



# SIINC for WASH

Impact-linked  
finance for aQysta

Social Impact Incentives for Water, Sanitation and Hygiene (SIINC for WASH) is an impact-linked finance programme co-designed and implemented by Roots of Impact and Aqua for All.

It provides innovative funding to water and sanitation enterprises in Asia, Sub-Saharan Africa and the Middle East and North Africa (MENA).

SIINC for WASH is an innovative and catalytic financial instrument where an outcome payer (e.g. a philanthropic organisation, development agency or other donor) agrees to make time-limited payments to the enterprise based on the impact generated by their operations.

To become eligible for a SIINC transaction, the enterprise must raise an investment round in parallel (e.g. equity, debt, mezzanine).

These temporary payments support water and sanitation enterprises to:



Increase their revenues



Enhance their impact



Attract private capital

***The greater the impact created, the higher the financial rewards.***

## SIINC for WASH launches in 2020

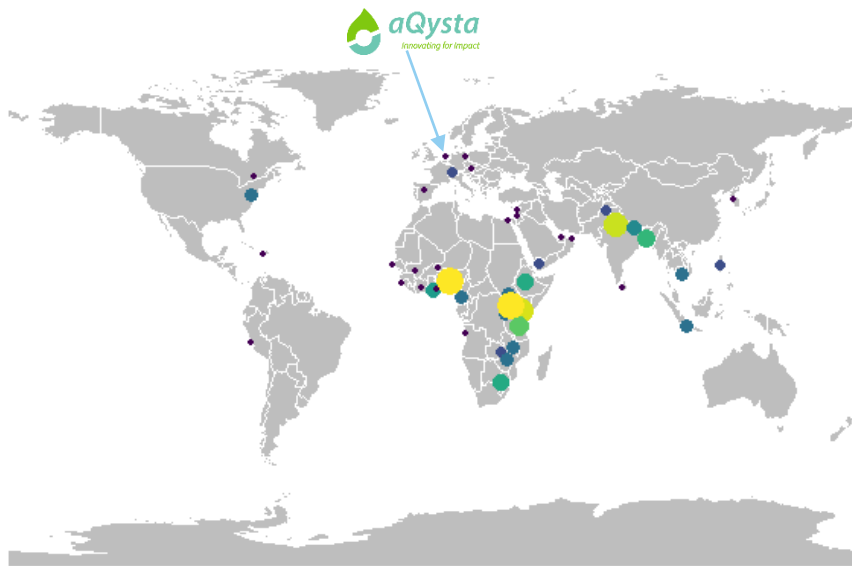
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The first SIINC for WASH call for applications (August-September 2020) received 140 applications from 33 countries (map below).

Four finalists were selected to participate in a SIINC transaction.

The selection and screening process included thorough review and continuous engagement with the shortlisted candidates.

Hydro-powered pump manufacturing company aQysta was one of them.



### aQysta's profile

Founding year	2013
Country of operations	India, Indonesia, Malawi, Nepal, the Netherlands, global
Business focus	Integrated water resource management
Main target groups	Rural poor
Growth stage	Scaling
Total pumps sold to date	320

# Smart solution for smallholder farmers

## Water scarcity affects rural livelihoods

Globally, 1.6 billion people live in areas with economic water scarcity. Water scarcity is a major driver of rural poverty and hunger. It impacts negatively on smallholder farming and rural livelihood. Affected farmers depend on rainfall and are subject to seasonal fluctuations. As a result, smallholder farmers' livelihoods are vulnerable and inferior to what they could be if they would have access to regular, reliable and resilience irrigation. In 2017, only 5% of harvested land in Sub-Saharan Africa was irrigated<sup>1</sup>.



## aQysta's solution

aQysta's hydro-powered pumps allow smallholder farmers to irrigate their fields all-year round in a water, energy and cost-efficient manner. By being able to irrigate their fields – also during dry seasons – smallholder farmers increase their income by 50% on average. As their yields increase, farmers' livelihoods and quality of life improve. Other benefits include high water efficiency, sustained quality of land, lower input costs and reduced carbon emissions.

For direct sales to customers, aQysta uses a pay-after-harvest model. Smallholder farmers pay for the pump based on their crop yields, with no upfront costs. This innovative model includes after-sales-service and support (including market linkages, crop consultation etc.) to generate more positive impact on the farmers.

<sup>1</sup> Claudia Ringler (2017), Investments in irrigation for global food security, available at:





## Dalitso M. (Malawi)

Dalitso lives with his family of four in Thundu village, Malawi, where he owns a small farm (1/2 acre). As he could not afford buying a fuel pump and the weekly fuel costs, he was forced to farm only during the rainy season and to work as a brick maker in the village. His lower middle-income made it hard to meet ends.

Since he uses aQysta's Barsha Pump, Dalitso farms onions, green maize and tomatoes throughout the year. aQysta offers assistance to its customers in the form of knowledge, training and inputs.

Dalitso participated in a decentralised farm incubator model offered by aQysta. Following aQysta's advice, he will start harvesting garlic to increase its income. Besides irrigation purposes, Dalitso and his family use the water pumped for bathing, washing dishes and sometimes cooking.



## Arjun K.K. (Nepal)

Arjun K.K. lives with his family of six in Nepal. He owns a small plot of land (~1 acre). In the rural area where they live, there are few job opportunities making agriculture the only viable option for generating income. However, Arjun has very limited access to water during the dry season. He must go to the nearby river downhill and carry the water all the way back. The limited crops were enough to provide him lower middle-income.

Thanks to aQysta's Barsha Pump, Arjun does not depend on rainfall anymore. He has regular access to water to irrigate his field all year long. This cost-effective and reliable irrigation solution is critical for making farming possible and profitable.

Arjun currently grows potatoes, carrot, spinach, peas as well as cereals like maize and paddy (mostly during monsoon season). He is progressing from subsistence to semi-commercial farming. This will contribute to increasing his income and improving his family's wellbeing.

## SIINC for WASH for aQysta

### Sales model tailored to farmers' needs

aQysta's operations are primarily based on business-to-government (B2G) and business-to-business (B2B) sales because of their larger volumes and payment guarantees. However, these sales channels give aQysta little control over whether farmers are properly using the pump and making the most out of it.

Business-to-customer (B2C) sales allow aQysta to stay closer to its end customers and provide them after-sales services that maximise the pumps' positive impact. But while there are clear benefits for and demand from smallholder farmers, they often cannot pay for the pump upfront.

aQysta developed a pay-after-harvest model that allows farmers to pay for the pump based on their harvest yields. In the short term, B2C sales are more impactful, but also riskier and less commercially attractive because of longer and more uncertain payment terms and the additional human and financial resources required.



### Supporting aQysta to reach scale

SIINC for WASH aims to support aQysta to overcome the tension between its economic and its impact goals. This will be done by facilitating aQysta to reach the required economies of scales that make its B2C and pay-after-harvest business model (self-) sustainable.

Progress will be measured through two key metrics that have been agreed with aQysta. These metrics will incentivise the enterprise to increase the breadth (in terms of size) and depth (in terms of quality) of its impact.

## Key metrics

### Metric 1: Percentage of pumps sold via the pay-after-harvest model

SIINC supports aQysta's efforts to increase the share of its pay-after-harvest B2C sales in Malawi and Nepal. This focus will allow aQysta to systematically target sales and operations. The goal is to replicate it at a later stage in the other focus countries and eventually, at a global scale.

### Metric 2: Percentage increase of smallholder farmers' income

This metric focuses on deepening aQysta's positive impact beyond the average 50% income increase that farmers experience by using the pump to irrigate their fields during dry seasons.

This incentivises aQysta to improve its after-sales-services and support – from market linkages to crop consultations and input– to ensure higher income benefits for smallholder farmers.

	Metric 1	Metric 2
Incentive	Increase the percentage of pumps sold via the pay-after-harvest model in Malawi and Nepal	Enhance smallholder farmers' income
Baseline	5%	50%
SIINC target	12%	200%
Payments (up to)	€250,000	
Transaction period	3 years + 1	
Impact verification	Every 12 months	

*'SIINC for WASH allows entrepreneurs to pursue both impact and revenue, without having to choose between them.'*

*I hope that SIINC for WASH and our results will prove larger investors that our approach works and therefore help to raise more capital. I would also like that our SIINC for WASH transaction inspires other entrepreneurs. '*

**Pratap Thapa**  
CEO & Co-Founder  
aQysta



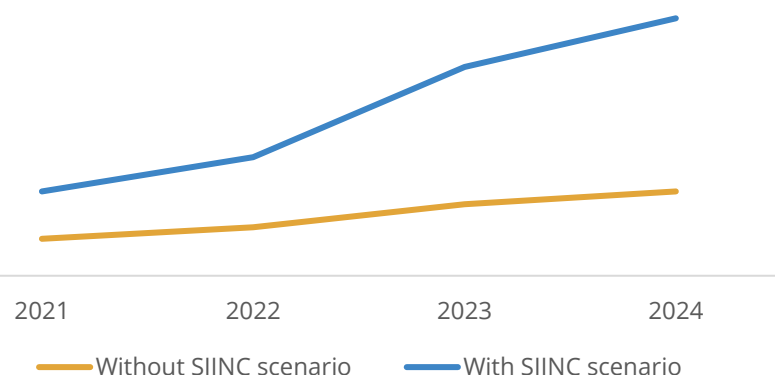


## The SIINC rationale

### Rewarding additional impact...

SIINC aims to push water and sanitation enterprises' impact boundaries. As such, it only rewards additional impact created. These are outcomes achieved on top of what was already planned for by the enterprise. aQysta's pre-SIINC plans targeted an average of 5% pay-after-harvest pumps sold to farmers in Malawi and Nepal<sup>1</sup>. SIINC for WASH encourages aQysta to increase this average up to 12%, by rewarding them for every extra impact mile achieved.

Pumps sold via the pay-after-harvest model



Similarly, SIINC incentivises the enterprise to grow smallholder farmers' annual income from an average 50% to an average 200% increase due to improved after-sales-services.

### ...while attracting capital...

Every SIINC scheme requires the enterprise to raise an investment round in parallel in order to receive incentive payments. aQysta's investment round achieved a financial leverage close to 1:4. Given SIINC's support to scale a business line that is still at an early development stage, the resulting proof of concept could attract more investors in the future. This could improve the financial additionality associated with SIINC even more.

<sup>1</sup> As compared to total global sales of Barsha Pumps through all sales channels.

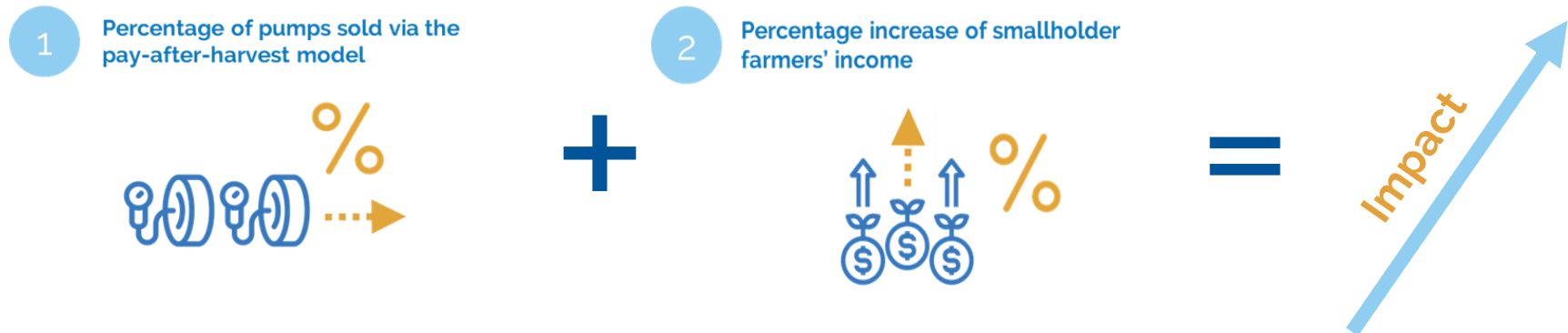
### ... and ensuring impact sustainability.

SIINC for WASH supports aQysta to ensure that its pay-after-harvest model and after-sales-services become intrinsic features of its business model and drive impact sustainability.

aQysta's hydro-powered pumps have positive impact on smallholder farmers living in areas with water scarcity.

The Barsha Pump has water, energy and cost-efficient features that prevent the overexploitation of basic resources. It does not include electronic or easily damageable components allowing easy maintenance and endurance.

The sales model is tailored to the income cycle of smallholder farmers. And aQysta's additional services and support help farmers to improve or increase their crops and yields and provide them higher income levels.



## Looking back and ahead...

Given the early stage of the pay-after-harvest sales model, it was important to limit the geographical scope and give aQysta enough flexibility to scale its operations without overburdening them.

An additional impact verification year was added to capture the annual income increase of smallholder farmers buying the pump in the third SIINC year.

After SIINC for WASH, aQysta expects to have an established and proven B2C sales model that allows the water enterprise generate high impact while achieving commercial growth.

The great results achieved regarding smallholder farmers' income increase could be extrapolated to its B2G and B2B sales channels to include extensive after-sales-services and increase impact.

For more information, **please contact Aqua for All** at



## About Aqua for All

Aqua for All is a not-for-profit organisation. For almost two decades, Aqua for All has worked towards catalysing an innovative, sustainable and inclusive water and sanitation economy worldwide. Aqua for All operates in Africa and Asia supporting innovations and scaling up enterprises until they are investment-ready without distorting the market. In addition, Aqua for All uses funds to mobilise private and public capital to increase investments in water and sanitation. Aqua for All brings to SIINC for WASH extensive water sector expertise as well as impact-linked funding for the enterprises.

<https://aquaforall.org/>

## About Roots of Impact

Roots of Impact (RoI) is a specialised advisory firm dedicated to making finance work for positive impact on people and planet. RoI collaborates closely with a variety of stakeholders across the globe to scale high-performing enterprises and innovations with strong potential for impact. As pioneers of Impact-Linked Finance, RoI is passionate about making the most effective use of public funds and catalytic capital. Their mission is to maximise “impact leverage” by mobilising private investment for high-impact opportunities and shaping innovative public-private partnerships.

<https://www.roots-of-impact.org/>



# SIINC for WASH

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Cover: aQysta  
Pictures: aQysta  
Graphs: Roots of Impact,  
Aqua for All

