

## WATER BENEFIT CERTIFICATE PROJECT

MORE YIELD WITH LESS WATER?

SOUNDS LIKE AN EASY CHOICE!



## IMPLEMENTATION OF SUSTAINABLE SUGARCANE INITIATIVE (SSI) PRACTICES AMONG SMALLHOLDERS IN RURAL INDIA

### WHAT IS THE PROBLEM?

**Smallholder farmers** don't take decisions lightly. In rural India, there are about 180 million smallholder farmers owning less than 2 hectares of land each. Climatic conditions are tough. Maximum temperatures are above 30°C throughout the year, and they peak at above 40 °C in May. Given the heat, 750 mm of rain per year is far from generous. And 90% of that rain falls in just five months between June and October. Outside the rainy seasons, farmers have to revert to ground water sources, which are increasingly strained by overexploitation.

### WHAT IS THE SOLUTION?

**Agricultural Services Private Limited (AgSri)** is a company with an ambition to innovate and scale farm-based technologies that are inherently farmer friendly and ecologically sustainable. One of these innovations is a set of methods named the **Sustainable Sugarcane Initiative (SSI)**.

**Using traditional sugarcane planting practices**, farmers must retain between 10-20% of the sugarcane harvest as seed cane for the next planting season. The retained seed cane is then chopped into 20-30cm pieces and planted directly into the fields, which are then flooded to effect germination. This wastes a great deal of water and seed cane, since not all the seeds sprout. **Using AgSri's new SSI planting techniques**, farmers can access seedlings raised in a nursery off-site. These seedlings can be planted directly into the smallholders' fields. Since the nursing process is highly specialized and standardized, it is far more efficient in its use of water. It can save up to 90% of the water compared to traditional practice while also saving a great deal of seed cane that would otherwise be wasted.

**Through SSI**, seedlings are planted in a regular, widely spaced pattern that increases the health of the plants and thus the yield per hectare by at least 20%. At the same time, this spacing technique allows farmers to use drip irrigation technology, which proved very difficult in the past for sugarcane. Using some or all of the recommended SSI techniques allows farmers to save a significant amount of water while also raising their incomes.

### PROJECT KEY FACTS

**Location:**  
Andhra Pradesh, India

**Project type:**  
Sustainable Sugarcane Initiative (SSI)

**Project standard:**  
Gold Standard Water

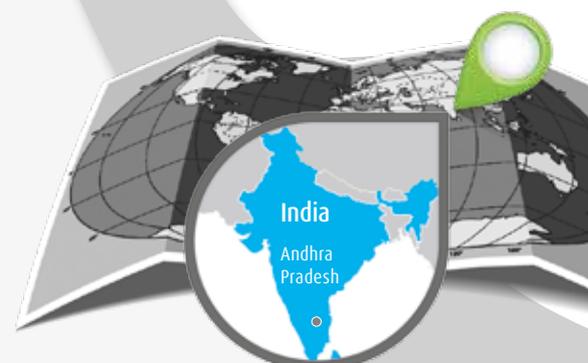
**Total water volume:**  
**940.000 m<sup>3</sup>/a**

**Number of Water Benefit Certificates:**  
130.000 /a

**Project start date:**  
July 2012

**Project auditor:**  
SGS

[Click here to see the project video](#)



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#### HOW DO WATER BENEFIT CERTIFICATES HELP?

**Ultimately**, AgSri's main contribution is its interaction with farmers by training and supporting them to apply SSI methods and building trust in the results. Through revenue from selling WBCs, AgSri anticipates expanding from the existing 1.500 farmers currently using the technique to 20.000 in five years time. The extra WBC revenue shall subsidize educational campaigns as well as the cost of seedlings to farmers to encourage wider application of these water-saving practices.

#### ADDITIONAL BENEFITS AT A GLANCE

- SSI methods can increase sugarcane yields by at least 20% with a 25% reduction in chemical inputs. The time saved by purchasing seedlings also allows farmers and their families to pursue more productive activities.
- There's great potential for scale. India is the second largest sugarcane producer in the world. Sugar is a 6 billion dollar industry and represents the principal livelihood of 35 million farmers. Another 50 million depend on employment generated by sugar factories and other related industries using sugar.
- The wide spacing of cane allows for intercropping vegetables, which both enhances the farmer's income and provides an additional source of nutrition.



#### WHO IS BEHIND THE WATER BENEFIT CERTIFICATE STANDARD?

The Gold Standard Foundation, First Climate Markets AG and more than twenty **Water Benefit Partners** (blue chip corporates, public institutions, NGOs, research institutes) have developed the Water Benefit Certificate Standard as an innovative financing mechanism to support water projects in regions particularly affected by water-related problems. **Water Benefit Partners** is a Public Private Partnership (PPP) that was formed in 2011. The partnership was initiated by First Climate Markets AG and is co-funded by the Swiss Development Cooperation (SDC).