100 communities and launched several new livelihoods and sustainable development projects.
- Increased the number of mangrove species to 53 in the Mangrove Gene Bank.
- High quality project implementation resulted in record high 96% survival rate, AAA rating from BeZero ratings agency, and USD 40 carbon credit sales.

Blue Carbon Development

- WIF 3-year strategic planning unit constituted with international participation.
- International one-week conference and workshops on blue carbon with 40 Asian participants.
- Worldview International Foundation A/S established in Norway.
- Included Azolla ferns in WIF's Blue Carbon projects as the fourth with mangroves, seaweed, and seagrass.
- Initiated discussions with Gold Standard and Plan Vivo for possible cooperation in developing carbon methodologies for seagrass conservation and seaweed farming.
- Worldview Climate Foundation constituted in Thailand.
- MOU signed with Thailand Fisheries Department. Digital conference held on blue carbon seaweed with 250 participants.
- First seaweed project launched with fishing communities in Krabi, Thailand.
- Initiated research for seagrass projects in Thailand.
- Continued partnership with Thailand Institutions on expanded mangrove projects.
- The first African project launched in Gambia.
- New initiatives in Kenya and Tanzania with high potential for partnership.
- Negotiated 20,000 ha mangrove restoration projects in Sri Lanka for a possible start in 2023.
- Invitation by HE the President of Timor-Leste for partnership in blue carbon projects to start in 2023.
- Signed MOU with Impulse NGO Network, Bangladesh to start a mangrove restoration project on 20,000 ha in Sunderbans, Bangladesh, the world's largest mangrove forest.
- Initiating cooperation with IUCN for exploring mangrove restoration in Venezuela and other Latin-American countries.
- First meeting with Sarawak regional government, Malaysia to explore developing large blue carbon projects.

- Invitation by Minister of Environment and Climate Change and Development Authority of Papua New Guinea for partnership in blue carbon projects to start in 2023.
- Initiating partnership with Sulawesi Regional Government, Indonesia for large blue carbon projects.
- Established cooperation with Nature Conservancy Indonesia for long-term partnership in implementing blue carbon projects.
- Invitation by the President of the Maldives to start mangrove restoration projects in 2023.

Capacity Building Projects

- Worldview Mangrove Virtual University constituted for start in 2023 with international partners.
- Prepared start of Small Island States to assist in participatory communication mobilization and planting of mangroves to reduce erosion of seashores due to rapid sea level rise.
- GenerationHOPE a WIF initiative to mobilize the participation of the young generation for empowerment on natural climate solutions.
- Miss Earth 2021-22 Baitong Jareerat appointed as WIF's Youth Ambassador.
- Expanded partnership with like-minded NGOs in cooperating countries.



PARTNERS IN BLUE CARBON Thanks to our investors for their trust.

Special thanks goes to CEMAsys, Soneva Foundation, High Tide Foundation, Kakariki Capital, Starboard, Removall Carbon, Blue Life GmbH, Storebrand Livsforsikring AS, Carbon Neutral Royalty.

Of these investors, Starboard is the longest serving partner.

Its founder, **Svein Rasmussen** is 6 time World Champion in wind surfing - an all time high Inspirator. Svein has unparalleled experience with blue oceans and is truly a nature based blue carbon hero.

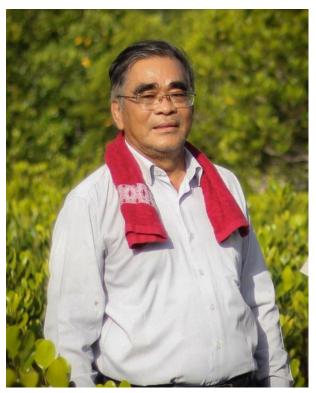
Svein, CEO and founder of Starboard, has been supporting WIF mangrove restoration since 2014, as the first company to become climate positive. Starboard is a pioneering 10x climate positive company, having supported the planting of over 2 million mangrove trees in Thor Heyerdahl Climate Park. However, their journey will not stop there, another one million mangroves will be planted in 2023, WIF's new country partner.



Apart from financial support, WIF has benefited greatly from Starboard's unrelenting inspiration and practical support. As a member of WIF's Board of Directors, Svein has always been ready to mobilize his network to help when needed, guided by endless generosity.

U WIN MAUNG The master planter triggering WIFs success.

Human mobilization is key in combating climate change.



WIF is blessed with top professionals with the highest international standards, starting with 4 PhD academics. But high-level knowledge is not enough, the winning battle is in the field. It is in the wet, muddy ground that mangrove trees thrive and grow to mighty carbon machines, mitigating up to 5 times more CO2 than terrestrial trees, thriving on salty tidewater with continuing pouring non-stopping rain for months in the yearly monsoon seasons.

WIF's climate warriors are certainly not faint-hearted. They have to withstand nature's bombardment from the open sky with billions of rain bombs hitting the flooded ground of their workplace. The endless pouring rain causes snakes to escape from their hidden underground bunkers. These continuous attacks from open skyrivers and poisonous snakes mean our

planters are facing an uphill task. Free raincoats and boots can only help to a limited extent. Our strength is that the planting morale is never lost, thanks to shared solidarity by the leader, U Win Maung, WIF's iconic Field Director for the last 10 years. He is sharing the challenges with everyone, as a battle-hardened Field Marshal, overcoming all obstacles with a strong human spirit of excellent leadership.

Myanmar is, for months, one of the wettest places on Earth. It needs full cooperation by all to sustain, from harvesting the propagule seeds, to the final planting. Without proper storage of propagules, vulnerable lives from nature will be lost. The shining light of care and love is the overall driving force in securing the survival of the tiny new lives. Bringing these propagules to the planting site in time is another challenge, far away without roads. Thereafter to be planted by trained planters who fully understand the process of taking care until the plants properly set root for more than 100 years, actively contributing to the yearly miracle in renewing life.

There are plenty of reasons for why things could go wrong. Generally, mangrove projects only reach less than 50% survival rate of plants, while WIF's projects in the last 5 years have documented 96%. This exceptionally high record of surviving plants propelled WIF to be awarded the first AAA rating for mangrove restoration in 2022 by BeZero global ratings agency.

U Win Maung started his mission after graduation from Forest University. He is blessed with an exceptional curious mind, soaking up tons of knowledge wherever available and adapting to practical usefulness. Every knowledge and practice concerning mangroves is permanently recorded in his encyclopedia-like mangrove memory. This includes first-hand practical experience in hydrologic planting by freely using the moon-elevated tide to float the seeds to their root-setting destinations. Furthermore, establishing bare-root nurseries, and direct seed sowing, scooping up millions of potential tiny tree seeds from the drifting sea, ignited with life to become forest giants.

U Win Maung had the guts to challenge conventional practices in his eagerness to invent the smartest planting methods. With logical thinking, he simplified the planting process with seeds directly in the soil. This increased productivity to over 200%, without compromising quality. His mentor, the Japanese mangrove enthusiast, Dr. Kygo Motohiko, official WIF advisor and WIF Environmental Prize recipient, provided additional knowledge in a successful blend of achievements.



Dr. Kygo Motohiko received the WIF Environmental Prize 2019 from U Win Maung.

Our field hero U Win Maung is a man in a hurry. His days start at 4am, before the birds rehearse their daily forest concerts. He has no time to wait for the light of day, and keeps going at full speed until 6pm, when he meta-force in social activities with his field staff, gearing up for a new day for his life's passion; mangrove restoration. With over 30 years of mangrove development on his mind, he has reached the ultimate mangrove knowledge.

The only explanation I have for this extraordinary capacity makes me wonder that he could be an incarnation of a mythical faun from nature, combined with an extraordinarily, passionate-driven human truth-seeker.

Thanks to him, his competent field staff of over 3,000 trained planters (the majority women) are in active service. WIF has been blessed with wonderful progress, benefitting investors and community partners alike, in fighting the climate battle with HOPE. 25 million propagules are ready to be planted in 2023, meta-forcing into a wonderful mangrove forest with life-bearing ecosystem services.



The master planter with a new recruit, Miss Earth, Baitong Jareerat, WIF's newly appointed Youth Ambassador with love of mangrove restoration.

WIF LIVELIHOODS in cooperation with over 100 communities.

The need for human dignity in project implementation is clearly manifested in WIF natural climate solution projects. Listening to the communities and finding solutions to their urgent needs is our first priority to mobilize protection of living forests.

WIF's dedicated Livelihoods Director, Grace Bo Ni, is sharing some of the highlights of achievements of livelihoods and sustainable development under her leadership in 2022.

Our ultimate aim is to increase family income of community members by 100 percent within the first 5 years.



Social Economic Impact and Key Achievements

WIF is implementing five program of livelihoods project activities:



- income generation
- cash for work
- awareness and improving knowledge
- communication and public education
- life skills and vocational training
- financial family support
- target activities for vulnerable groups in consultation with community development committees with gender equality.

Income Generation

WIF aims to increase family income generation to help support economic progress of the communities it partners with. This is achieved by supporting various kinds of aquaculture, such as distributing nets for crab fishing through village development committees, as well as promoting mushroom production and other home gardening activities for food production and additional income. WIF has supported equipment related to agriculture such as seedling tray, sprinkler, sprayer and other needed equipment.

WIF has promoted seaweed farming as a very attractive income generation activity with the





blue carbon benefits. This is now appreciated by over 100 communities as a method of creating jobs and pursuing sustainable development.

Family income generate from seaweed farm

"I have four family members including two children. I joined the seaweed training which was delivered by WIF and could learn practical seaweed farming processes, drying techniques of seaweed, packaging system, and so on. After completing the training, I can earn income by selling dry seaweed and my family's livelihood is improved as well as support a lot to my children's education."

U Zaw Win Tun, 54 years, Kanyin Kwin village. As a result of WIF education, charcoal makers from Kyauk Phyar village have decided to cease current charcoal burning, instead using fuel-efficient stoves provided by WIF. This is a far better



livelihood alternative, avoiding destructive charcoal production and creating job opportunities in stove production, providing additional economic benefits. WIF has also supported these communities with carpentry machines and accessories in close collaboration with village development committees for the same purpose.

Fuel efficient stove to reduce cost of firewood

"The most obvious thing I have noticed by using this fuelefficient stove has reduced the use of firewood, saved time
and money. As I work in pig breeding; I have to cook pig
food every day. When I cook it with traditional way, I have
to use 8 sticks of firewood. Now I can save cooking time
with only 3 sticks of firewood. So, I want to thanks WIF for
their generous distribution to the local communities."
Daw Yin Yin Nu, Ah Le Kone village.



Cash for Work Program



This program helps meet the immediate needs to provide food and other essentials to families below the poverty line. The activities create daily jobs for the villagers, enabling them to earn more than minimum daily wages during the project period through renovation and construction of drinking water wells and water supply systems and improving drainage with flood protection walls proposed by the village development committee.

This also includes improvement of drinking water ponds to provide year-round access to safe drinking water. This will save the communities a lot of time, particularly for women and girls whom would otherwise spend hours in search for drinking water during the drought period.







Rain water harvesting is another effective initiative to improve the general health and hygiene, reducing contagious diseases through contaminated water. The number of healthy families has greatly increased by providing big clay pots to harvest daily clean drinking water requirements.

Awareness Raising with Improved Knowledge

WIF continually provides learning opportunities for children facing poverty, delivering education supplies at targeted schools to ensure their right to education. This provides access to learning, helping to improve IT skills, knowledge and education by supporting computers, printers, tables and chairs, solar lamps and solar panels, batteries and accessories.

In addition, WIF is supporting partner community schools with insufficient resources by supplementing monthly teacher salaries. Scholarships for girls striving to attend universities and other types of scholarships are provided annually to children from disadvantaged families.



Scholarship make great support for my education

"I am Aye Min Naing from Thabaw Kan village and I am attending Grade 10. My family are causal labor and it's difficult to get the regular income for the family. My parents have not attended the school and they want me to be educated. My goal is to be a doctor to give the health service for the people. I expensed the scholarship by purchasing the school items. I will continue to reach my goal,"

Aye Min Naing from Thabawt Kan village.

Youth for Climate Action

Environmental Youth Camp Awareness Program is organized to meet the capacity gap, especially in areas of mangrove restoration and conservation. The program aims to give local youth knowledge and confidence to involved be directly in active environmental issues and raise their voices in public decision making.





Income from Home **Gardening:** "I have attended the organic fertilizer and organic crop protection training provided by Worldview International Foundation. WIF provided seeds, blue net, water spray and organic fertilizer for the home garden. Now I get income and nutritious food using the organic fertilizer and crop protection provided. This is very helpful for the whole family. so much Worldview **International** Thank Foundation for climate support with human dignity."

Daw Phyo Phyo Aye from Thabaw Kan village

Biodiversity in WIF Projects

WIF emphasizes biodiversity and protection of endangered species in all its activities. This also relates to the human/elephant conflicts in the project areas. As part of our protection responsibilities we are happy that our newly planted forests are providing protection for wild elephants. The first wild elephant family was observed in the forests in 2019.



Wild elephants seeking shelter in WIF's newly planted mangrove forests. Photo credit: *Ashima Narain*

WIF has organized training courses for the mitigation of Human-Elephant Conflicts (HEC) in 2 townships, Ayeyarwady Region supported in collaboration with Friend of Wildlife. Those training courses were taken at the different four places namely Ma-gyi-zin, Thit-won-pu, Shwethaung- yan, and Chaung thar villages.

89 participants across 29 villages received training on elephant biology and ecology, mitigation methods to reduce HEC, and the important role of civil society organizations in biodiversity conservation.

Emergency support makes family recovered

"I have four family members. In my village of Pho Chaung, wild elephants entered and destroyed my house on November 22. Therefore, my family fled from the house to a safe place. Our home was completely destroyed and we faced difficulties to get food and shelter. WIF has supported with food and house."

U Soe Min from Pho Chaung Village



Financial Support

The program is to improve economic progress and support start-up capital in micro-enterprises and home industries in 27 villages. The program has also supported establishment of electricity projects in 6 villages.

The Revolving Fund provides income generation and vocational/ life skill training for 815 households in 27 villages for fishery, livestock, agriculture and small businesses. The living standard has improved with additional income to disadvantaged households.

Life Skills / Vocational Training

Agriculture: Mushroom cultivation, home gardening, production of organic fertilizer and other relevant activities.

Aquaculture: Crab, shrimp, seaweed farming, oyster and clam production. Livestock development, production of fuel efficient stoves, mechanical skills, hairdressing and make-up, handmade personal care products, financial management and book-keeping to improve career skills for job opportunities.

WIF coordinated with the Myanmar Red Cross Society (MRCS) to organize a First Aid Training course at Kyat Thun Kwin Village, Monastery. This course was conducted over 3 days and a total 25 persons attended across 18 villages. It included modules on Concept of Aid, Emergency Case Management and First Aid principles.

Health awareness on hygiene and four clean principles (Water Clean, Latrine Clean, Food Clean and Hand Clean) was conducted to improve hygiene practices and reduce water-borne diseases in targeted villages in collaboration of rural health staff.

Emergency Response to the COVID-19 Global Pandemic

During the pandemic period, WIF supported the basic food as rice, cooking oil, vegetables, eggs, and beans to meet food shortages during the lockdown period. In addition, WIF provided personal protective equipment (PPE) with surgical masks, hand sanitizer, infra-thermometer, hand gel, patient monitor and electrocardiograms and other essential support to local health institutions and the regional general hospital.

Promote Community Energy Forest

WIF has distributed seedlings of high energy tree plants, including *Gliricidia sepium* to households and schools to improve energy forest for fuel woods in protection of carbon storing mangrove trees.





Trash Campaign

Trash minimization aims to avoid waste, by conducting meetings through education and the adoption of less wasteful practices. There is a lot of trash in villages due to lack of proper trash awareness. WIF mobilized village development committees for permanent action.

Media and Public Education

WIF is conducting public education and advocacy by organizing discussion clubs and meetings, production of newsletters and pamphlets for improving education and awareness on environmental protection and sustainable livelihood development. The grassroot communities are motivated and are following up with concrete action. Information boards and suggestion boxes have been established in 9 villages on a pilot basis.



Sustainable development with human dignity

For more information about human dignity in blue carbon projects, in relation to the UN Sustainable Development Goals, visit WIF's website at: www.WIF.foundation/livelihoods