

PILOT IRRIGATION PILOT-OCTOBER 2021

COCOA HEALTH AND EXTENSION DIVISION (GHANA COCOA BOARD).

INTRODUCTION

- Introducing irrigation into cocoa farms guarantee an all year round cocoa production which results in increased productivity of farms.
- ♦Flower abortions due to moisture stress is reduced and survival rate of seedlings on irrigated farms are significantly higher than non-irrigated farms.
- ◆The Irrigation project is to assist cocoa farmers to minimize the damaging effect of the dry weather as a result of climate change.

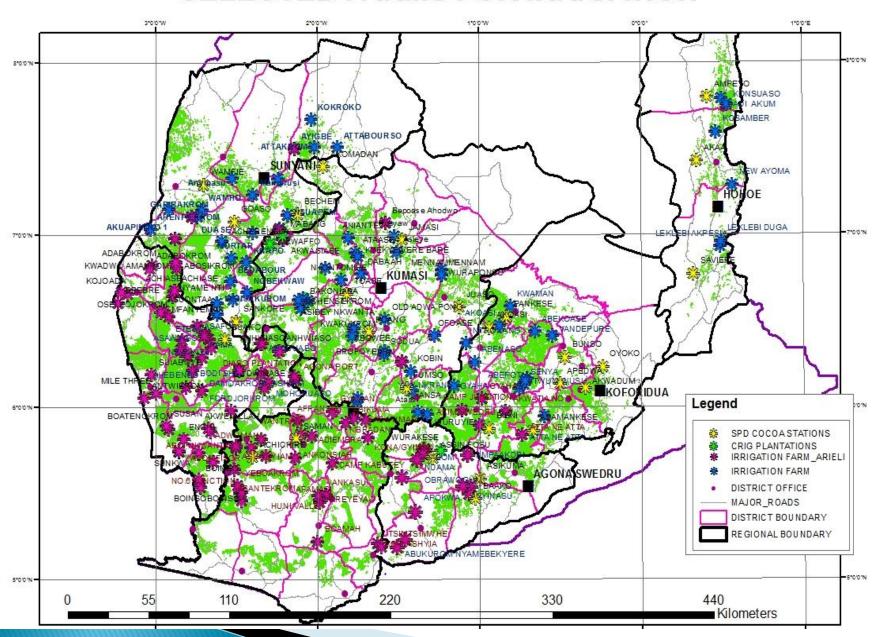
IRRIGATION SYSTEMS DESIGNS

- ♦Mist System Or Spray Tube Irrigation
- ♦Drip Irrigation Systems



PILOT IRRIGATION

SELECTED FARMS FOR IRRIGATION



ACHIEVEMENT





Irrigation Construction Works:

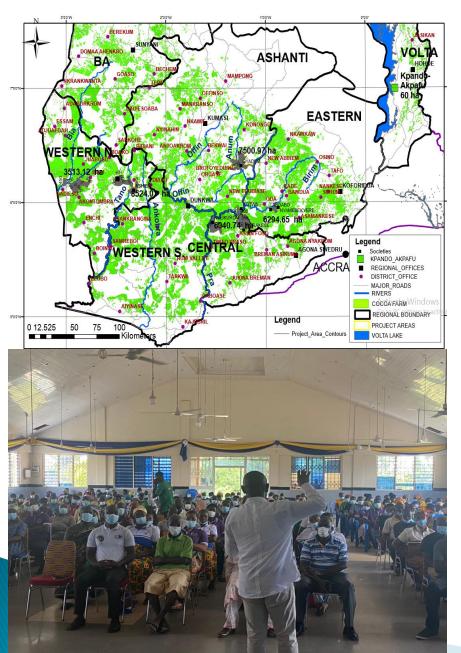
| REGION | NUMBER OF BOREHOLES | | | | IRRIGATION INSTALLATION | | |
|---------|---------------------|------|------------------|-------|-------------------------|-----|--|
| | SPD | CRIG | FARMERS' FARM | TOTAL | FARMERS' FARM | SPD | |
| Western | | | | | | | |
| North | 1 | - | 32 | 33 | 21 | - | |
| Western | | | | | | | |
| South | 6 | - | 47 | 53 | 9 | - | |
| | | | | | | | |
| Ashanti | 9 | 2 | 25 | 36 | 2 | 1 | |
| Brong | | | | | | | |
| Ahafo | 12 | - | 7 | 19 | 4 | - | |
| Eastern | 15 | 9 | 10 | 34 | 4 | 2 | |
| Volta | 3 | - | - | 3 | - | - | |
| Central | 2 | 4 | 13 | 19 | 3 | - | |
| TOTAL | 48 | 15 | 134 | 197 | 43 | 3 | |

ONGOING WORKS

- ♦An additional 9 Seed Production Division farms have been selected for irrigation and this will cover 110 ha; Installation works is ongoing.
- Nine (9) major river bodies in the Brong Ahafo, Ashanti and Central Cocoa Region have been earmarked as source of water for the scaling up of the Irrigation Project to cover 3,972.49 ha of cocoa farms
- Nine (9) companies have visited the sites of the selected farms for the irrigation and have conducted quality test and measured volumes

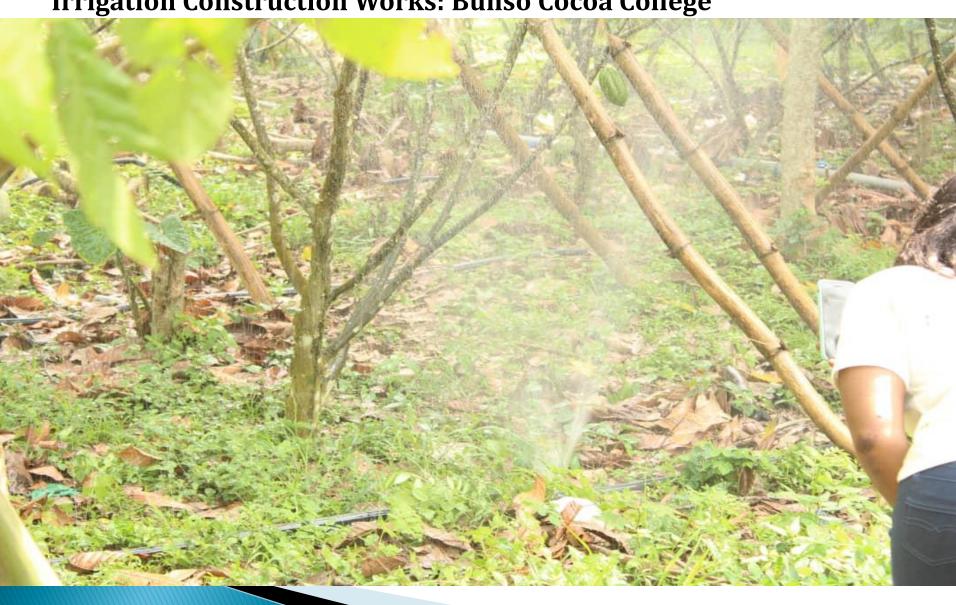
of water required for the project

SCALE-UP USING RIVERS - NINE PROPOSALS ASSESED

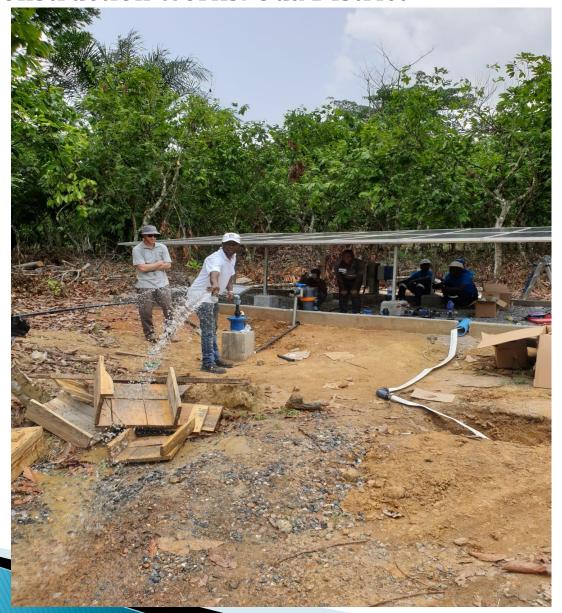


- A Stakeholder engagement has been done for the project areas.
- Presentation on the IrrigationTechnology and Expectation forCocoa Farmers is currentlyongoing
- This presentation is to be followed by the tendering process

Irrigation Construction Works: Bunso Cocoa College



Irrigation Construction Works: Oda District



Irrigation Construction Works: Akim Sweduro District



Irrigation Construction Works: Nuanua, Twifo Praso



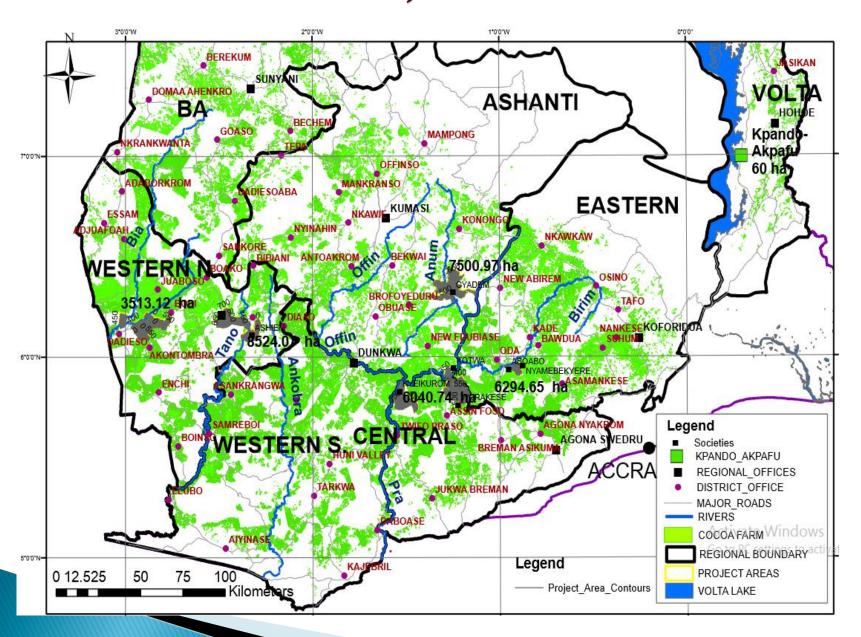




Irrigation Construction Works: Apedwa SPD Station



SCALE UP - IIRIGATION PROJECT





Cocoa Tree Water Requiren

- Young Tree
- Transplanting -1st year
- •10 lt/Day

• 1 Bucket







Cocoa Tree Water Requirement

- Young Tree
- 2nd 3rd
- year
- •15 lt/Day
- •1.5 Bucket







Cocoa Tree Water Requirement

- Mature Tree
- 3rd 20 years
- year
- •30 lt/Day
- 1 big Bucket



PRODUCTIVITY OF PILOT IRREGATED FARMS

- ❖ Per the field report o Irrigation, the average yield on the irrigated farm has increased by 109% (18 bags to 41 bags per hectare)
- ❖ Average yield 2,624 Kg / ha (2.6 tons per ha)

Some farmers have recorded 84 bags (5,376 Kg) per ha for the pilot project

TARGETS FOR THE IRRIGATION PROJECTS

The target for project is to irrigate 3,972.49 ha of cocoa farms within a period of four (4) years.

❖75 % of the target will be implemented on productive cocoa farms

❖ The remaining 25% will be installed on **Rehabilitated**Farms

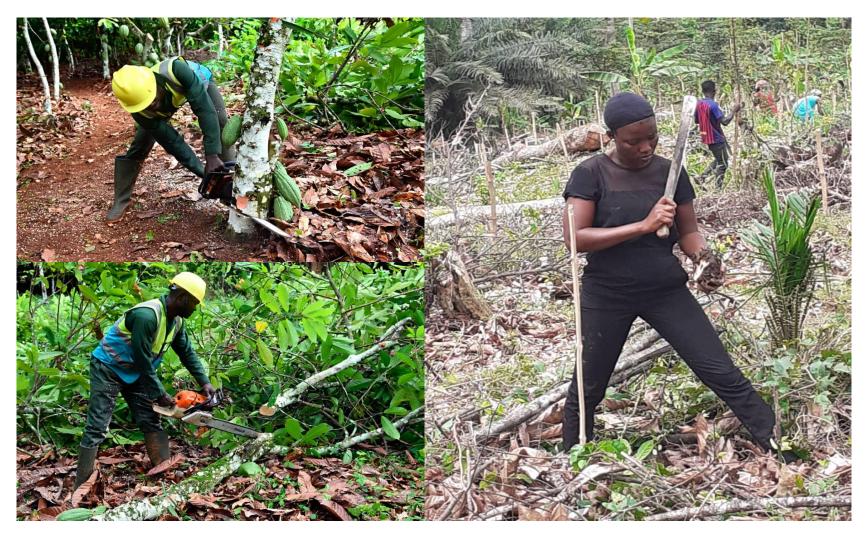
REHABILITATION

❖ Government and COCOBOD have secured over USD200M to rehabilitate CSSVD affected farms in the cocoa growing regions

Under the rehabilitation programme

- Service Providers (Private Sector Participation) have been engaged to provide services
- Over 36,000 of the youth in the rural areas have been employed
- Workload on weak and aged farmers have been drastically reduced.
- ❖ Food security in the scheme areas have ensured

IMAGES OF TREATED & REHABILITATED FARMS



Over 36,000 youths in the rural areas have been employed



DATA ON OUTBREAK AREAS

| REGION | Cocoa Area | Area Diseased (CSSVD) | % Outbreak per Region | % of National Outbreak | |
|---------|--------------|-----------------------------|--------------------------------|------------------------------|--|
| | Hect | ares | % | | |
| Western | | | | | |
| North | 509,295.53 | 214,508.26 | 42.12 | 67.91 | |
| Western | | | | | |
| South | 408,422.67 | 24,427.14 | 5.98 | 7.73 | |
| Ashanti | 424,087.22 | 7,111.41 | 1.68 | 2.25 | |
| Brong | | | | | |
| Ahafo | 223,884.24 | 11,097.09 | 4.96 | 3.51 | |
| Volta | 30,205.64 | 4,990.42 | 16.52 | 1.58 | |
| Eastern | 167,100.33 | 41,666.80 | 24.94 | 13.19 | |
| Central | 150,170.67 | 12,084.94 | 8.05 | 3.83 | |
| TOTAL | 1,913,166.30 | 315,886.06 | 16.51 | | |

REPLANTING OF REHAB. FARMS

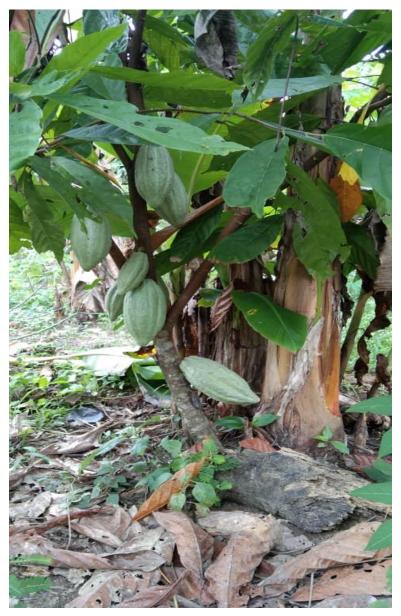


- ❖ Supply of plantain suckers to provide temporal shade
- Supply of economic tree to provide permanent shade
- ❖ Supply of disease tolerant high yielding hybrid seedlings
- ❖ Supply of compost to improve soil structure and enhance growth of seedlings.

REPLANTING PICTURES



1 YEAR FARM, WESTERN SOUTH



2 YEAR FARM, WESTERN NORTH

THANK YOU

