



Impact Report 2021



Contents

02	Introduction
03	Message from CEO
04	About us
06	Key Highlights
09	Environmental and Socio-economic impact
14	Our Partners
16	Customer testimonials
17	Meet our team
21	Future outlook

Introduction

AGROS believes in a world in which small farmers continue to feed our planet in a sustainable and profitable way. We're revolutionizing agriculture across the globe, giving millions of farmers the technologies, inputs, advisory and financing they need to transition to long-term profitable farming. Our mission is to double the income of smallholder farmers while making their farm climate-resilient for generations to come.

We are Asia's first ecosystem to help crop farmers be profitable and sustainable, season after season. Our ecosystem allows farmers to reduce input costs, restore soil health and increase yields. We guarantee adoption, longevity and affordability by designing products locally, providing data-driven education and offering flexible financing solutions.



Agrosolar

A solution for farmers to increase their income by saving on fuel for irrigation and growing crops year-round.



Agrosoil

A solution for farmers to restore their degraded soil with fewer chemicals, to increase yields and income for the next harvest and many to come.

Message from CEO

Max Nelen

Founder & CEO



As one Agros team, by working together and by believing we can make a change, we can accelerate the agriculture transition and realize the future that smallholder farmers need.

Climate change is a major threat to our environment, society, and economy. However, we believe a prosperous, inclusive, and low-carbon world is possible.

Smallholder farmers, who are some of the poorest people, produce 30% of the world's food and 47% of all GHG emissions from their farming. We are facing unprecedented population growth, with the world's population expected to reach 8.6 billion by 2030, necessitating 50% more food, 45% more energy and 30% more water. How do we solve these urgent challenges? The suite of solutions will need to solve two challenges simultaneously: closing the yield gap and decarbonizing agriculture.

Agros is an ecosystem that combines technologies, inputs, advisory, and financing to double farmers' profits while lowering CO2 emissions. Our holistic solution is brought to market under two different brands – Agrosolar and Agrosoil – allowing farmers to reduce input costs and increase yields.

At Agros, we are committed to climate action and rural prosperity — decarbonization and higher yields. In 2019, we established Agros in Myanmar. In 2021, we expanded into Cambodia. Within two years, we have worked with more than 700 farmers and built up a strong sales and marketing team that increased the income for farmers by up to 63% and reduced emissions by 3,000+ tons. Agros' mission is to double the income of smallholder farmers while making their farm climate-resilient for generations to come. To achieve our mission, three successful factors are key for us:

1. **A best-in-class team** - a diverse team made up of talented and highly motivated people from various functional backgrounds and walks of life. We pride ourselves on really being farmer-centric, boots on the ground. We are in touch with the farmers we want to serve and do not take any decision without piloting it with the farmer communities.

2. **A pragmatic farmer-centric strategy** - targeting 2 ha+ cash crop farmers in selected provinces with two offers: Agrosolar and Agrosoil. Both offers deliver higher income and lay the foundation for better yields season after season. Agros will close the loop by increasing their presence in the retail shops and by educating the farmers on regenerative practices.

3. **A relentless appetite for implementation excellence** - a strategy without implementation is worthless. We invest in continuous piloting before scaling. This gives us an edge and invaluable insights which we use to scale effectively. Once we scale, field marketing is based on a "seeing is believing" and ambassador approach. Agros partners with farmers who turn into Agros community ambassadors and lead their community education towards a more regenerative and profitable future.

These plans, actions, and learning, backed by continued innovation in agronomy, technology, and business models, will enable Agros to become a pioneer in the industry.

About us

Mission

To double the income of smallholder farmers while making their farm climate-resilient for generations to come.



Vision

A world in which smallholder farmers continue to feed our planet in a profitable and sustainable way.



Our values

All of our employees commit to live by our values:

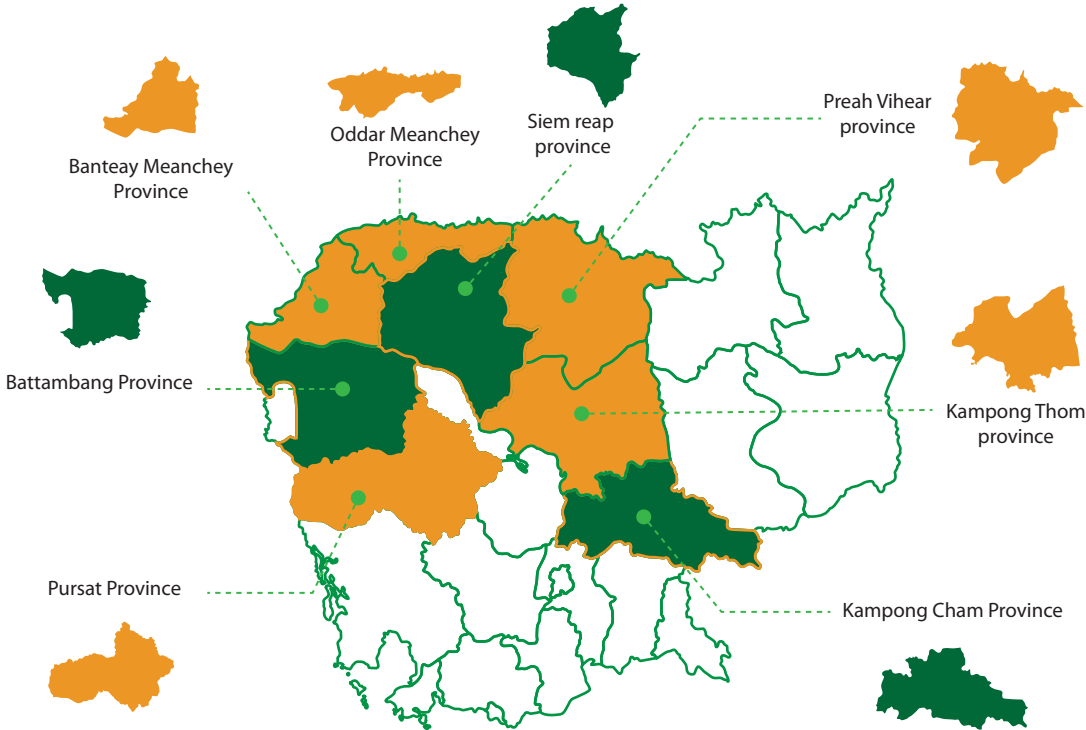
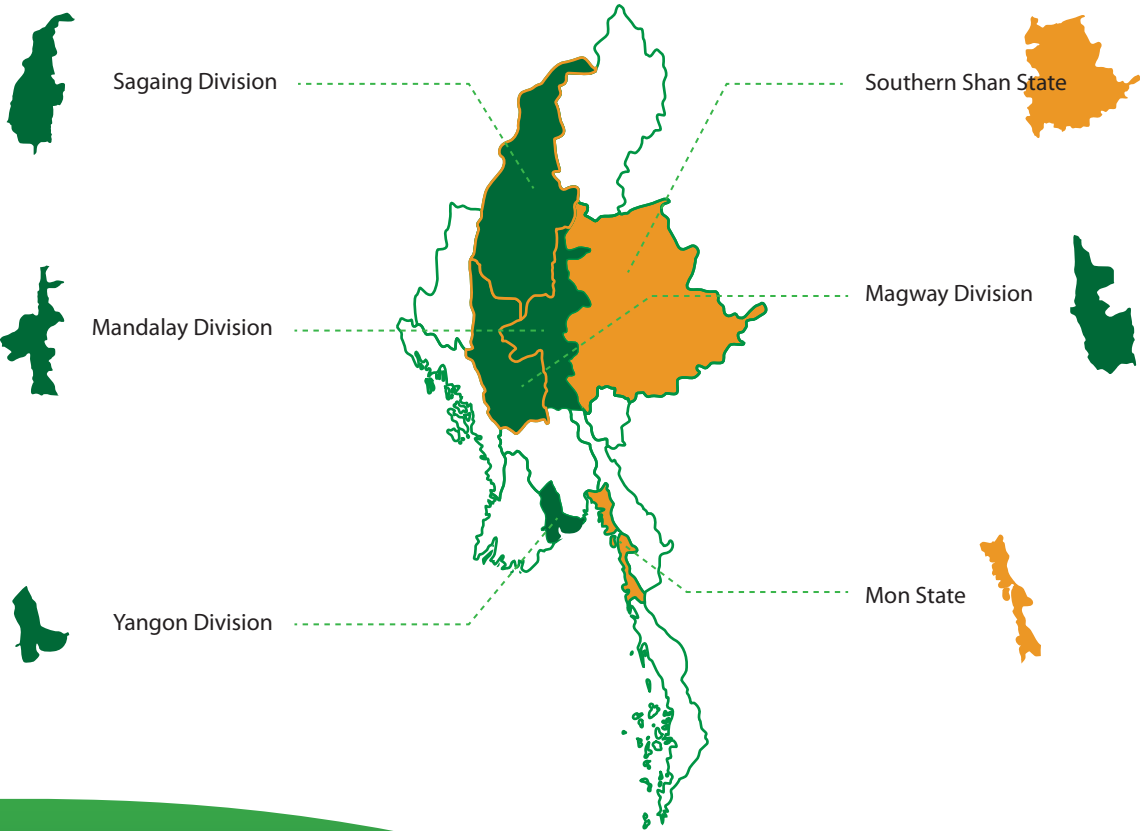
- Farmers first
- Long-term sustainability
- Solution-oriented
- Transparency



Area coverage and expansion map

Current operating areas

Operations to be launched in 2022



Key Highlights

Impact

Total number of beneficiaries in our operating area is **4,320 people** irrigating **4,996 acres**.

Units Sold

We have installed our products in both Cambodia and Myanmar for

864 + farmers in August 2022 with 3,000 Male and 245 Female end-users.

Feedback

100% of customers are satisfied by using AGROS products and services, and they have improved the awareness of climate-smart agriculture.

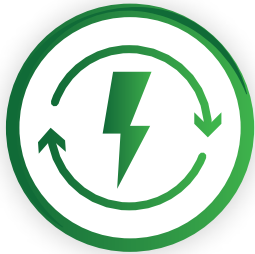
Coverage

7 Townships in Myanmar and

3 Provinces in Cambodia.

Fuel savings

\$1,741,918



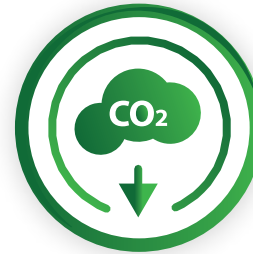
Yield Production

1,952 tons



GHG Emissions

4,287 tCO₂e



Water Savings

1,886M Gallons



Our Milestone Achievement



Environment

Switching to solar irrigation system not only abates the carbon dioxide along with the progress, it also reduces the noise pollution.

On a yearly basis, we save millions of gallons of water and help farmers to produce in an affordable way. It has a great impact on sustainable agriculture and natural resources stewardship. Water depletion is the major concern for the agricultural nexus.

By using solar-powered pumps in irrigation, we are able to reduce **GHG emissions and fuel consumption**. Environmentally, farmers adapt and respond to climate change and variability by avoiding the slash and burn method, planting trees and using other fuels instead of firewood.

Social



We have created job opportunities for **50+** in Myanmar and Cambodia during the worldwide pandemic and value the role of women in the workplace. We engage in the women's empowerment and we hired our first female hub manager in Myanmar. Total employees have increased with a 78% male and 22% female contribution.

After installing the solar pumps, the farmers were able to **reduce their anxiety and release stress** while dealing with growing fuel prices.

Continuously, they can participate in the community development activities in their society by getting some free time for farming. Moreover, we installed our products for water supply to secure the water shortage problem in some areas where drought and water scarcity are occurred.

54% of women farmers and 46% of male farmers are involved in our impact survey in Myanmar's Central Dry Zone. One of our female farmers, Daw San Aye said,

"The benefits I got from using solar was that last year, I had to run the Engine, so I need an extra man to help me with running the engine, but this year, I no longer need the extra man. And it costs me 2USD a day to hire that man and with the typical engine, having a man to help is a must. Now, I can switch on the solar on my own."



Economic

Profit

The average profit per solar-used farmer has **doubled** compared to the other farmers. The farmers in our impact area has increased their income by over **1 million**.

After switching to solar-powered farming, they have reduced their costs by about **34%** and added more inputs to increase yields instead of fuel.

Increase in Productivity and changed crop calendar

Our customers were able to change their crop calendar and obtained **62%** more harvest than before using our solar pumps.
As a result, they have increased their productivity by up to **127%**.

Cropping intensity and diversification

Farmers grow seasonal and long-term crops in **THREE** (Summer, Monsoon and Winter) seasons in Myanmar and **TWO** (Summer and Monsoon) seasons in Cambodia. The growers are able to harvest the whole year even there's not enough rainfall.

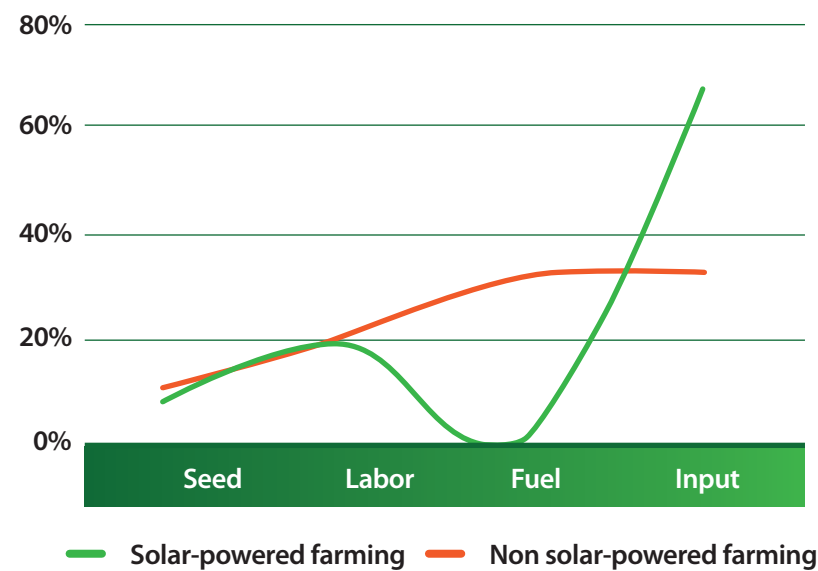
They can **diversify** crops such as banana, cilantro, grape, tomato, chili, paddy, flowers, pomegranate, sunflower, and mango, etc.



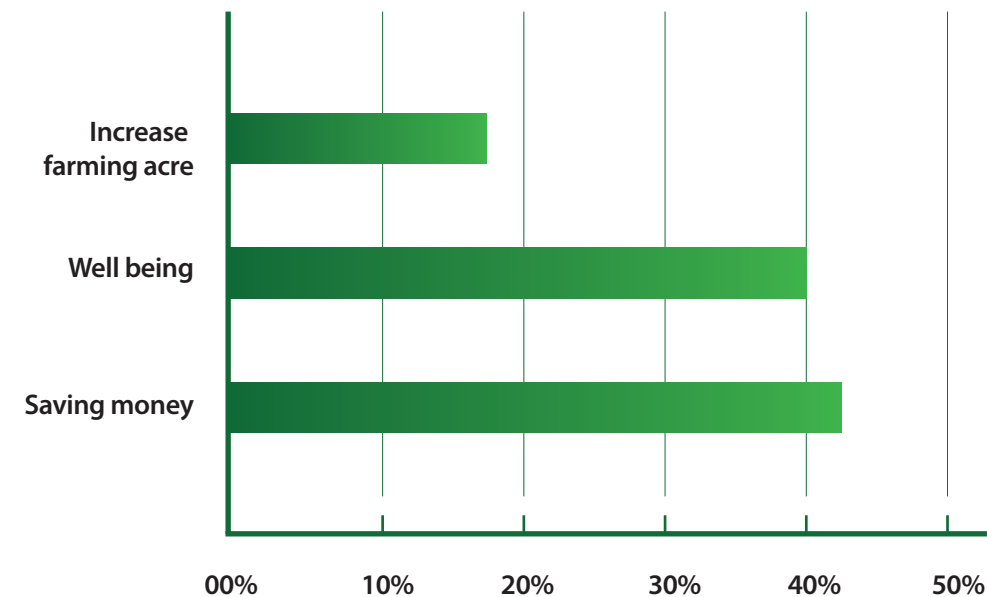
Economic

Irrigated land in terms of acres has increased **by 20%** after switching to solar water pumps. The farmers do not need to be concerned about **fuel and maintenance costs** anymore. In non solar-powered farming, the farmers used **31%** of total cost for fuel usage and **5%** of total cost to maintain the pumps.

The estimated irrigation period per crop cycle for solar pump user is **31 days longer** than diesel pump user.

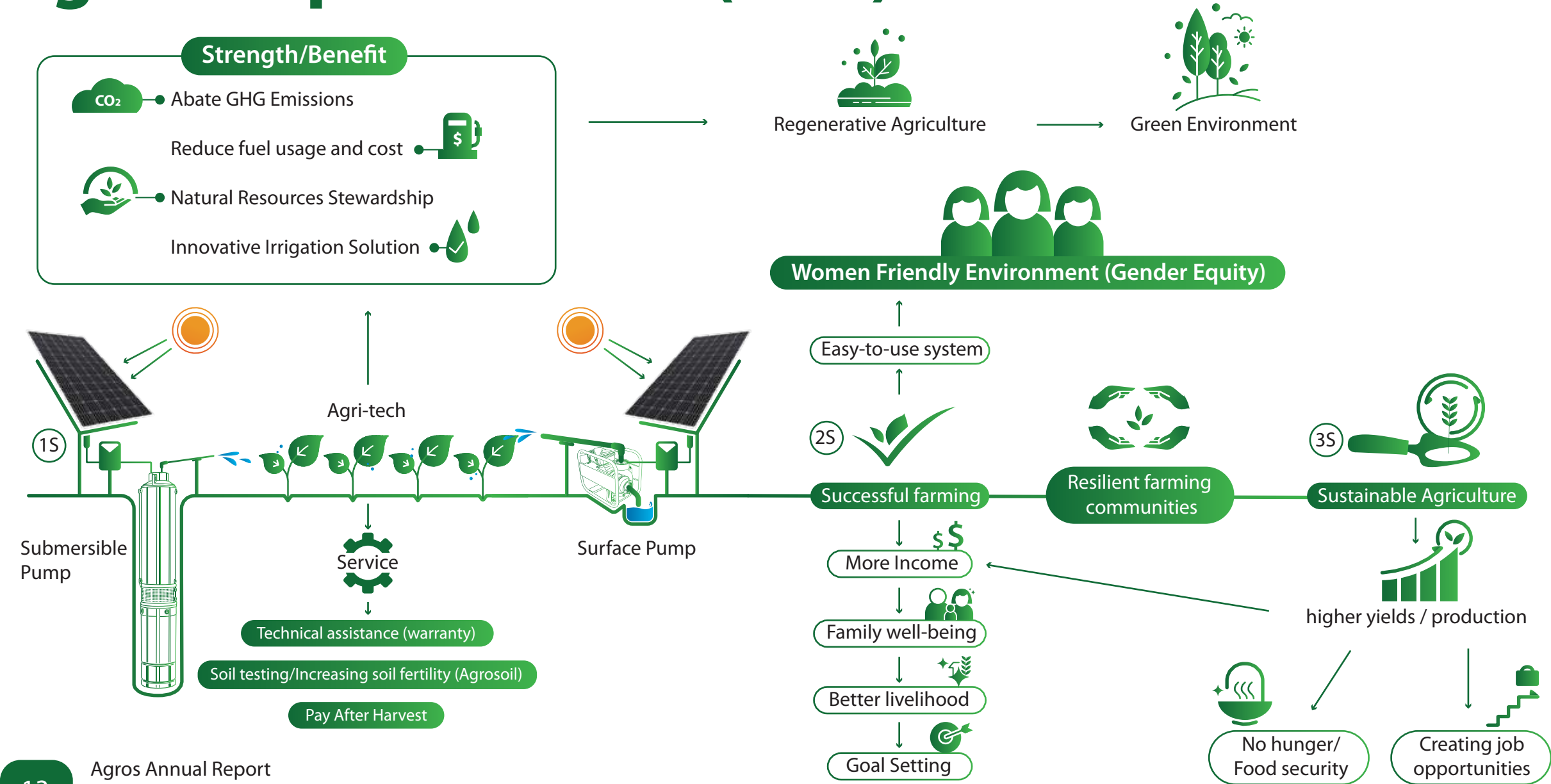


By reducing their fuel cost, farmers were able to use that spare money to invest in more inputs and increase production of their farm.



The improvement in the livelihood status of farmers has a **strong correlation** with fulfilling the crop water requirement. As a benefit for households, the farmers can grow more vegetable crops and get some surplus to invest in their children's education. **98%** of surveyed prospective farmers have the willingness to switch to solar-powered farming.

Agros Impact Matrix (ESG)



NGO Partners



Investor & Donors



Financial Partners



Donor and Investor

USAID

Agrosolar Myanmar is supported by DAI/USAID under the agreement of "Agrosolar Distribution Expansion Project" to achieve Agrosolar's objective of creating a roadmap for an omnichannel distribution strategy to reach our target of 10,000 systems installed. Agrosolar distributes directly to farmers and provides all services in-house, from lead generation to after-sales services. In order to scale, Agrosolar is seeking to partner with other players in the value chain, especially to increase the number of potential leads (both online and offline).

WE4F

Agros received grants from the previous phase of Asia EDGE Ag-Energy Prize and now CFI2 for Water and Energy for food innovation. WE4F provides digital marketing, gender lens integration in HR management as well as technical support, BU to attract 1.5 million USD and EE to expand in Cambodia, Vietnam and Bangladesh. With the help of WE4F, Agros develops partnership with donors, INGOs and the opportunities for knowledge sharing via webinars and in-person meetings both at the national and regional level.

Customer Profile and success story



“Solar irrigation system allows me to work independently, and it helps us farm efficiently even in the rainy season. Along with the irrigation solution, I have now reached my destination to secure food production during the fuel crisis.”

“By using the solar system, my family can start the system without my help. It’s very useful and lets us save on fuel costs of about 2USD/L, which turns out to be 20% of my profits, and I am able to farm 2 extra acres.”



Management team

Max Nelen

Founder & CEO



Max Nelen is the Founder & CEO of Agros. He is a serial entrepreneur and behind the success of companies like TablePointer and SolarAI. He is passionate about rural poverty and climate change and commits to make a difference.

Thet Win Naing

Country Director
Myanmar



Thet Win Naing administers Agros Co.,Ltd.'s subsidiary in Myanmar as its Country Head. He is a business development specialist and has 12+ years of expertise in industries such as direct sale, renewable energy, consumer electronics, and fin-tech.

Sandra Bos

Head of Product



The company's global Head of Product is Sandra Bos. With more than 12 years of expertise in the water, energy, and agricultural nexus in many nations in East-and Southern Africa, Sandra is a hands-on product manager.

Soeng Vay

Country Director
Cambodia



Soeng Vay is the Country Director of Agrosolar Co.,Ltd., the Cambodia subsidiary. Soeng is an agronomist with over 15 years' experience in agribusiness, private sector development, sale and marketing, and project management. He has a high commitment and contribution to reaching our company goal and has a passion to improve the agriculture sector.

Meet our team (Myanmar)

The Agros team based in Myanmar is a young and dynamic team of 25+ individuals spread across the HQ in Yangon and currently three operating hubs in Sagaing, Mandalay and Magway divisions. Each individual works hard every day to bring our solutions to farmers and provides an excellent experience.



Agros Myanmar

Agros Myanmar was launched in April, 2020 and stands out as the fastest-growing team in the industry, providing individual commitment to a group effort. Now, our Myanmar team is ready to deliver the best services for smallholder farmers.

Meet our team (Cambodia)

The Agros team based in Cambodia is an experienced and dedicated team of 15+ individuals spread across the HQ in Siem Reap and currently three operating hubs in Battambang, Siem Reap and Kampong Cham provinces. Each individual is committed, energized, and empowered with diverse backgrounds and a dedicated mindset to help farmers across the country.



Agros Cambodia

Agros Cambodia was launched in November, 2021 and employees are always delighted to assist the customers in their daily farming activities by delivering the best irrigation solutions and advisory services. With these great achievements, the team serves by heart.

Meet our ESG Reporting Team

May Grace

PR and ESG
Reporting
Manager



Hsumon Hein

Facilitator



**Hnin Wai
Wai Kyaw**

Intern



Saw Rain

Intern



Future Outlook



Climate change is urgent and the market doesn't wait. Therefore, Agros has drafted a growth strategy to become the leader in climate-smart agriculture across the region. The levers for growth are expanding regionally and launching new products and services that allow for recurring revenue. Agros currently has 8 operating hubs with 40 field staffs servicing our clients every day and is looking to open 50 more hubs in the next 5 years. The company will also launch operations in Bangladesh, a large market of more than 20 million rice and horticulture farmers. In terms of new solutions, the R&D team is currently piloting soil testing and agronomy protocols to allow farmers to reduce input costs and increase yields with regenerative practices and organic inputs. It also plans to test a leasing solution for farmers who are not able to pay 40% or 100% down at installation. With this strategy, Agros aims to double the income of 100,000 farmers and abate 2 mega tons of CO₂e per year by 2030.