



True Value of Origo's Business

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1. Introduction

The Indian agricultural sector is a global powerhouse and consists of complex market linkages with over 263 million agricultural workers catering to the needs of over a billion domestic customers and a large number abroad. Gross Value Added (GVA) by agriculture, forestry and fishing was estimated at USD 276 billion in FY20.

Origo, as the fastest growing player in the agri value chain sector, has a vision to create sustainable value for all its stakeholders, from primary producers to end consumers. Its business units namely, Origo Commodities and Origo Finance, have diversified solutions and products for warehousing and financing agricultural products. This study is an attempt to reflect upon Origo's value creation for its stakeholders. Here we present to you how Origo's niche solutions help not only contribute to the nation's food security but also have far-reaching societal and economic impacts.

I. Heralding Value Creation in the Agri Ecosystem

Origo's innovative solutions and products have impacts across the agri value chain. However, these impacts are not always quantifiable in monetary terms or are directly visible. Through this study we have attempted to quantify these impacts, in order to present a holistic picture of Origo's contribution to the society.

The following diagram provides a simple representation of the impact map of Origo's activities:

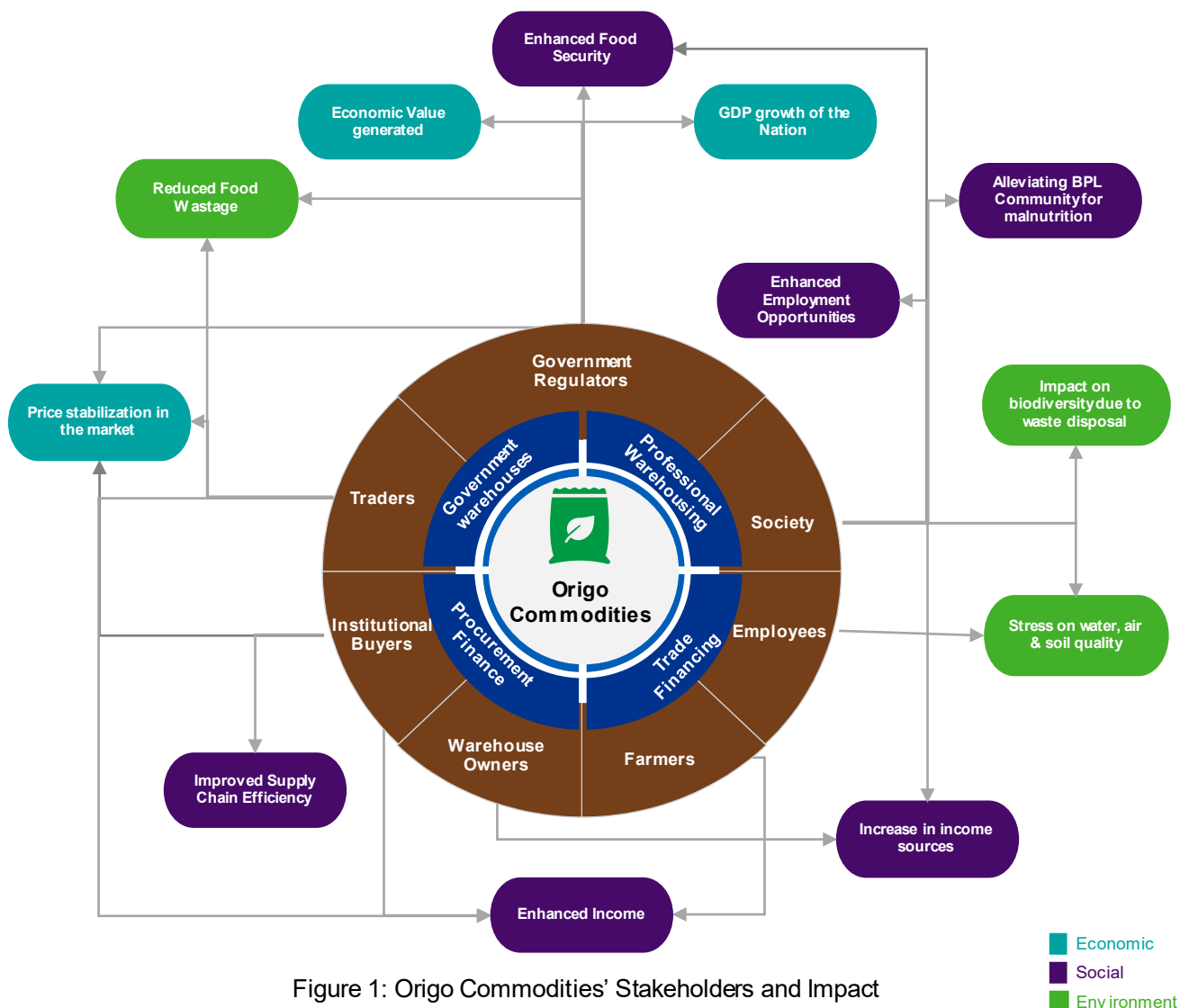


Figure 1: Origo Commodities' Stakeholders and Impact

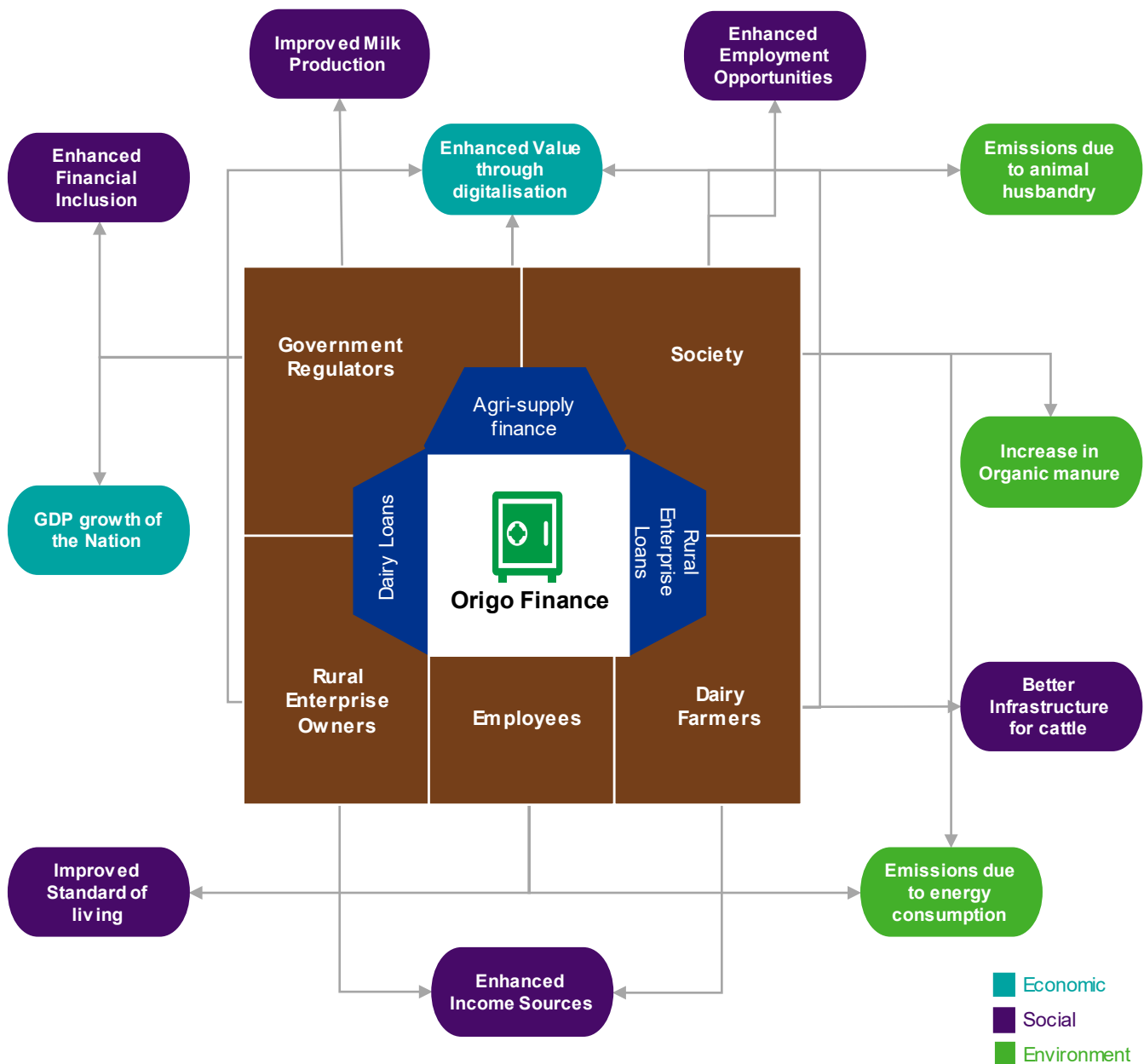


Figure 2: Origo Finance's Stakeholders and Impacts

II. Measurement of Impact – the True Value Project

The impacts of Origo's activities have a socio-economic equivalent which goes beyond the conventional financial cost and benefit accounting. This must be seen in conjunction with the traditional concepts of profit and loss to really understand its true potential. KPMG's True Value methodology was used for this assessment and these are bucketed under three categories, namely, economic, environmental and social.

The economic impacts primarily focus on the effects of economic activities that Origo is involved in. An environmental impact is any change to the environment, whether adverse or beneficial, resulting from Origo's activities, products, or services. A significant change that addresses a pressing social challenge is defined as social impact. The value creation of an enterprise has traditionally been seen as the net earnings it generates year-on-year. However, in recent times economic, environmental and social impacts of the business, which have thus far been external to the organisation, are now being rapidly internalised. In order to comprehensively understand the 'True value' that the business creates, valuing these externalities is critical as it represents a holistic picture.

The following chart demonstrates the true impacts of Origo's activities carried out during FY 2019-20:

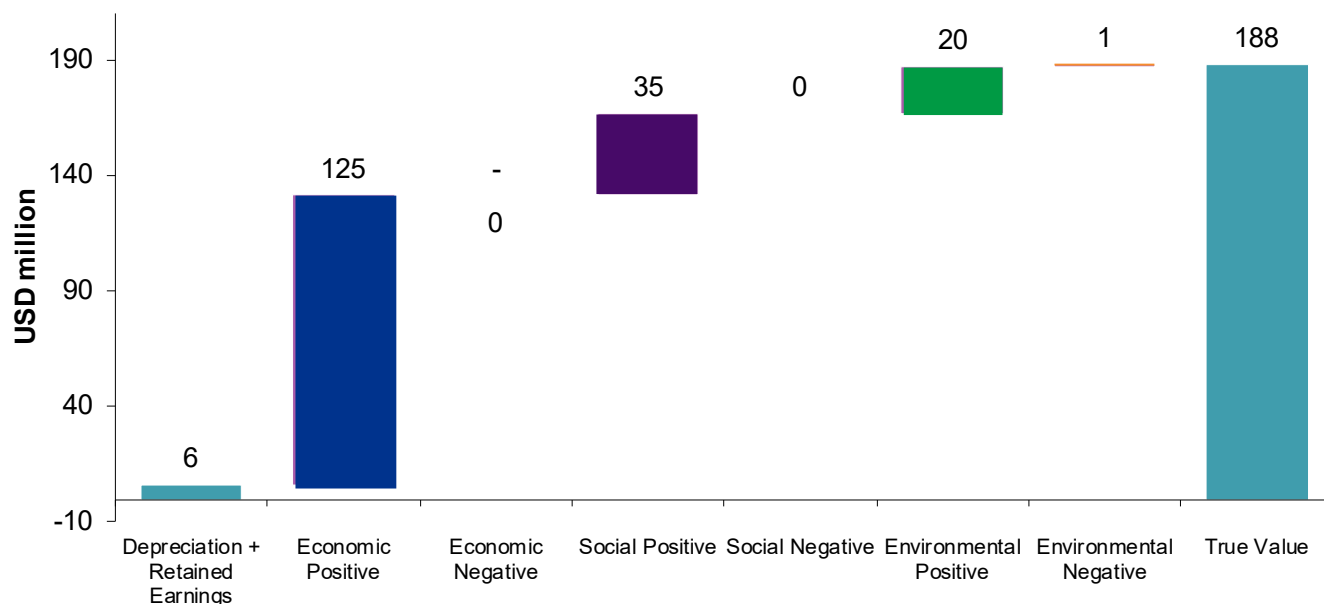


Figure 3: Origo True Value bridge

The KPMG True Value assessment is based on data obtained from various primary and secondary sources including direct surveys conducted with a select set of stakeholders. The activity data considered for all impacts pertains to FY 2019-20. The study includes impacts from all existing products and services offered by Origo.

III. Overcoming Challenges – Amplifying Outcomes

At the foundation of Origo's business philosophy is the eradication of inefficiencies in the agricultural value chain through strategic interventions designed to solve specific problems. The subsequent sections of this report elaborate how Origo works meticulously to solve these larger problems. We also considers the inter-relatedness of these impacts as well as its effect on the various players within the ecosystem. These impacts have a ripple effect and many a times, the true magnitude is multiple times that of the direct, visible tangible impact.

This report presents the hypothesis and calculation approach used in quantifying these impacts. The methodology takes due care to ensure that the impacts are attributable to Origo alone and are also context specific.

2. Enhancing Food Security

1. Scientific Storage for Preventing Food Wastage

Fulfilling the food demand of an increasing population is a global challenge. Post-harvest losses are a major part of this problem, as they lead to decreased food availability, increased pressure on natural resources and negative economic and environmental impacts including malnutrition and climate change. A recent study conducted by the Food and Agricultural organisation (FAO) states that if food waste was a country, it would be the third largest emitter of GHGs in the world. At 4.4 Giga tonne CO₂ equivalent food wastage accounts for nearly 8% of the global anthropogenic emissions. This also translates into nearly USD 936 billion of economic losses.

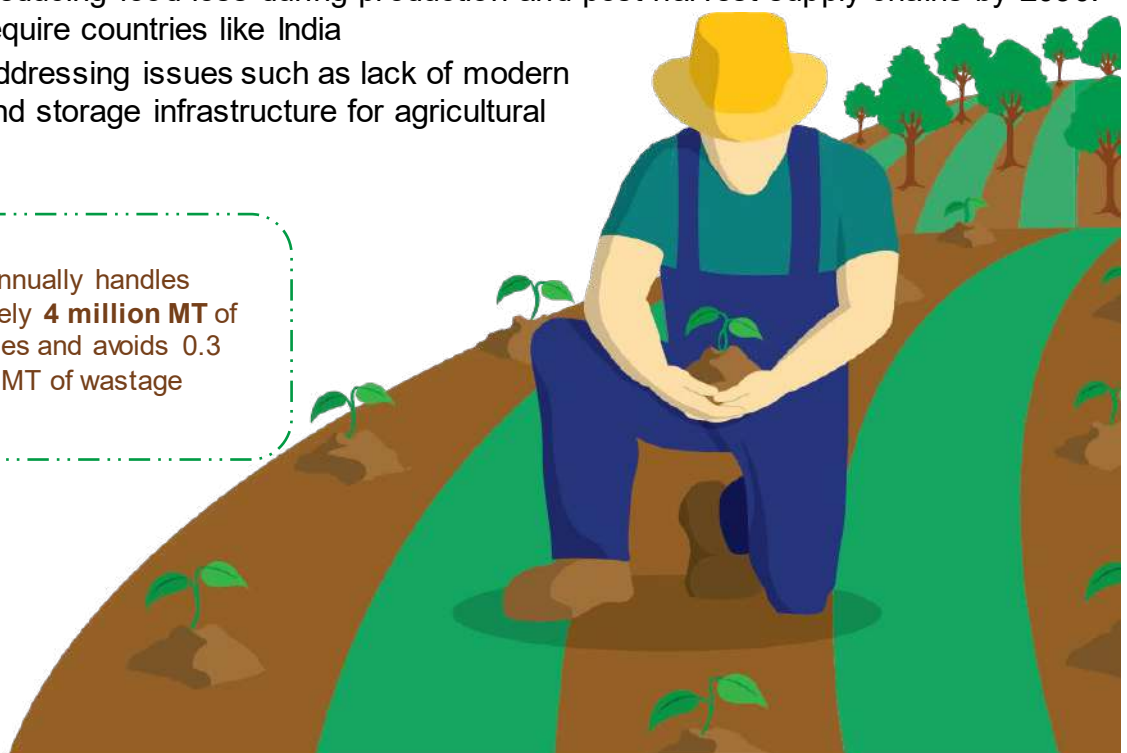
Developing countries like India are especially impacted by this issue. Despite quadrupling its food production since independence, India still ranked 102 in the Global Hunger Index in 2019 and 72nd out of 113 countries in the Global Food Security Index. This has been largely attributed to poor post-harvest management of agricultural produce. Another report pegged the value of total food wasted in post-harvest processes at USD 12.58 billion. With this background, the importance of scientific storage, which holds the potential to eliminate food wastage cannot be overstated. In the Indian context, this can have varied and long-term impacts which range from reduced environmental impacts to enhanced food security for the society at large.

Through scientific storage techniques, Origo's warehouses ensure zero wastage and best retention of commodity quality, thus contributing towards the two essential elements of food security, viz. food sufficiency and conservation of nutritional value of food products.

a) Reduced Food wastage

One of the objectives of the United Nations' Sustainable Development Goal number 12 is to reduce the per capita food wasted at retail and consumer levels by 50% while also significantly reducing food loss during production and post-harvest supply chains by 2030. This would require countries like India to focus on addressing issues such as lack of modern technology and storage infrastructure for agricultural produce.

Origo annually handles approximately **4 million MT** of commodities and avoids 0.3 million MT of wastage



Origo's professional warehousing solutions aim to eliminate the key reasons for food wastage including both biotic and abiotic factors. Apart from maintaining proper storage conditions, Origo undertakes interventions such as fumigation and application of insecticides as needed.

Different agricultural commodities have been observed to demonstrate different levels of average losses when stored using non-scientific or traditional storage methods. With the application of above-mentioned scientific techniques, Origo has been able to reduce wastage across various commodities, up to as high as 19% In FY 2019-20, Origo has handled approximately 4 million MT of commodities and avoided 0.3 million MT of wastage.

b) Value Generated for Governments and Regulatory Institutions

Governments and regulatory bodies are responsible for ensuring availability of commodities in the market at fair prices. The Indian government's budgeted allocation on food security and public distribution has consistently been over 1% of the country's GDP and has been growing by nearly 6% year-on-year. A large proportion of this expenditure is in the form of subsidies that the government provides to FCI on account of the loss it incurs in its procurement, storage and distribution operations.

Origo's professional warehouse services are availed by government agencies in some of the largest food producing states in India, and the Multi Commodity Exchange of India Ltd. (MCX), one of the leading commodity exchanges in India, among other clients.

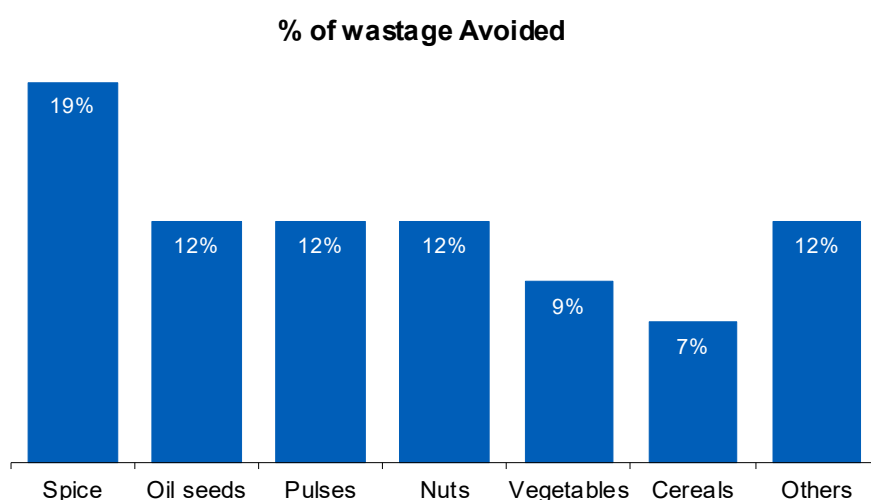
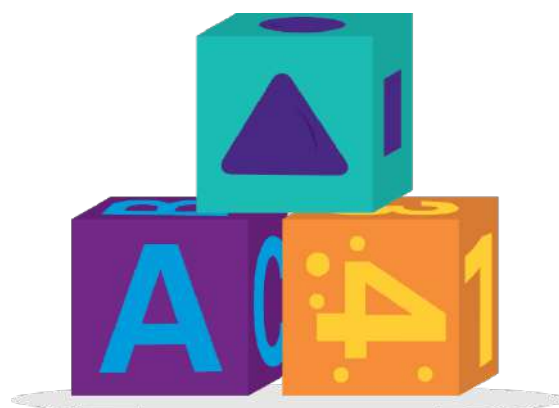


Figure 4: Commodity-wise wastage avoided



Origo's services help reduce wastage of commodities, thereby ensuring reduced loss for the government. This results in sustained supply of commodities which could also result in long-ranging induced impacts such as limiting price volatility of such commodities.

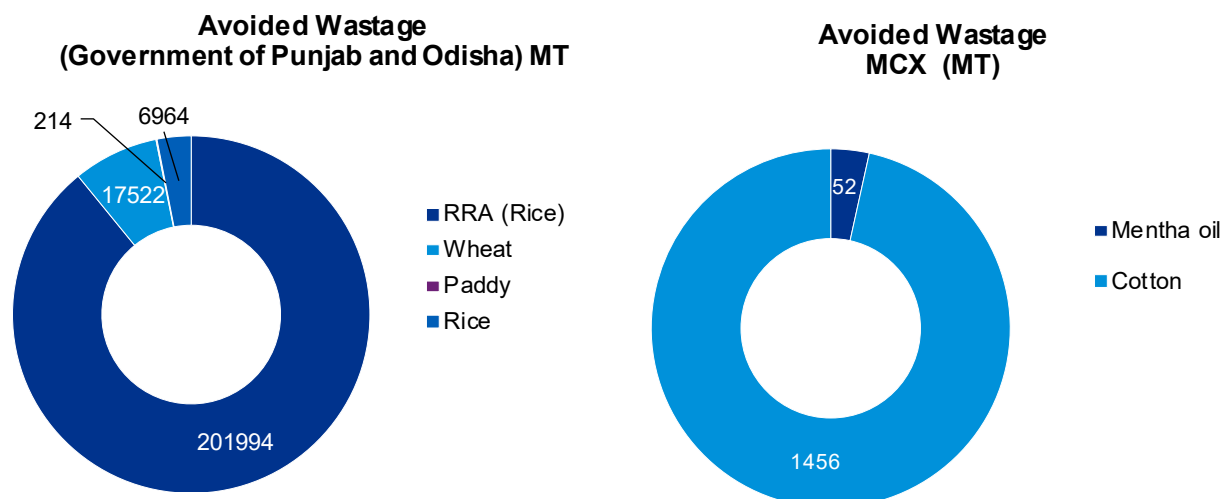


Figure 5: Wastage Avoided for Government

During the year, Origo was able to avoid wastage of commodities stored for government and MCX amounting to 2,26,693 MT and 1,508 MT respectively which was worth **USD 110.55 million**.

c) Enhanced Food Security

Availability and nutrition content of the commodities have a direct relationship with food security of the nation. Although losses occur at each stage of the value chain, in developing countries like India storage losses are most significant. Usage of conventional and non-scientific methods of storage lead to wastage of a large quantity of the commodities.

Larger the quantum of food loss, greater will be the pressure on the available production to meet the increasing demand. Climate change is exacerbating frequent seasonal changes and extreme weather conditions such as heat waves and cold spells which are leading to increased fluctuations in crop yield and associated commodity price shocks. Scientific storage provides an avenue for food to be stored for a longer duration, thereby providing protection against changes in crop yield.

The dependence of a nation on import of commodities is directly influenced by the availability of food in the local market. Origo, through its professional warehousing and trade financing solutions, contributes towards enhancing availability and stabilizing market prices of commodities, which in turn helps to curb inflation and improves social welfare. We have established an intrinsic relationship between reducing wastage and its impact on stabilization of commodity prices. The economic benefit of cost avoided due to reduced food wastage has been estimated to be about **USD 24.57 million**.



Origo through its efficient solutions is able to help in **reducing India's dependence on import of commodities**. The resulting economic benefit of controlled inflation rate amounts to **USD 24.57 million**

II. Supporting the Public Distribution System

Next to the FCI subsidy, the biggest area for government spending is the Public Distribution System (PDS) which distributes food grains at subsidized prices to citizens. PDS is jointly operated by state and central governments. The Central Government, in collaboration with the FCI, manages the procurement, storage, transportation and bulk allocation of food grains to state governments. Origo's professional warehousing services are availed by government agencies for scientific storage of the food grains which are meant for PDS.

The National Food Security Act (NFSA) 2013 aims to cover as much as 67% of India's population under the PDS. Especially during the current COVID-19 pandemic, the importance of PDS has come to be even more appreciated. With more citizens within the country likely to be exposed to food insecurity due to the economic slowdown caused by the pandemic, the efficiency of the PDS supply chain is of paramount importance.

Origo's solutions address these inefficiencies in the supply chain, thereby ensuring reduced leakages in the PDS and greater access to subsidized food grains for the economic weaker section of the society. During the year, Origo's warehouses stored nearly 3.23 million MT of government stocks which directly helped strengthen the PDS.



Origo stored nearly
3.23 million MT of government
stocks

a) Alleviating malnutrition

One of the biggest contributions of the PDS is the role it plays in fighting the scourge of malnutrition, especially among the economically weaker sections of the society. It is estimated that nearly 14% of India's BPL population still suffers from malnutrition due to lack of access to and availability of food. This leads to further societal and economic impacts such as increased human capital loss due to preventable child deaths and premature adult deaths due to malnutrition and diet-related non-communicable diseases. It also impedes the economic growth of the country. All these impacts can be broadly classified under the social cost of malnutrition.



During the reporting period, Origo had housed food grains worth USD 1.3 billion. Through its operations, Origo has enhanced access to food for around 10 million people from the BPL community which has further helped reduce the social cost of malnutrition. We have estimated this benefit to be around **USD 1.65 million**.

III. Climate Action through Food Preservation

United Nations' SDG 2 identifies food preservation as one of the important targets to strengthen capacity for adaptation to climate change related impacts such as extreme weather conditions. Food wastage not only weakens resilience in such crises, but also directly contributes to further increasing GHG emissions generated during handling and disposal. Wastage of food also results in wastage of all the energy and water it takes to grow, harvest, transport, and package it.

Increased GHG emissions have indirect as well as induced impacts associated with them. Not only does it further worsen environmental conditions, which have a direct linkage with deteriorating soil quality and risk of crop failure, but also causes long-ranging health impacts on the society.



The preservation and maintenance process provided by Origo, ensure reduced food wastage, resulting in reduction in GHGs. During FY 2019-20, professional warehousing solutions by Origo helped avoid 0.29 million metric tonne of CO₂ equivalent of emissions which translates into monetary benefits worth **USD 20.20 million**.

Avoided **0.29 million metric tonne of CO₂ equivalent** through reduced food wastage resulting in prevention of emission worth USD 20.20 million.

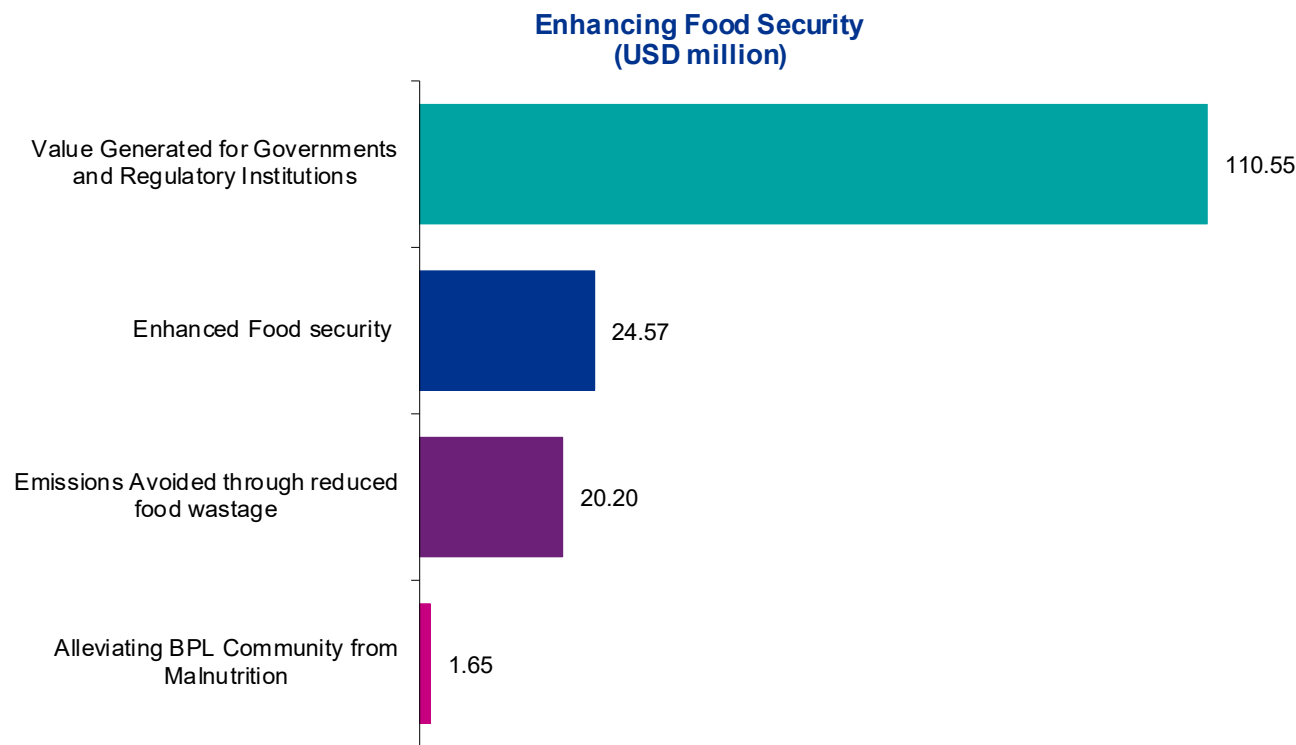


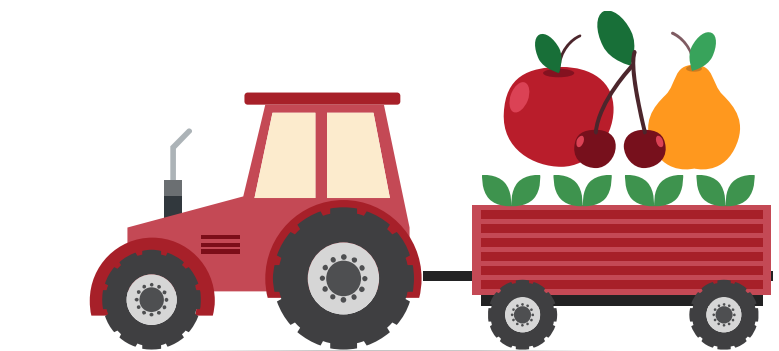
Figure 6: Enhancing Food Security

3. Driving Value Chain Efficiencies

I. Innovating Models for Better Price Realisation

Agri-commodity prices can drive inflation dynamically, thereby suppressing the purchasing power of consumers. This is evident when there is a demand-supply mismatch of commodities in the country. Origo, through its warehousing and trade financing solutions, contributes to price stabilization in the Indian commodity market. The trade financing solution is designed primarily to cater to institutional buyers, by supporting them in purchasing commodities at fair prices, and mitigating cash flow imbalances.

Growing agricultural production has various challenges associated with it, including marketing, supply, storage and distribution. With highly fragmented markets and volatile commodity prices, it is difficult to ensure fair and remunerative prices for all the stakeholders involved. Keeping this in view, Origo has developed an internal price discovery tool which helps in fair pricing of procured commodities.



Price stabilization of commodities has an indirect economic benefit worth **USD 1.04 million**

a) Reduced procurement cost for institutional buyers and corporates

Volatility in commodity prices has a direct impact on the operational expenses of agri-businesses. Owing to the seasonal nature of the agricultural sector, institutional buyers need to streamline operations to procure, store and manage large quantity of commodities throughout the year. Storing commodities at Origo's warehouses helps its corporate clients realize stable procurement prices. Further, reduced wastage lowers procurement costs. As a result of the commodities being stored at Origo warehouses, its corporate clients were able to realize procurement costs which were below the market average

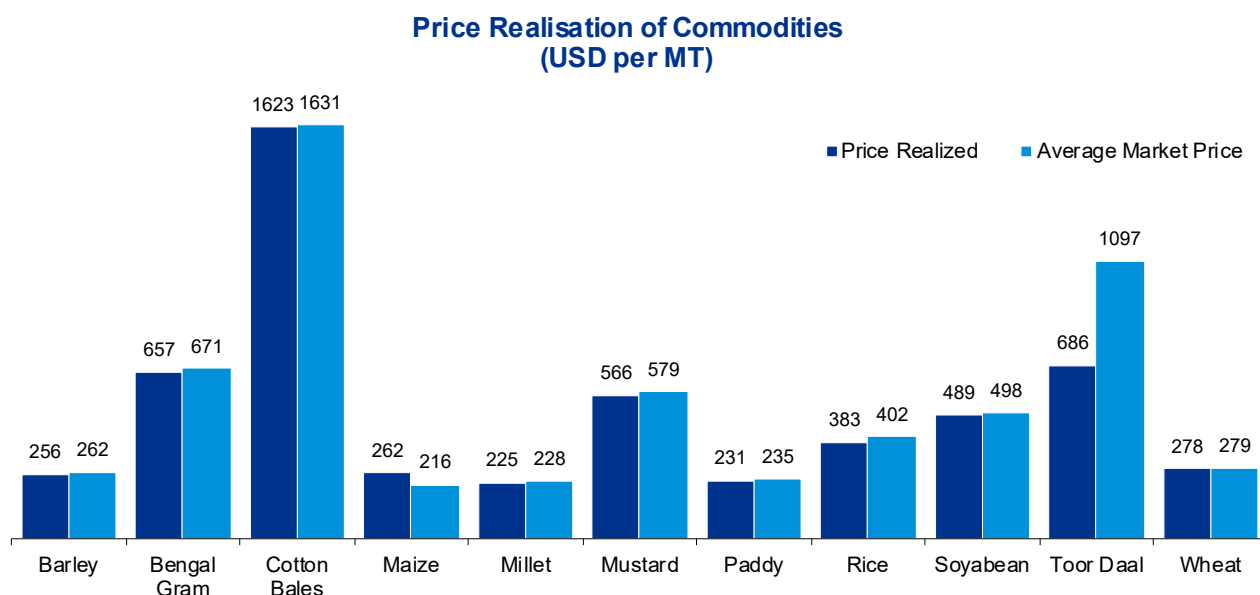


Figure 7: Price Realisation of Commodities

Origo, through its professional warehousing solutions and structured trade financing, was able to reduce the procurement costs for institutional buyers, unlocking a benefit of about **USD 0.20 million** in FY 2019-20.

Value Realisation for Institutional Buyers

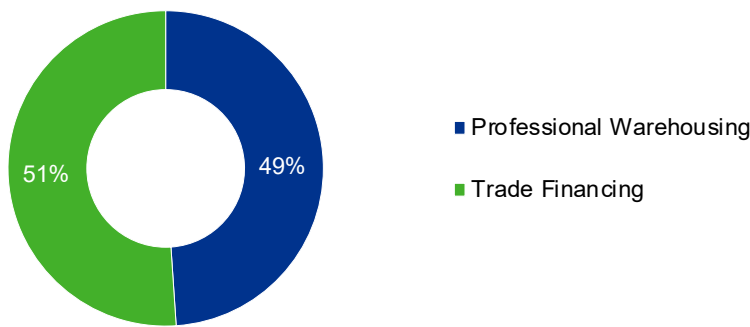


Figure 8: Value Realization for Institutional Buyers

b) Price Stabilisation of Commodities

Storage of commodity ensures continued availability, thereby restricting price fluctuations. This, in-turn, reduces the associated impact of inflation. Without adequate storage infrastructure and institutional support such as trade facilitation, procurement finance, it is observed that the commodity prices are subject to inflation to a degree as high as double the average inflation rate, as shown in the graph below. The spiked inflation rate could lead to significant economic losses for stakeholders across the value chain. Commodity price instability has a negative impact on economic growth, countries' financial resources, and income distribution, and may lead to increased poverty

Price stabilisation of the commodities

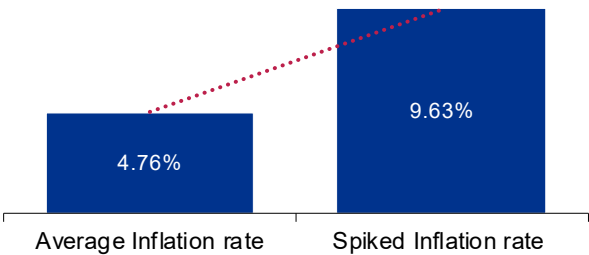


Figure 9: Change in Inflation rate

The economic benefit due to price stabilization of commodities achieved through Origo's warehousing and trade facilitation solutions is estimated to be **USD 1.04 million** in FY 2019-20

Driving Value Chain Efficiencies (USD million)



Figure 10: Value Chain efficiency

4. Propagating Financial Inclusion

In the context of a developing country like India where a majority of the population is dependent on agriculture for their livelihood, economic growth is intrinsically linked with agricultural development. One of the most important strategies for propagating inclusive growth in the agricultural value chain is through developing an inclusive financial system. Financial inclusion refers to ease of access to financial instruments and reduced barriers to entry for new credit customers. Financial inclusion is instrumental in facilitating economic transactions, managing day-to-day resources, protecting against vulnerability, improving quality of life, making productivity-enhancing investments and leveraging assets.

a) Enhancing Inclusion through Digitalisation

Cost effective delivery of financial products through the use of technology helps users stabilize their incomes and build productive assets. Financial technology (FinTech) is generating new ways to target and collateralize credit, pricing and spreading of risk appropriately, and organizing agricultural value chains. A 2017 ADB report has observed that digital payment systems could close 40% of the unmet need for payment services and 20% of the need for credit.

Origo has been leveraging latest technology in its operations and in process of launching its blockchain platform for Structured Trade Finance and also OrigoPay for digital payments for transparent and quicker transactions.

The National Automated Clearing House (NACH) is a web-based payment solution for bulk money transaction. Its various beneficiaries include small retailers, government, corporate sectors, NBFCs, banks etc.



~ USD 4.8 million collections, from its customers through the NACH platform

The NACH portal provides seamless interface to the users with reduced dependency on cash transactions, facilitating transactions for small businesses like retail suppliers, warehouse owners, etc. This helps in further reducing the additional economic costs which are implicit in the conventional financial systems. These may manifest in the form of costs incurred due to physical transaction.

Origo has extensively leveraged the NACH portal to collect payments. During the financial year, Origo has collected approximately USD 4.8 million against loan interest collection, from its customers through the NACH platform. The perceived economic benefit derived due to the use of the NACH platform over cash transaction accounts to USD 3,276. Additionally, the increased adoption of NACH platform has significantly reduced on-field deployment of employees for interest collection.

b) Contribution to nation's GDP growth

Businesses retain earnings and re-invest in growing economic activity. An increase in business size is indicative of enhanced value creation for the national economy.

During the year, Origo's commodities and finance businesses together generated an incremental financial value of USD 19.89 million.

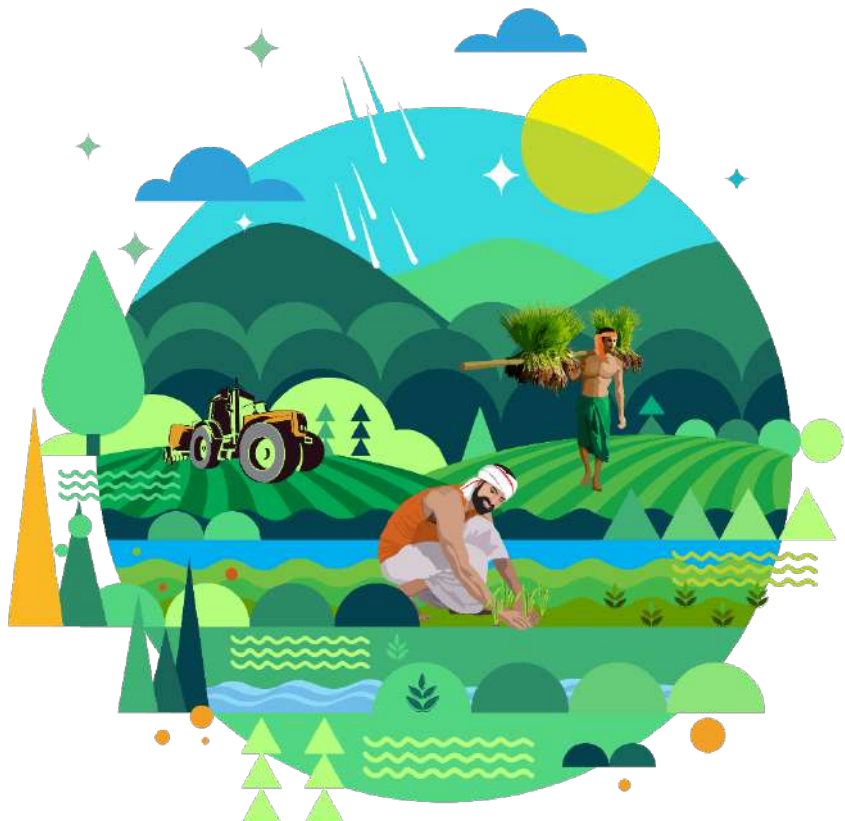


Origo contributes to the national GDP by catalyzing growth in the agricultural sector by providing formal credit to those sections of the society which so far had limited access to it. Beneficiaries of these loans have an enhanced income generation. We have determined that even after paying of the interest due for the credit availed, the beneficiaries are able to generate additional income which goes a long way in improving their quality of life and socio-economic stature.

c) Enhanced access to working capital for traders and farmers

Access to working capital is critical for farm investments in productivity, improving post-harvest practices, smooth household cash flow, enabling better access to markets and promoting better risk management. A vast majority of the rural poor depends either directly or indirectly, on agriculture as their primary source of livelihood. However, they have little or no access to formal credit.

The benefit realization for farmers is usually delayed due to transactions being done on credit and the value created is diminished due to multiple intermediaries. Origo's trade financing service has enabled better benefit realization for farmers than the traditional approach due to instant payment from buyers. This enhances the working capital available to traders and farmers, which led to a value creation for the reporting period worth **USD 4.10 million**

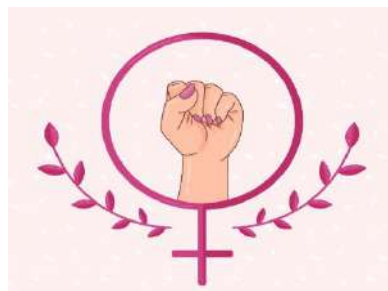


>10,000 farmers are benefitted through structured trade financing solution

d) Promoting women entrepreneurship

Woman entrepreneurship has a big role to play in the emancipation and overall empowerment of women, especially in rural India. It helps improve the quality of life of women while also increasing the inclusion of women in economic value addition. It has been established through extensive research that there is a strong positive relationship between women entrepreneurship and economic development of any country.

Origo promotes women entrepreneurship by providing Rural Enterprise loans to women. The value creation linked to the support extended by Origo to women entrepreneurial ventures in FY 2019-20 approximates to **USD 0.27 million**



II. Better Awareness of Financial Products

Financial literacy is the first step towards financial inclusion, financial development and ultimately financial stability. In absence of sufficient knowledge of financial products, farmers and rural entrepreneurs have been prone to the risk of excessive credit exposure and eventually default in repayment of loans. Origo appraises the borrowers about the financial commitment associated with the loan, the investment opportunities the loan enables, cash flow management and assets leveraging for accessing capital. This helps in informed decision making leading to reduced risks and better returns for the farmers. This, in turn, supports asset building and promotes entrepreneurship with an emphasis on sustainable livelihoods.



During the financial year, Origo disbursed loans worth **USD 11.75 million** to 1,986 customers.

State wise Loans disbursed

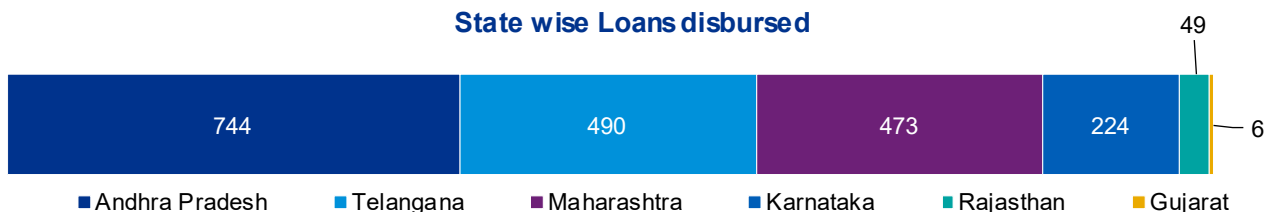


Figure 11: State-wise Loans disbursed

III. Increased Investment in Animal Husbandry

Capital constraints limit the ability of dairy farmers to invest in cattle health as well as technologies to improve productivity. Availability of formal credit has been known to boost output even with fixed resources such as land.

Origo's dairy loan beneficiaries, in addition to purchase of new cattle, also apportion a part of the loan towards other activities such as renovation of infrastructure, purchase of high-quality cattle feed, purchase of automatic milking machine, etc.

Origo supports dairy farm owners and offers guidance on the possible benefits that can be derived from dairy loans. This includes improvement of existing farm infrastructure and additional mulch for cattle, among others. The health and hygiene of cattle is balanced through proper feed and better veterinary services.



Invested ~ **USD 0.27 million** for improving animal husbandry

During the reporting year, Origo beneficiaries cumulatively invested USD 0.27 million in improving animal husbandry and infrastructure development. The betterment of health and hygiene of cattle has a direct bearing on the quality of the milk yielded. The benefit derived by dairy farmers in terms of enhanced income due to better yields amounts to about **USD 0.11 million**

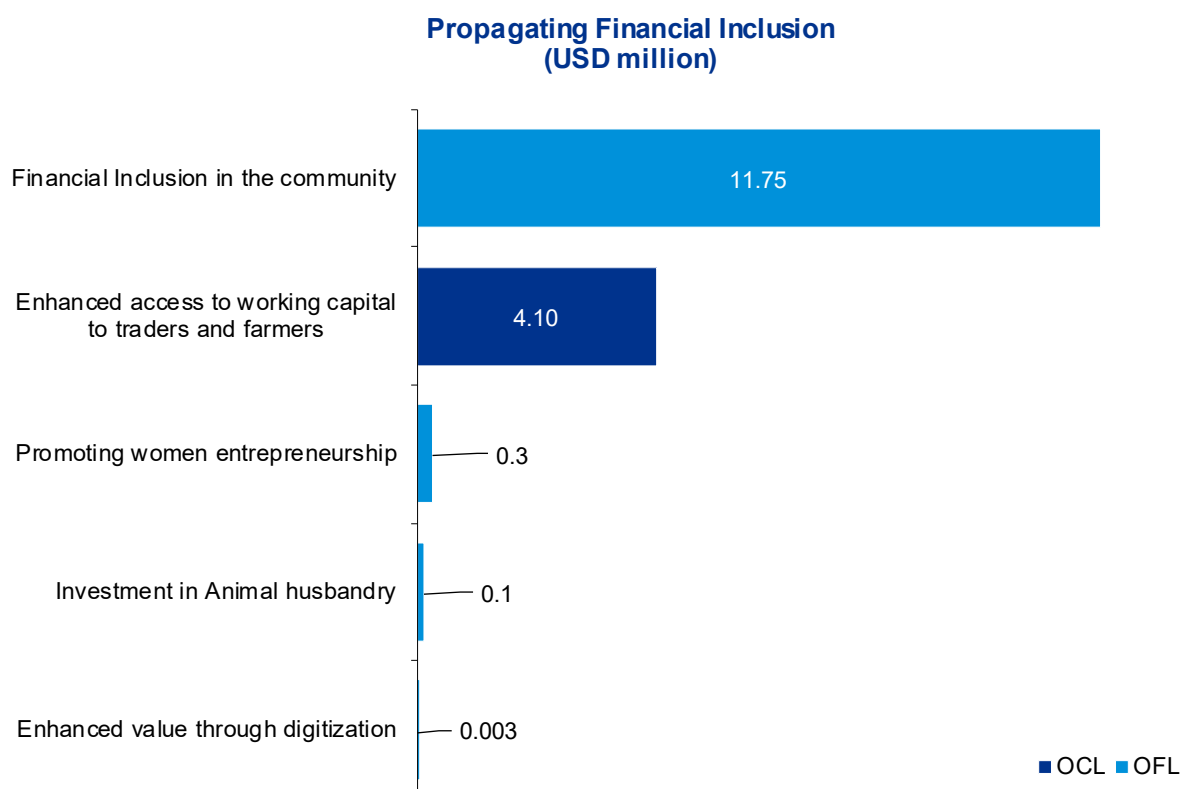


Figure 12: Financial inclusion by OCL and OFL

5. Driving Rural Economic Growth

I. Employment Generation

As per the statistics, employment in the agri-value chain stagnated in the early 2000s thereby resulting in the decline of agricultural share in the economy of India . Origo's innovative business model plays a vital role in promoting agricultural marketing, rural banking, financing and ensuring food security in the county. It enables the markets to maintain uninterrupted supply of agricultural commodities during both harvest season and off season. Through its warehousing and financing businesses, Origo directly, as well as indirectly, contributes to employment generation in the rural economy.



*Origo is able to generate perceived benefit of **USD 1.43 million** through enhanced income for farmers*

*Through Origo's activities, a cumulative benefit of **USD 1.94 million** has been derived for Rural Enterprise loan beneficiaries*

a) New Employment Generation

The warehousing and field marketing operations of Origo are manpower intensive. Majority of its manpower recruitment, for the roles of supervisors, officers and other positions, is from local rural areas.

To address its business needs, the Company has undertaken special drives to recruit supervisory level staff at all of its field operations and recruited a total of 465 employees during the year.

The new employment generated by Origo leads to additional income for the local economy. The estimated impacts of the employment generated by OCIL and OFL during the year are **USD 0.42 million and USD 0.93 million** respectively.



Origo has a special thrust on employment and training to ensure all its employees strive to achieve business objectives. The staff at Origo's warehouses are trained and evaluated by the operations and internal audit team. This training enables the staff at all facilities to follow SOPs and identify and escalate risks related to food storage and safety.

b) Enhanced Income from Employment

Local recruitment by Origo results in enhanced income and increased purchasing power, resulting in better standards of living. To confirm this, a primary survey was conducted amongst Origo employees to assess the perceived enhancement of income sources attained after their association with the organisation. The survey revealed that Origo helped improve the household income of new recruits by as much as 20%. The overall value creation from new employment generated by Origo for FY 2019-20 amounts to **USD 0.49 million**

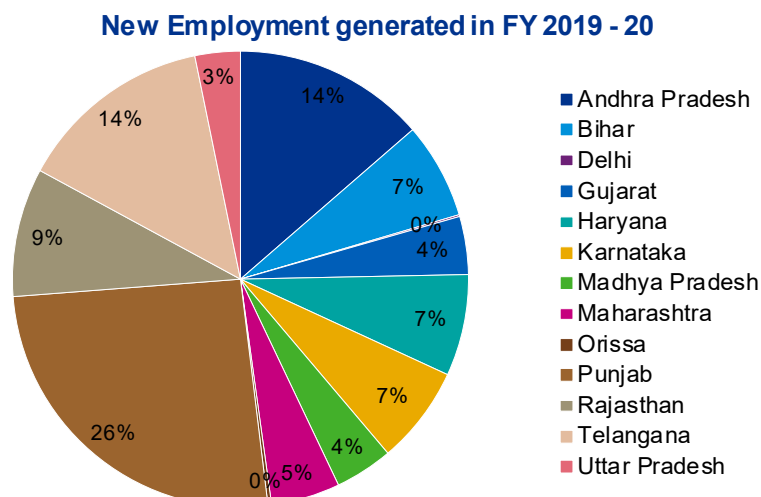


Figure 13: state wise new hires

c) Reduced Migration of Rural Population

Origo recruits personnel for warehouse operations locally, which provides new employment avenues for youth from local communities. Over the long-term this would help in reducing migration of rural population. A stable, formal income at hometown leads to an improvement in their standard of living. This further enhances access to quality education and healthcare for their families. These could also have far-reaching induced impacts such as abolition of child labor. The cumulative value creation as a result of reduced migration due to Origo's activities is estimated at **USD 0.38 million**.

II. Enhanced Income in Rural household

In line with the objectives of SDG 1, India has implemented a comprehensive development strategy to end poverty in all its forms through accelerated economic growth and broader social safety nets. It is important for organisations to promote gainful employment thereby strengthening livelihood opportunities which improve accessibility to basic services such as health, nutrition, drinking water and sanitation, education, skills, infrastructure and utilities. Origo supports enhancement of rural income through provision of formal credit, which supports beneficiaries in enhancing their economic activities and helps them in improving their social well-being.

a) Enhanced Income for farmers

Origo's trade finance solution presents a win-win situation for traders as well as for corporate buyers. For the traders who store their commodities in Origo's warehouses, there is an increased chance of sale at reasonable prices due to the availability of multiple trade linkages. On the other hand, for corporate buyers, Origo's price discovery tool ensures assured availability leading to overall benefit in terms of standardized pricing and protection against price volatility. Farmers also get indirectly benefited from this model as traders are able to make timely payment to them.

Origo's trade financing model provides sellers access to fair prices, in the absence of which they would have to sell their produce in the open market. Origo's trade finance solution helps enhance income potential for farmers which is estimated to be **USD 1.43 million**.



b) Enhanced Income from Rural Enterprise loans

Availability of finance provides Rural Enterprise beneficiaries an opportunity to expand their businesses. On an average, an MSME in India can generate about INR 6 Lakhs of annual revenue. During the year, Origo financed 1,968 businesses. Similarly, disbursement of dairy loans worth USD 2.78 million during the year, is estimated to have benefited dairy farmers to the tune of USD 0.94 million. Dairy loans have also resulted in a notional benefit from the manure produced. The notional benefit on account of this is estimated to be USD 0.21 million. The cumulative income earned by these beneficiaries during the reporting year accounted to **USD 3.93 million**.

6. Origo's Operational Footprint

I. Climate Change Impacts

Origo's energy consumption from its daily operations such as office operations and business travel along with the impact from additional capacity created for animal husbandry results in GHG emissions. This is expected to eventually contribute to climate change.

a) GHG Emissions from business activities

Origo's operations require energy consumption in the form of electricity purchased from the grid. This is a source of indirect GHG emissions. At present this data is being monitored for OFL's business.

Total GHG emissions generated from OFL operations amounted to 157.59 tonne CO₂ during the year. The social cost of every tonne of CO₂ being generated is estimated to be around USD 86. This includes impacts on human health, cropping patterns, economic losses caused to extreme weather conditions and sea level rise, loss of species and habitats etc.

During the year, Origo had sanctioned dairy loans worth USD 2.5 million to support animal husbandry. Since animal husbandry leads to GHG emissions, the emission produced during the cattle's lifetime is factored in.

During the reporting period, the total social cost of OFL's indirect GHG emissions, accounts to **USD 24,741**.

II. Environmental Impacts of Warehouse Operations

All of Origo's storage facilities have an associated environmental footprint. The water consumption and use of insecticides for commodity preservation directly have an environmental footprint. Warehousing operations, by their nature do not require significant amount of water. However, the impact of Origo's warehouse operations associated with both water and insecticides consumption needs to be accounted for.

a) Water stress and biodiversity

India is placed thirteenth among the world's 17 'extremely water-stressed' countries, according to World Resources Institute (WRI) in 2019. During the year, Origo's warehousing operations across 240 locations, utilized 1,553 KL of water for preservation of commodities. Although this does not significantly contribute towards creating water stress in the areas of Origo's operations, considering the social cost of freshwater extraction, the impact of Origo's operations during the reporting period is estimated to be **USD 12,495**.

OCIL uses insecticides and pesticides at its warehouses for preservation of commodities as per government regulations. This can lead to potential environmental impacts. Taking cognizance of this, Origo ensures that warehouses are located away from residential areas. Moreover, regular training regarding use of PPE, handling and disposal of chemicals are provided for the staff at warehouses. During the year, Origo used about 112 tonnes of insecticides and pesticides across its warehousing operations. The related environmental impact is estimated at **USD 0.80 million**

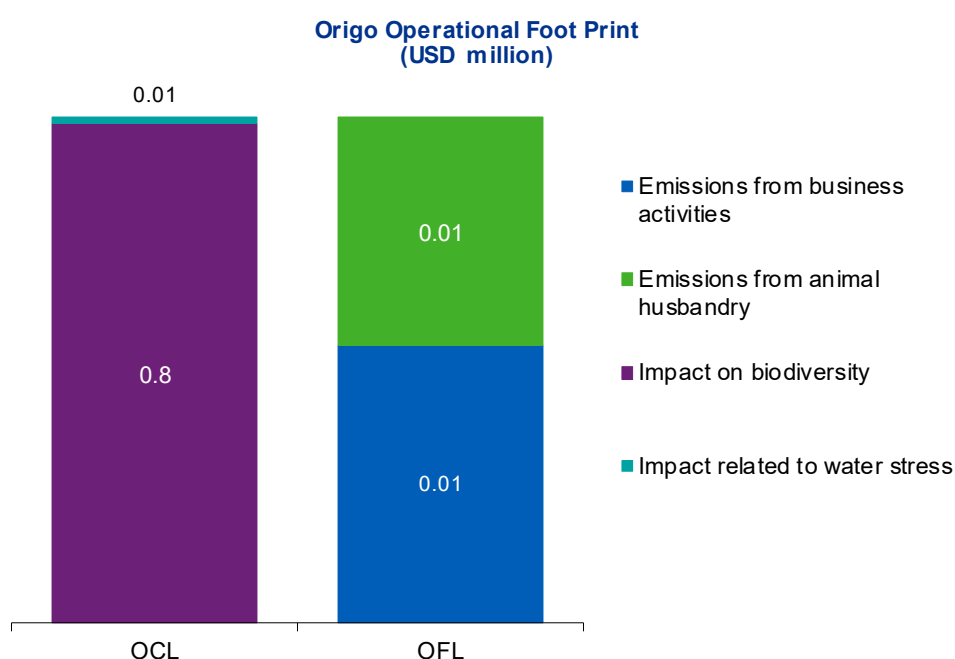


Figure 14: Operational Impact due to Origo activities

7. Way Forward

I. The Results: What Did we Learn?

Origo's business solutions have a plethora of beneficiaries, both direct and indirect, across the value chain. The True Value assessment enabled Origo to quantify its societal, economic and environmental impacts in addition to identifying the benefits offered to its various stakeholders. The social benefits reaped by both direct and indirect beneficiaries of Origo's services are multifold, ranging from enhanced food security and employment generation to entrepreneurial support.

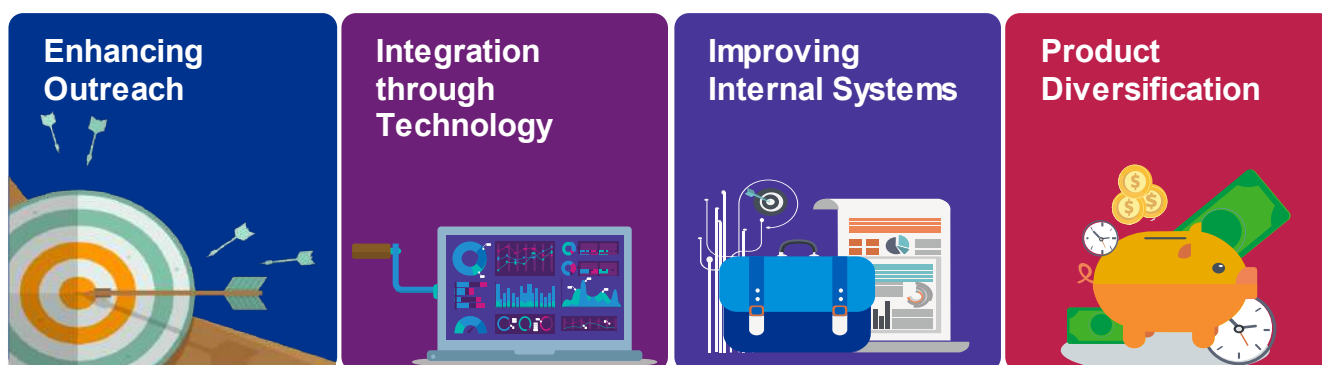
Origo's warehouses, while handling large quantity of stock, helped to reduce food wastage, resulting in reduced environmental impact.

The learnings from the study are bucketed under 3 categories mentioned below:



II. Origo's Future Path to Value Creation

Origo's vision of transforming fragmented commodity supply chains into an integrated and efficient ecosystem can be achieved by addressing the unmet needs of all participants, from the primary producer to end consumer. Origo is on its journey to becoming a one-stop solution provider of the agricultural value chain, by working towards the following:



a) Enhancing Outreach

Origo aims to expand its outreach to a larger number of underserved and unserved stakeholders deprived of mainstream access in the society. This will foster an integrated and inclusive ecosystem for the communities at the heart of the agriculture sector. Similarly, a wider presence across the nation will amplify the impact of the Company's activities.

b) Integration through Technology

Another way to enhance reach is by improved integration through tech-enabled solutions. Towards this, Origo is focusing on creating a robust commodities financing platform, and an auction driven trading marketplace. The blockchain technology-enabled commodity finance platform, TradeFi, will allow collaboration between investors, borrowers, and commodity suppliers, enhancing transparency in transactions and commodity purchases. The e-auction platform aims to connect government agencies and private traders with farmers, thus reducing the number of intermediaries in the commodities value chain. This technology will reduce dependence on manual intervention, have better price discovery, making all transactions transparent, while eliminating the probability of fraud.

c) Improving Internal Systems

Origo is also improving its internal functions that will translate to improved efficiencies in the value chain. For instance, its risk management processes are getting automated for seamless functioning. Origo is also focusing on enhancing capabilities of employees through training and development. This will ensure consistency and standardisation in processes, leading to improved performance.

c) Product Diversification

Going forward, Origo aims to diversify its product portfolio to include tech-enabled platforms, that can better connect buyers and suppliers and bring small retailers into the mainstream.

All this will culminate in greater value creation for all stakeholders. This will come with the added advantage of helping Origo attract investors which, in turn, will amplify its value creation.



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