# A revolutionary water treatment system for communities in CÔTE D'IVOIRE



# **RURAL DRINKING WATER**

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More than 300 rural villages in Côte d'Ivoire with fewer than 2,000 inhabitants have had their manual water pumps replaced by independent solar stations. These villages are members of either the "Conseil du Coton et de l'Anacarde" (Cotton and Cashew Council) or the "Conseil du Café et du Cacao" (Coffee and Cocoa Council).

#### The chosen technology : Sotrad Water's PUMP&DRINK solar pumping and treatment stations

The Pump & Drink stations, which Sotrad Water have been designing, developing and perfecting for the past 10 years, have been designed as sustainable, turnkey solutions for supplying drinking water to rural communities. These stations are used to install new boreholes and wells or to replace old, broken manual pumps.

They meet the most stringent requirements reliably and can be operated without fossil fuels or electricity.

The pumped water is treated to make it suitable for drinking, and the surplus can be used for crops and livestock. These solutions are designed to be installed in existing boreholes or wells up to 80m deep.



Solar-powered pumps, Chlorination, Storage, Distribution & Monitoring

#### Chlorination

#### 300 units D8WL3000N IE AF

TITNAUC

SETTINGS

**ADDITIVES** 

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PRESSL

Injection ratio from 0,03% to 0,125%

**CaClO 70%** 

from 0,15 to 8 Bar



Founded in **1974**, DOSATRON INTERNATIONAL has been a leading water dosing company on the **African** continent for more than **20 years** and has many satisfied customers in the water and chlorine dosing industry.

A solar pump station with a capacity of up to 2,480 W



**Proportional Hydraulic Chlorination** 



Remote data management



## Our solution.

The Dosatron dosing pump works in conjunction with the solar energy unit.

It is **ACS /NSF certified** and has an external injection system to prevent lime scale build-up.

This self-priming, easy-to-maintain unit provides a continuous flow of water.

**The 8,000-litre** reservoir stores the water before it is distributed via public fountains.

Between 10 and 30 m<sup>3</sup> of drinking water are distributed by each station every day.

Finally, the distribution points are equipped with a solar-powered street light that provides lighting after dark, meaning that the locals can collect water at any time, day or night.

Water is pumped into the borehole by a submersible pump powered by 8 solar panels, which replaces the existing old, broken manual pumps. Before reaching the dosing pump, the water is filtered to remove particles.



### PUMP&DRINK

and DOSATRON technologies have been awarded the **Solar Impulse Effi**cient Solution label



