



# Olam International

Building Sustainable Agriculture Supply Chains

August 2016



# Olam - An overview

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- In **26 years**, we have grown from a single agriculture product exporter, to a global agri-business leader, operating from seed to shelf
- Working in **70 countries**, comprising **47 agri-commodities**
- Headquartered in Singapore, listed in Singapore Stock exchange, with major share holders like **Temasek Holdings** and **Mitsubishi Corporation**
- We have direct buying linkages with over **4 million farmers**
- We handle in a year over **12.4Mn MT of Agriculture Commodities, 140 processing facilities** globally
- With approximately **3.3 million hectares**, 21 different type of crops, in 26 countries under its ownership and management

**“We are the World’s Largest Farmer”**

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# Our portfolio

## Leadership positions

**Edible Nuts, Spices and Vegetable Ingredients**

#1 global dehydrated onion and garlic supplier

#1 global cashew supplier

#1 global almond grower

**Confectionery and Beverage Ingredients**

#1 focused supplier of cocoa beans and cocoa products

#2 global coffee supplier

**Food Staples and Packaged Foods**

#2 largest wheat miller in Nigeria and Ghana

#2 global rice merchant

**Industrial Raw Materials**

#1 global FSC® certified\* contiguous tropical forestry concessions

#2 global cotton merchant



# Key Challenges in agricultural supply chains



## Land

Availability of Land, selecting and managing land responsibly



## Climate Change and Water Scarcity

Adapting to climate risk; responsible use of water for our own needs without impacting the needs of others



## Livelihoods

Supporting and Improving the small holders livelihood



## Efficiency in Supply Chain

Reducing inefficiencies in the Food value chain, improving yields, reducing losses, building efficiency in material distribution



## Food Safety, Security and Nutrition

Improving quality of food; access to affordable nutritious food to all



## Market Access

Most efficient, cost effective way of addressing Supply-Demand mismatch



## Consumer behaviours and values

Adapting to changing demographics and consumer buying behaviour

# Value at Risk (VaR) for Agriculture Business

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- **Enterprise level risks** associated to any commodity supply chain companies:
  - *Price Risks (Volatility in commodity prices)*
  - *Position Risks (When to buy/When to sell/how long to hold stocks?)*
  - *Currency Risks (volatility associated with the movement in currencies)*
  - *Credit and Counterparty Risk (Risks associated to advances to your suppliers/Risk of counterparty not performing on a contractual obligation)*
  - *Sovereign Risk (changes in government policies)*
  - *Operational Risk (failure in the logistic network/stock damage/crop risk)*
- **Value at Risk (VaR)** associated to agriculture industry is considerable:
  - *Weather risks and associated crop failure leads to*
    - *Credit/counter party risk*
    - *Higher than avg variation in commodity prices*
  - *Biological Risk*
  - *Dependence on the small-holder farmers*
    - *Labour and health risks*
    - *Loss in productivity*
  - *Policy and Political risk*

# Olam's purpose

Our Purpose of '**Growing Responsibly**' describes how we do business.

We ensure profitable growth is achieved in an ethical, socially responsible and environmentally sustainable manner.

Our vision is to achieve end-to-end sustainable supply chains by 2020



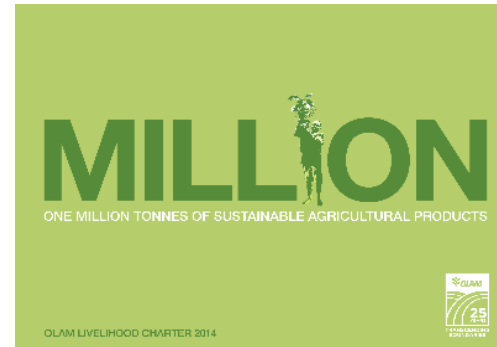
## Sustainable Agricultural Supply Chains

# Olam Livelihood Charter (OLC)

With an objective to build sustainable smallholder supply chains, Olam started in 2010 the OLC

## Eight principles:

- **Finance** (*finance options to the small-holder farmer group*)
- **Improved yield** (*training/support and best practices to improve yield*)
- **Labour practices** (*Health/safety/labour issues*)
- **Market access** (*offer farmer fair and competitive prices for their crop*)
- **Quality** (*enhancing income of the farmers by encouraging farmers to produce good quality*)
- **Traceability** (*ensure our supply chain could be certified and Traceable*)
- **Social investment** (*Rural health/education*)
- **Environmental impact** (*reducing the environmental footprint by training farmers*)



## Benefit:

Customers want reassurance of sustainable supply chains/traceability, but not necessarily 3<sup>rd</sup> party certification. OLC being externally verified, opens up joint partnerships (e.g. Nestlé, USAID).

# Olam Livelihood Charter

FY 2015 highlights



Farmers



Sustainable Agricultural Products



New Initiatives  
[36 in total]



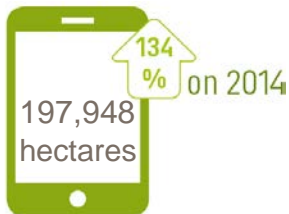
New Products  
Hazelnuts, Rice  
[10 in total]



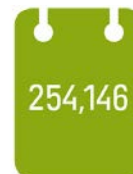
New Countries  
Tanzania, Uganda  
[16 in total]



Smallholder Land



GPS Mapped Farms for Traceability



Farmer Training Days 2015  
Farmers Received GAP Training



Sustainability Staff



# Olam Farmer Information System (OFIS)

Revolutionary technology solution  
for gathering and utilising farmgate level data



# OFIS: Agri-business data solution tool to develop sustainable supply chain



- Today farm level data in many countries has either been completely inaccessible or the collation is done with Pen and paper
- This limits the use and scalability of the data
- As part of OLC programme, OFIS solves this issue of data collection by providing a revolutionary solution at the farm gate level that allows access to on the ground data for the farmer groups, Olam (supply chain managers), our customers and our sustainability stakeholders

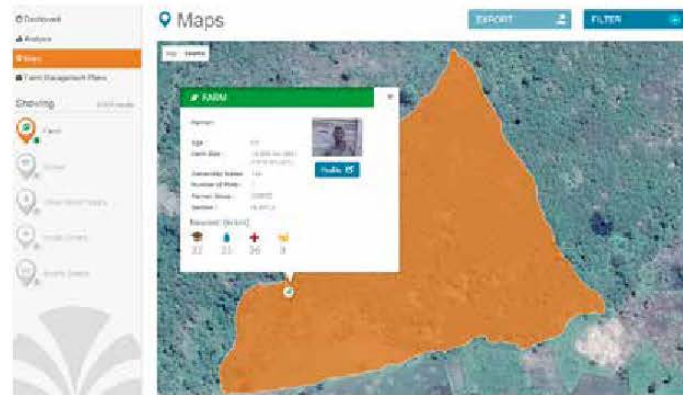
# Collection:

- Collect targeted farm level data including farmer registration, farmer and family information, state of each farm, labour metrics, inputs, finances and production.
- Data is uploaded into Olam's cloud server through a free, multi-language, Android-based application.



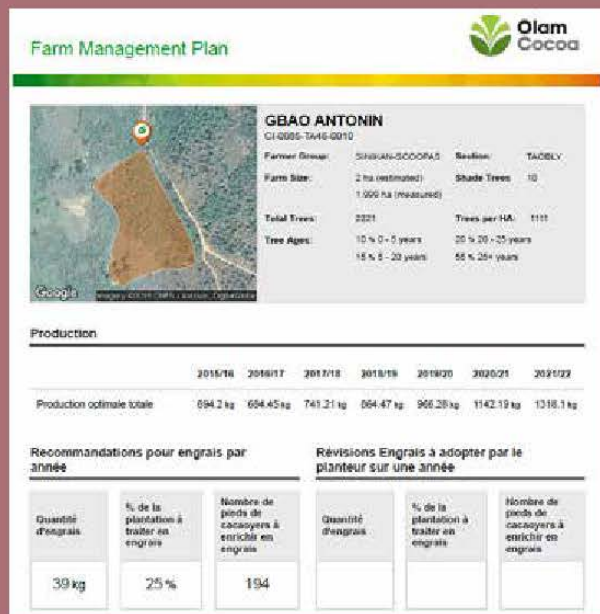
# Online visualisation and analysis

- View data on purpose-built OFIS website (accessible by farmer groups, customers and Olam employees) which is designed to manage and integrate large data sets.
- Create GPS maps of farms and social infrastructure with cutting-edge satellite technology. This provides visibility of farm location, including distances to and from key points of interest.
- View individual farm profiles via GPS markers.
- Generate risk 'hotspots' to create action plans.
- Utilise online OFIS toolkit to rapidly display information in charts and tables.
- Filter and compare multiple datasets in user friendly, easy to view, side-by-side visuals.



# Utilisation and application:

- Datasets can be fed directly into the Farm Management Plan module. This provides a personalised 5 year plan for each farmer in Olam Cocoa's sustainability programmes.
- Module offers key recommendations for each farmer on how to maximize farm productivity and gives the farmer the ability to feed back into the process.
- Target infrastructure investments and track the progress of your recommendations over time.



## Supports Farmers, Sustainability Programmes and Business Objectives:

- OFIS provides potential for “smart” licensing, improved bankability, greater membership numbers and improved services for farmers.
- Directly help farmers to take a long term, investment based approach to their farm management, on a previously impossible scale.
- Sustainability programme partners and customers can, for the first time, have direct access to their supplier base directly from their office. Linking the end user and the farmers gives the end user an unparalleled understanding of who supplies their raw ingredients from both a product traceability perspective and from a human angle.
- Improved visibility enables end users to maximise and more accurately target resources and to understand how those resources have delivered farm level impact.





## Strategic Advantages

- **Collect**: Farmer Surveys, GPS Mapping, Olam Records
- **Analyze**: Online Mapping and Analysis Tool
- **Utilize**: Farm Management Plans (Tracked Over Time) + Project Development + Assurance

## Beyond Horizon

- In Olam **OFIS** is already a multi-product, multi-location platform
- Cocoa, Coffee, Rice already using the software
- Edible nuts, Palm, Rubber, Spices and Vegetable ingredients business to start application very soon
- **Traceability**: when extended across supply chain, become our proprietary Traceability software

**Thank you**