Climate Smart Agriculture: Progress and impact
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Pricing, costs. **DO NOT** exchange information / agree with competitors on prices and conditions.  
Bid strategies. **DO NOT** exchange information on how you intend to respond to a tender  
Future capacity additions or reductions.  
**DO NOT** share other sensitive market information or specific information on commercial matters with your competitors.  
Customers. **DO NOT** communicate market information directly to competitors.  
Output decisions. **DO NOT** exchange individualized confidential business data of the past 12 months.
Today’s objectives

• Summarise CSA Project and highlights
• Review progress against 2015 CSA Action Plan
• Discuss priorities aligned to CSA Action Plan and Food and Nature narrative
Today’s agenda

1. Climate Smart Agriculture – Overview and highlights

2. Group discussion – Strategy alignments
Today’s agenda

1. Climate Smart Agriculture – Overview and highlights

- CSA Project Summary and highlights
- Smallholder resilience – Atin Tyagi, Jain Irrigation
- Water Smart Rice – Sanjay Sethi, Phoenix
- Scaling investment – Matthijs Mondria, Rabobank
WBCSD’s Climate Smart Agriculture (CSA) Project

- CSA Project established in the lead up to COP21 in Paris
- CSA action plan runs from 2015-2020, part of the LCTPi strategy
- CSA was WBCSD’s first Food and Nature project
Climate Smart Agriculture (CSA) challenges

- 9bn people by 2050
- Agriculture = most vulnerable sector to climate change
- 25% GHGs from agriculture and food

90% of Governments have agriculture mitigation and adaptation as a priority under Paris Agreement NDCs

CSA inclusive of all agricultural systems at all scales
WBCSD CSA member ambition statement:

“Make 50% more food available and strengthen the climate resilience of farming communities, whilst reducing agricultural and land-use change emissions from commercial agriculture by at least 3.7 Gt CO2 eq/yr (50%) by 2030. By 2050 the target is to achieve a 65% emissions reduction”
CSA Project member ambition by 2030

1. PRODUCTIVITY

Make 50% more nutritious, safe food available
- Incr. productivity of existing land
- Restoring degraded land
- Halving food losses (farm to shelf)

2. RESILIENCE

Strengthen climate resilience of landscapes and farmers
- Context specific approaches for all scales of farming
- Sustainable rural livelihoods
- Technology, knowledge, equality

3. MITIGATION

Reduce commercial ag. GHG emissions by 50% by 2030¹
- Zero deforestation and land conversion
- Landscape carbon sequestration
- Halving food loss (farm to shelf)

2010 baseline, with 2050 target to achieve a 65% emissions reduction. It is expected that total land use mitigation accounts for 57% of reductions, and that food loss and waste actions (from field to shelf) account for 43% of reductions.
Meeting our ambition Priority Action Areas

How is this ambition achieved?

• Value: Knowledge sharing, value chain collaboration
• Impact: Innovation, financing and on-ground solutions
• Voice: Global + regional events, comms and policy

CSA Action Areas

1. Smallholder Resilience
2. Scaling up investment
3. Monitoring performance
4. Zero deforestation and landscapes
Cross cutting: (e.g. FLW*)

CSA Focus regions

ASEAN
Brazil
Ghana & West Africa

India
North America

*CSA plays a coordination role in partnership with WBCSD’s FReSH and GAA Project teams
CSA regions Progress summary

North America
- CSA Metrics
- Soil health and carbon
- Farm of the Future

West Africa (Ghana)
- Smallholder adaptation
- Cocoa and staple crops
- 1m smallholders targeted

India
- Water Smart Agriculture
- Sugarcane, cotton, staples
- 140,000 smallholders

ASEAN
- Sustainable Rice Landscapes in Mekong Delta (Th, Vi)
- Food Loss (Indonesia)

Brazil
- Zero deforestation
- Cerrado agro-forestry
- Climate financing solutions
Climate Smart Agriculture Highlights

- **$30m** leveraged + **$900k** grants
- **1.2m** farmers targeted
- **15** innovations launched across 5 regions

- Sustainable Rice Landscapes USD 30 million
- Agri3 Fund USD 1 billion
- We Mean Business USD 400,000
- Food Loss and Waste Partnership USD 500,000
Rice facts:
• 3.5bn people, 19% of dietary energy
• Livelihoods for 1bn billion people
• Produced on 160m ha
• 144m smallholder farmers in Asia
• 40% of global irrigation water
• 10% of global methane emissions
• GHG = Aviation / Germany
• 15% of the world’s wetlands
• Key species and ecosystem services
• Agro-biodiversity for rice varieties crucial
• +25% by 2050 to meet demand

Global collaboration for climate-smart rice production in Asia
Sustainable Rice Landscapes **Key developments**

**RBF Bangkok, March 2019:** Formal signing of Sustainable Rice Landscapes Initiative consortium MOU (GIZ, IRRI, SRP, WBCSD, FAO, UNEP)

- $30m GEF financing for ASEAN countries
- Sustainable Rice practices at landscape level
- Private sector engagement along value chain
- Policy and land planning initiatives
Join CocoaCloud to strengthen farmer productivity and climate resilience in the West African cocoa landscape.

#HealthyPeopleHealthyPlanet
• Data platform supporting climate-smart decisions for agriculture
• 7,500 farmers and community members in Ghana with weather forecasts and alerts
• Scale up to 1m farmers by 2024 based on financing of $1.4m ($1,500 pcm per company)
Member presentation:
Jain Irrigation
India: Water smart Agriculture

Atin Tyagi, Jain Irrigation
The India context

• Over 80% freshwater consumed by Agriculture
• High water stress and pressure on agriculture land
• 138 million landholdings and 78% smallholder farmers
• Agriculture employs over 50% of the workforce, and contributes to 14% of the National income

• Home to 194 million undernourished people
• 14.4 million obese children live in India
• 40% of the food produced in India is lost or wasted. This amounts to about USD 8.5 billion tons annually.
### Context: There are opportunities in providing solutions

5 of the top 13 opportunities for achieving the Global Goals in India (US$ Billion) lie in the food sector

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<th>Size of incremental opportunity in 2030¹ $ billions</th>
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¹ Source: Business & Sustainable Development Commission, 2017

Food storage and distribution, packaging to reduce food waste in supply chains (worth USD 62 billion per year by 2030)

Farmer information and financial services; technology to smallholder farms (worth USD 33 billion per year by 2030)

Efficient conveyance and irrigation systems; micro-irrigation (worth USD 31 billion per year by 2030)
Project: Water-smart Agriculture

Activities in 4 areas...
1: Knowledge exchange

Knowledge visit of members to Jain Irrigation Manufacturing and R&D, in Jalgaon, Maharashtra, April 2017

Webinar on Rabobank’s pilot on Decision Support Tool, October 2017

Webinar on Phoenix Global’s assessments on water risk in rice-growing region of Taraori, Karnal, March 2019
Evaluating business solutions

Report on solutions, sharing lessons from India

Brings 12 member case studies on solutions for sustainable agriculture in India, released in 2017.

Solutions evaluated against impact on yield, farmer incomes, and water-use efficiency. Other sustainability benefits were also catalogued.

Provides guidance for any country or region facing water stress.

3: Collaboration for local action

Innovation, outreach, capacity building

Pilot projects concluded at 4 locations to implement solutions on new crops and at new locations

Impact measurement – water-use efficiency improvement, crop-yield increase, and benefit to cost ratio.

Developing case studies and informing way-forward

For SPaRC* project

*SPaRC: Solar Power as a Remunerative Crop
4: Government partnership for state-level action and advocacy in India

Positioning businesses as responsible water-stakeholders, and working on state-level action

Members represented in Maharashtra

Active workstreams:
1. Command Area Water productivity workstream – Project Implementation Unit to identify PPP based projects
2. Water and livelihood security for rainfed agriculture areas – Developing standards for better water use in cotton
Smallholders and Sustainable Development in Rice Sector at Phoenix

Montreux LD 2019
Water Stress Map - 2040

Water Stress by Country: 2040

ratio of withdrawals to supply:
- Low (<10%)
- Low to medium (10-20%)
- Medium to high (20-40%)
- High (40-80%)
- Extremely high (>80%)

phoenix
Our water stewardship project in Karnal

- Plan to implement AWS Standards on the site with an aim to increase groundwater table in the region
- Launching of Sustainable Basmati Rice (SBR) project in Haryana with an aim for the export markets in USA and Europe
- Implementation of Sustainable Rice Platform (SRP) in India on lines of SRP of Vietnam
- Implementation of WASH (Water, Sanitation and Hygiene) Standards and water savings in our plant
- We are also undertaking Pilot Testing of Circularity with respect to our resources at our Rice processing facility in Karnal, Haryana, India in partnership with WBCSD.
- We are also signatories of the Water and Sanitation Hygiene Pledge (WASH) at Workplace, support companies to take meaningful action towards fulfillment of their responsibility towards Hygiene and Water at all the operational facilities under direct control
Our water stewardship project in Karnal
Our water stewardship project in Karnal
Sustainable Rice Production in Vietnam

- Phoenix has partnered with Loc Troi Group, a leading agricultural company to develop sustainable rice production in Vietnam.
- We have also partnered with Rikolto, which works with farmers with smallholdings to alleviate rural poverty.
- We are working together to support smallholder farmers to adopt sustainable rice production methods over an area of 10,000 Ha.
Sustainable Rice Production in Vietnam

- Modernization of the rice value chain
- Empowering women and encouraging youth run enterprises
- 2500 Ha of paddy fields from 10 cooperatives have already joined the program in the first year
- Many farmers in Unions in Long An, An Giang and Dong Thap provinces are supporting the SRP initiative
- On-boarding 45-50 cooperatives with our SRP Plan to cover 10,000 farmers with small holdings
- Training farmers in Integrated Pest Management (IPM) to reduce insecticide and pesticide usage
- Farm support services like inputs supply, credit, quality assurance, storage and market access
- Expansion to other provinces in the Mekong Delta
- Shared accountability and decision making among public, private sector and NGO counterparts
Restoring the Balance
Logic Behind - Three Dimensions of AGRI3 Fund

Forest

1 football-field of forest is lost
Every second

Farmers

+ 70%
We need to increase agricultural production by 70%

Food

there will be over 9 bn mouths to feed in 2050

75% Agriculture is responsible for 75% of global deforestation

2.6 bn people depend directly on agriculture

7 bn 2018
Growing a Better World Together - Time for Drastic Change

- The United Nations Environment Programme
- The Dutch Development Bank (FMO)
- IDH: the sustainable trade initiative
- Rabobank
How the Fund Works

Donors

AGRI3

Technical Assistance

Finance Fund

$50 M

Investment manager

$250 M

Projects

Clients & Farmers

Commercial and Development banks

Including Rabobank

Up to $700 M

Commercial debt

Guarantees and loans

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Today’s agenda

2

Group discussion – Strategy alignments

• CSA action plan review - PWC
• Group discussion
The 2015 Action Plan to 2020

Four action areas were identified as the most critical issues to hand, and which most need collaborative action to address:

1. Building smallholder resilience

2. Scaling-up investment in CSA

3. Improving Businesses’ Ability to Trace, Measure and Monitor CSA progress

4. Implementing Agriculture-driven Zero Deforestation and Land Use Commitments
Action Area 1 Progress: Building smallholder resilience

What was planned in 2015

- Identify ‘road-test’ countries
- Support enabling environments
- Develop appropriate tools to support CSA adoption
- Capacity building through data access, training and investment

What has been done so far

- Five ‘road-test’ regions identified with Regional Manager in place
- Data-Enabled Climate Solutions Pilot for Smallholder Farmers in Ghana implemented 2017-19
- ‘Cocoa Cloud’ scale-up to entire cocoa belt (1m farmers) by 2024
- India Agriculture Water Tool developed
- UPL w/Olam and Ambuja Cement ‘Zeba’ pilots rolled out in India
- Partnerships with IWMI, WRG and AWS fully established

What is planned to 2020

- Full implementation of Cocoa Cloud underway, with 15 company members
- Potential roll-out of DECS solution to farmers in ASEAN region
- Implementation of Phase 2 of the Zeba pilots
- Pilot ‘Farm of the Future’ projects in India, leveraging IWMI/2030 WRG pilots and publishing a solutions paper
- Micro-irrigation partnerships in rice growing areas in India
Action Area 1 Progress: Building smallholder resilience

Potential gaps

• Broaden enabling environment actions in target countries/regions?
• More capacity building/livelihoods work with farmers in areas of shared sourcing?
Action Area 2 Progress: Scaling-Up Investment in CSA

**What was planned in 2015**
- Scale up and ‘climate-smart’ agri-finance provided to farmers
- Work to develop new ‘climate-smart’ financial products for farmers and SMEs
- Collectively engage with donor funding mechanisms
- Assess options for internal carbon pricing

**What has been done so far**
- 1bn Euro ‘Agri3’ Fund launched at WBCSD Council Meeting 2017 by Rabobank and UNEP
- CSA Financing Guide developed with Brazil’s National Bank Federation.
- Developing a Cerrado Regenerative Agriculture investment fund for long-term loans to farmers.
- Via engagement with GEF, a financing window for Rice Landscapes is being integrated into GEF 7

**What is planned to 2020**
- Agri3 Fund continues disbursement
- Insurance partner identified for Cocoa Cloud
- $20-30m of GEF financing secured for ASEAN rice landscapes
- Secure the carbon buyer to support the development of the Cerrado Carbon Program
Action Area 2 Progress: Scaling-Up Investment in CSA

Potential gaps

• Further develop approaches to carbon payment incentives for farmers?
• More engagement with impact investment community on regional programmes?
• Further engagement with the insurance industry?
Action Area 3: Improving Businesses’ Ability to Trace, Measure and Monitor CSA progress

What was planned in 2015

- Develop a corporate CSA measurement approach
- Road-test the corporate CSA measurement approach with a selection of willing WG member companies
- Support identification of where agricultural supply chains and food systems are causing the greatest volumes of GHG emissions
- Measure global progress towards the Statement of Ambition 2030

What has been done so far

- CCAFS delivered assessment of the 2010-15 progress towards the Statement of Ambition
- CSA 100 initiative launched
- Smarter Metrics programme established with CCAFS Guide to setting corporate CSA targets being drafted
- A CSA-specific ‘Reporting Matters’ assessment to determine the baseline for corporate CSA reporting
- Engagement with FOLU to help identify largest sources of GHG emissions in ag supply chains

What is planned to 2020

- CSA target-setting and measurement clinics planned
- Dissemination campaign for CSA Target-Setting guide implemented
- Continue annual Reporting Matters company assessments
- 2020 CCAFS assessment of progress towards Statement of Ambition
Action Area 3: Improving Businesses’ Ability to Trace, Measure and Monitor CSA progress

Potential gaps

• Have initiated Smarter Metrics and CSA 100 programmes, but have not had chance yet to road-test CSA measurement approaches with companies

• Further assess approaches to measuring sustainable agricultural intensification

• Assess latest developments in science-based corporates targets for biodiversity
Action Area 4: Implementing Zero Deforestation and Land Use Commitments

**What was planned in 2015**

- Identify five landscape level management action partnerships for zero deforestation
- Engage with local governments and stakeholders in these landscapes
- Establish funding mechanisms and resources for landscape management plans

**What has been done so far**

- ASEAN Rice Landscapes consortium formed with FAO, UNEP, SRP and GIZ to access GEF funds to support sustainable landscapes programmes across the region
- Implementation of integrated crop, livestock, forestry (ICLF) systems underway at demonstration farms in Cerrado (Matopiba)
- Cocoa Cloud programme in West Africa supporting increases in productivity to reduce pressure on forests

**What is planned to 2020**

- ASEAN Rice Landscapes programme begins implementation and full-scale up
- Validate Cerrado Aggregated Carbon Program baseline & additionality with the Verified Carbon Standard (Verra)
- Secure the carbon buyer to support the development of the Cerrado Carbon Program
- Create a plan to scale the CCP
Action Area 4: Implementing Zero Deforestation and Land Use Commitments

Potential gaps

• Increase engagement on zero-deforestation specific landscape programmes?

• Need to secure funding resources (although we are on the way to this in each initiative to date)
Global and cross cutting work

Food Loss & Waste

• The Food Loss and Waste Protocol launched in 2016
• Champions 12.3 - The Business Case for Reducing Food Loss and Waste published in 2017
• Food Loss and Waste Calculator launched in 2018
• Partnering for Green Growth and Global Goals (P4G) launched in 2019 to build a cross-sector program to reduce food loss and waste in Indonesia by 50 percent by 2030.

CSA 100

• Brings together one hundred leading companies to make measurable commitments across the three pillars of CSA to 2030
• Soft launch at GCAS 2018
• 7 companies committed, 19 requested to join
• Concept Note, Commitment Statement and Joining Procedure delivered
• CSA 100 Target-Setting Guide in development with CCAFS
• Reporting Matters will cover targets across CSA for 2019 to provide baseline across WBCSD membership

Farm of the Future

Farm of the Future Project ‘Farm 2030’ will investigate the following:

• Role of technology, practices, services and data in expanding climate-smart farming
• Communications, knowledge and educational benefits
• Finance sector role in accessing high-technology products and services
• Crucial partnerships needed for Farms to 2030
• CSA practices relevant to each region

Results will help identify new business models, opportunities, and innovations, that will shape the Farm of the Future in 2030.
Policy engagement – some examples
Questions for discussion

• What are your priorities in the run up to 2020 for the CSA Action Plan?
• How can we further align with the overall Food & Nature narrative?
• What key policy initiatives do you see on the horizon we should prepare for?
Contact us

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