OCA Farm Programme Impact Report 20/21
Accelerating the Organic Cotton Effect
If you would like to find out more information about participating in a farm project, or you have further questions about the Farm Programme season 20/21, please contact OCA by emailing secretariat@organiccottonaccelerator.org
Foreword by OCA Programme Director

As the entire organic cotton sector expands, we see the demand for organic cotton getting stronger, with more farmers switching to organic farming and more global brands and retailers expanding their organic cotton sourcing. We’re pleased to see that every year we continue to facilitate the rapidly increasing number of farmers in our Farm Programme and speak to more Implementing Partners who want to join us on our mission.

OCA exists to advance farmer prosperity while creating a resilient, responsible, and transparent supply chain for all players. Our Contributors enable that change and we commend them for supporting OCA’s mission with a sustained and growing commitment.

The Farm Programme Impact Report acknowledges what has been achieved, provides learnings on what we can improve and illustrates where we can accelerate change. The on-the-ground reality and insights from working with over 22,000 farmers last year delivers data driven and verified accounts of what is needed to increase capacity and secure successful foundations for organic farmers. Working with a dedicated team and partners we have created tangible and impactful results including direct brand-to-farm linkages, robust payment, and validation of farmer premiums as well as securing farmer access to quality non-GM seeds. Additionally, we have established a clear set of common guidelines and indicators to measure and report on progress and its impact.

Our Farm Programme is OCA’s mission in action: creating direct brand-to-farm linkages.

The programme objectives include:
1. Demonstrating and improving the business case for farmers to grow organic cotton
2. Promoting best practices and inputs for organic farming whilst providing secure uptake and premium payments to organic farmers
3. Improving transparency and providing third-party verified impact reporting at the farm-level

We will continue to support existing organic cotton farmers through our programmes but we also recognise the growing importance of creating a support framework for farmers wishing to make the switch to organic.

We praise and thank the farmers, the farm groups, local partners, Implementing Partners, Contributor Partners and our OCA team for their commitment and dedication to pushing for positive change, and we look forward to the next 12 months with our expanding network of organic cotton pioneers.

Sincerely,

Ruud Schute
The Year in Review
The Year in Numbers: 20/21 Season

Farmer premiums and lower production costs compensated for the lower yields of organic farmers, creating a better business case for OCA farmers compared to conventional farmers.

- **Rajasthan**: 2 PROJECTS, 1,401 farmers
- **Gujarat**: 1 PROJECT, 1,497 farmers
- **Maharashtra**: 7 PROJECTS, 7,707 farmers
- **Madhya Pradesh**: 6 PROJECTS, 6,188 farmers
- **Odisha**: 4 PROJECTS, 5,353 farmers

### Project Location
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- **Madhya Pradesh**: 6 PROJECTS, 6,188 farmers
- **Gujarat**: 1 PROJECT, 1,497 farmers
- **Odisha**: 4 PROJECTS, 5,353 farmers
- **Maharashtra**: 7 PROJECTS, 7,707 farmers

Total number of villages: **693**
Total number of Internal Control Systems: **91**

**NOTE**: Map is for representation only.

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1. OCA’s third party validation agency verified the accumulated premium amount on a project by project basis, based on their payment verification with individual farmers.
2. Data on cost of production, seed cotton and premium payments are made in INR; however, for reporting purposes this is converted to EUR using the following conversion factor: 1 EUR = 88.37 INR.
Strong Growth in Farmer Numbers
The 20/21 cotton season marks the fourth year of OCA’s Farm Programme in India. This year we successfully partnered 6 brands with 10 Implementing Partners (IPs) across 20 projects in their supply chains. The programme covered a total of 22,146 farmers this year, recording a 180% growth in farmer numbers compared to the previous season. Farmers were spread across 5 different states of India and farmed 24,022 hectares of land of which 743 hectares were in-conversion to organic and 891 hectares were Regenerative Organic Certified (ROC) cotton production.

Higher Net Income per hectare of Cotton for Organic Programme Farmers
With an average net income from organic cotton of €635 per hectare, the farmers engaged in the OCA Farm Programme earned on average 21% more than their local non-organic peers. A combination of farmer premiums and lower production costs compensated for the lower yields of organic farmers, resulting in a better business case for programme farmers when compared to conventional farmers.

Partnership Support Services Prove Their Value
At the start of the season, brands and IPs drafted agreements for the delivery of 12,140 metric tonnes of lint. During the harvest season, it became clear that demand for certified organic cotton outside OCA’s Farm Programme would be higher than the market was able to supply. We are pleased to report that during these testing times all long-term OCA IPs continued to deliver organic cotton to fulfil their agreements. Ten long-standing IPs out of an initial twelve partners delivered their committed 10,429 metric tonnes of pre-booked organic cotton which equals 86% of the original total commitment. Two IPs did not fulfil their commitment. The delivered 10,429 metric tonnes was entirely procured by the six brands resulting in maximum uptake, demonstrating the value of long-term partnership in the value chain.

Pandemic Challenges – Practical Programme Mitigation
At the start of the 20/21 season, the COVID-19 pandemic underscored the organic cotton sector’s fragility as the global textiles market came to a halt. One of the most prominent challenges faced by stakeholders alike was the crunch on financial liquidity, which created a hurdle for the farm groups and farmers to obtain essential farm inputs, most notably seed. In response to the immediate threat to the availability of non-GMO seed for farmers, OCA established a seed pre-finance match-fund in partnership with the Laudes Foundation. The grant was used to leverage €220,000 of private match-funding by brands and other supply chain partners in the farm projects to give farmers direct support by subsidising the cost of non-GM seed procurement for farmers on ground. Other challenges faced by the sector included delays in certification audits, inability to monitor projects in-person during moments of lockdown and travel bans, lack of labour for land preparation and the general uncertainty in the sector.

In response to the changing conditions, OCA adapted its data validation process and remained committed to verifying payments on the ground and delivering quality impact data for its partners. A series of interactive online workshops were organised for the field teams led by sector experts to enable a knowledge transfer on key topics relevant to the cotton season. Additionally, OCA facilitated coordination between the farm groups and the certification bodies to ensure timely certification audits on a need basis allowing for smooth organic cotton movement into the supply chains.

Programme Highlights

2. Data on cost of production, seed cotton and premium payments are made in INR, however for reporting purposes this is converted to EUR using the following conversion factor: 1 EUR = 88.37 INR.
Putting Farmers First
More than 22,100 organic farmers engaged in the Farm Programme: all with individual realities, challenges and back-stories. We found some common themes that informed the general farmer profile across the different regions where the programme is implemented.

Most of the project farmers are small and marginal landholders: 25% of all farmers involved in the programme in the 20/21 season can be categorised as marginal farmers with less than 1 hectare. Small farmers with between 1 and 2 hectares of land were 37% of the total, whilst farmers with more than 2 hectares of land both accounted for 38% of the total.

Significant dependence on organic cotton for family income: The income from organic cotton cultivation accounts on average for 62% of the total family income of farmers across the different projects. Income from other crops contributes to 16% of family income, and the remaining 22% comes from non-agricultural sources such as off-farm labour.

The Farmers’ Perspective

Organic cotton farmers are at the heart of the OCA Farm Programme. Their perspective is key to understanding the motivations behind growing and continuing to grow organic cotton. Through them, we can see the impact the Farm Programme makes to farmer livelihoods and farming communities, with clear signals on how this can be further improved. To this end, OCA collects feedback and information from farmers through third-party farmer surveys on a range of topics. The overall response on a selection of questions is presented in this report.

Firstly, farmers were asked by the third-party validators how they could best be supported in continuing to grow organic cotton in the seasons to come. 44% of farmers prioritised the need for cash advance, 32% prioritised higher premium payment whilst 11% articulated the need for more bio inputs. Other areas of support mentioned included more clarity on buy back and premiums, provision of farm gate procurement, additional training and the provision of higher yielding seed.

13% of all sample farmers interviewed by third-party validators indicated that their overall economic situation had improved when compared to last year. Over 80% of sampled farmers stated that they felt they were in a similar economic situation. On top of this, 98% of farmers would like to continue growing organic cotton in the coming years, an increase of 5% when compared to the 19/20 season.

Who are the OCA Farmers?

Total land size

- 1% Greater than 4 ha
- 25% Less than 1 ha
- 37% 2-4 ha
- 37% 1-2 ha

Income source

- 22% Non-agri. Sources
- 62% Organic Cotton
- 16% Other Crops

Education

- 6% Illiterate
- 12% High School and/or above
- 26% Secondary School
- 36% Primary School

Water use

- 36% Irrigated
- 64% Rain-fed

Figure 1: Farmer Profiles

Figure 2: The Farmers’ Perspective

Areas in which farmers require support from Implementing Partners to continue growing organic cotton:

Cash advances 44%
Increase in premium price 32%
Supply of bio inputs 11%
Clarity on buy-back & premium 7%

March 2022

How farmers feel about their overall economic situation compared to last year

- 6% Worse
- 13% Better
- 81% Same

Would farmers like to continue growing organic cotton in the coming years?

- 2% No
- 98% Yes
**Premiums Reaching Farmers’ Pockets**

All the brands and Implementing Partners in the Farm Programme agreed to pay a premium to farmers in support of the farmer business case for organic. The premium is defined as: the additional amount paid to organic cotton farmers over and above the average market price for seed cotton at the moment of sale. Organic premiums paid per kg seed cotton across the projects ranged from 5% to 10%.

For long staple cotton, which made up 97% of the cotton sourced through the Farm Programme, the average price paid to organic programme farmers was 8% higher than the average market price at the moment of sale.

**Figure 3: Price and Payment**

**Market price and price paid to OCA Farmers**
- Euro per MT of seed cotton

<table>
<thead>
<tr>
<th></th>
<th>Long Staple</th>
<th>Extra Long Staple</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum support price</td>
<td>€659</td>
<td>€704</td>
</tr>
<tr>
<td>Average market price</td>
<td>€659</td>
<td>€704</td>
</tr>
<tr>
<td>Price paid to OCA farmers (excl. premium)</td>
<td>€667</td>
<td>€765</td>
</tr>
<tr>
<td>Price paid to OCA farmers (incl. premium)</td>
<td>€670</td>
<td>€770</td>
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-97% Long staple
-3% Extra Long staple

**Verification of Payments to Farmers**

Payments for premiums and organic seed cotton to Farm Programme farmers are made through both cheque and cash transactions. The payment method used varied among the different projects, with some projects paying the vast majority to all farmers by bank transfer, while others relied entirely on cash payments for both seed cotton and premium payments.

Compared to the previous season we observed a 6% increase in bank transactions. In the 20/21 cotton season, 27% of seed cotton payments and 28% of premium payments were conducted via bank transfer. Cash remains the preferred choice for farmers to receive payment for their seed cotton and premiums as farmers were paid in cash in 66% of cases. 5% of transactions were conducted partly through the bank and partly through cash.

**Figure 4: Method of Payment**

**Figure 5: Verification of Payments to Farmers**

OCA have set the ambition to pay as many farmers as possible via bank accounts, as this method best validates the existence of farmer payments whilst also facilitating farmers’ access to institutionalised forms of credit.

The third-party validation agencies were tasked with verifying the payment to farmers as reported by the Implementing Partners for a sample of farmers per project. For 96% of sample farmers, the data recorded by the Implementing Partners for seed cotton payment matched with information gathered from farmers. For premium payments, this percentage was 97%.
The Farmer Business Case

A primary objective of the Farm Programme is improving the business case of organic cotton farming, which means ensuring a competitive and higher net annual income from organic cotton when compared to conventional cotton farming under similar conditions. OCA is proud to state that, as in the previous year, our collective efforts have resulted in organic programme farmers receiving a higher net income per hectare of cotton than their conventional peers. The amount of cotton produced on a hectare of farmland - the average seed cotton yield (MT/hectare) - is a key determinant of cotton revenue and therefore a key indicator in the Farm Programme.

The yield of seed cotton across the 20/21 Farm projects was on average 7% lower when compared to the yield from conventional non-organic farmers. The average yield of organic programme farmers was 1.47 MT of seed cotton per hectare, whereas the yield of conventional control farmers was 1.58 MT per hectare.

Under the Farm Programme in 20/21, organic cotton farmers had on average a 21% higher net income (profit) per hectare of cotton grown than non-organic control farmers in the same region (635 EUR/ha vs. 523 EUR/ha, respectively).

The key to higher net income for organic farmers in the Farm Programme is the combination of lower production costs for organic cultivation and better prices received for organic cotton due to the organic premiums paid out in the projects. The lower production costs and the better prices received were able to compensate for the, on average, lower yields from organic farmers when compared to conventional (1.47 MT seed cotton/ha for organic farmers vs 1.58 for conventional farmers).

The average cost of production incurred by the organic cotton farmers was 18% lower than that of conventional farmers. The breakdown of costs indicates that the major savings for organic farmers came from the reduced cost of pesticides, fertilisers, seed and irrigation.

The average premium payment of 8% in addition to the market price for organic farmers is the additional critical factor in establishing a more attractive business case for organic compared to conventional growers. This year, as a first, the organic farmers would have earned 5% more than the conventional control farmers even before the payment of premium.

OCA paid out €1,697,000 in premiums to organic farmers in the Farm Programme in the 20/21 season. As in all previous OCA Farm Programme years, without these premiums, the net income of organic farmers would have been lower than the net income of their conventional peers.

An additional feature in the farm projects is the widely adopted pre-financing offered to farmers for inputs, especially seed. Implementing Partners support project farmers (either directly or with support from brands) by providing pre-financed these inputs free of interest at the start of the season. This amount is then deducted from the payments made to farmers for their produce when sold to the Implementing Partner. It is estimated that €492,453 was provided to farmers across all projects as pre-finance in the 20/21 season.

By the end of the season Implementing Partners had delivered 86% of the original lint commitment. If the lint commitment of the two Implementing Partners who did not fulfill their obligations are excluded this lint commitment value increases to 94%. Of that lint which was delivered by the Implementing Partners, close to 100% of it was procured by the Brands & Retailers. Together this not only shows the demand for organic cotton via this direct-to-farm sourcing model from the brands & retailers, but also the generally high performance of farmers and Implementing Partners in delivering it.

Of the 22,146 farmers who participated within the Farm Programme, 81% of them had their organic cotton procured directly via the Implementing Partners. There are a number of reasons that can dictate why a farmer may not sell their cotton to the Implementing Partner, including farmer driven motivations, Implementing Partner’s choice, or acts of nature preventing the production and harvest of cotton. However, over the coming seasons OCA will strive to increase the farmer engagement to ensure as many farmers as possible can benefit from an additional premium payment for their cotton.

Lint Uptake and Farmer Engagement

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Meet The Farmers
Meet the Farmer  

**LATABAI**

Latabai is a 35-year-old female farmer who cultivates organic cotton across 2 acres (0.8 hectares) of her 3 acres (1.2 hectares) of agricultural landholding. She lives with her husband and 3 children in Maharashtra. Though she is committed to practising organic cultivation across her entire land, it is only cotton that is currently is certified under the organic system so far. Like many other farmers in her village, she has expanded her organic cultivation practices to other crops as well, like red gram, maize, bajra and jowar. Most of these food crops are used for household consumption, with the surplus quantities sold in local markets, which averages at around 60% annually.

Latabai produced 1,000 kg of organic seed cotton, from her 2 acres (0.8 hectares) of land, selling the entire production directly to OCA’s Implementing Partner (IP) for 54,000 INR (611 Euro). She received a premium of 5,000 INR (57 Euro) bringing her net income from organic cotton to 27,910 INR (316 Euro). Her gross earnings from cotton are 30% of the total household income, which totalled 161,000 INR (1,821 Euro), with the remainder of the income coming from non-agricultural work and sale of her other agricultural crops in the local market.

Although Latabai appreciates the premium paid for organic cotton, she would also like to receive similar premiums for the other crops that she grows organically.

“Receiving a premium for my other organic crops would increase my household income by almost 20%. I also think that access to a premium rate for other crops would ultimately also motivate other farmers in the village to practice organic cultivation, beyond just cotton.”

After exploring some options, Latabai reached out to Art of Living Foundation, an NGO promoting organic farming of food crops in the district. The foundation has established a supply chain to procure food crops like vegetables, wheat and maize from smallholder farmers which is then sold through their outlets in the town. In order for the foundation to procure and market the crops, Latabai must have official organic certification for the remaining one acre (0.40 hectare) of her land.

Latabai believes that she and the 200 plus farmers in the village would benefit greatly if the IP could facilitate the certification of the portions of their land that they currently use to cultivate crops other than cotton. This will provide them with the opportunity to collaborate with buyers like the Art of Living Foundation, so the produce can reach the desired market.

When crop diversification practices are encouraged and established in the community, Latabai believes it will eventually optimise the use of resources such as water and improve the food security situation for families. OCA’s local partner is now exploring these possibilities for the forthcoming seasons, as they believe this will help farmers expand their organic potential and improve general growing conditions across all crops.

This case study was collected by the third-party validation team using the following selection criteria: 1) Farmers who have been actively associated with the Implementing Partner for a long period 2) Farmers willing to give their consent for inclusion following a request by the field team for a case study. Please note, this case study is not necessarily representative of overall project performance or outcomes.

A conversion rate of 88.37 INR = 1 EUR, was used throughout this report.
OCA Farmer Latabai holds soil from her fertile organic cotton farm. Maharashtra, India. Photo: OCA

OCA Farmer Latabai prepares Farm Yard Manure for her organic cotton farm. Maharashtra, India. Photo: OCA

OCA Farmer Latabai learns how to use insect traps from OCA’s Implementing Partner’s Field Facilitator. Maharashtra, India. Photo: OCA
Meet the Farmer

Ritesh

Ritesh is an organic cotton farmer from Maharashtra, with a total landholding of 20 acres (8 hectares) in which he grows cotton across 9 acres (3.6 hectares) and crops such as Jowar (sorghum) and various vegetables, across the remaining area. He began organic production of cotton in 2008 on just 2 acres (0.8 hectares) of his land and slowly expanded over the years.

Well respected in the community, he is seen as a reliable resource of knowledge on all matters concerning organic cultivation by his peers, neighbouring villagers, and various promoters of organic farming in the region. Ritesh sharpened his understanding and skills of organic cultivation by attending multiple training sessions within and outside the district. Over the years he has upgraded his knowledge; learning the practices of intercropping with red gram and other lentils to preserve the soil fertility, the importance of using quality non-GMO seeds, bio inputs preparation and usage, as well as their impact on soil health. To control pest attacks he started using yellow sticky traps and pheromone traps, and he now sources and sells these to other farmers in his village for no additional profit. This has helped the other farmers to a great extent as these inputs are not easily available with local distributors. He is an avid learner, and passionate about what he does, and enjoys sharing his knowledge to the benefit of others.

In the cotton season 20/21, Ritesh harvested a total of 5,250 kg (5.25 MT) of cotton from 9 acres (3.6 hectares), selling the entire production to OCA’s Implementing Partner (IP). He received a payment of INR 293,000 (3,315 Euros) for the seed cotton and a premium of INR 26,000 (294 Euros). He plans to invest this premium towards his goal of opening a shop which sells organic inputs and products, a vital gain for the local farmers in his area.

Since 2010, Ritesh has secured a base of regular buyers who book his wheat and red gram in advance of the season, providing him with an additional income on top of his cotton crop. He receives INR 60 (0.67 Euro) per kg for his organic wheat, compared to the INR 40 (0.45 Euros) paid to his peers for their conventionally grown wheat. He has further diversified his sources of income by rearing cattle and selling the milk to local dealers and villagers.

Due to his expertise and enthusiasm, Ritesh is now associated with OCA’s Implementing Partner and a few other organisations as a resource person promoting organic farming practices amongst rural communities in Maharashtra.

“We believe that if conventional cotton farmers make the efforts to transition to organic methods, they will resolve a lot of their existing challenges, especially those pertaining to degrading soil health and low income due to reduced crop yields.”

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Meet the Farmer

WOMEN’S SELF HELP GROUP

This Self-Help Group (SHG) is an Internal Control System (ICS) of 19 women in Odisha. The women of the SHG receive training from OCA’s Implementing Partner (IP) to support better farming practices and to broaden their skills in the correct preparation and use of liquid manures, bio pesticides, and botanical extracts for pest control.

The training sessions have reached farmers across 20 villages, who are now invested in using biological pest control options like neem extract, cow dung slurry, Ammutpani, chilly garlic extract, Jeevamruth, and Handi-katha.

The farmers initially began preparations for these bio-inputs at their individual homes, but soon realized that collectively producing the bio inputs was a more cost and time efficient approach. Several such groups of farmers could not sustain these collaborative efforts, but the farmers have kept the process going with continued support from the IP, who ensured that the local farmers’ needs were served.

In 2018, the women’s SHG began the preparation of bio pesticides with an investment of 4,000 INR (45 Euro) and sold the finished products to farmers for a total of 8,000 INR (90 Euro). They operated on a similar scale in 2019. Due to their great skills and organisational capacity, they soon received an offer to produce the bio inputs at a much bigger scale.

The local gram panchayat (village council), in 2020, started a programme to support women farmers from 5 villages to start an orchard to ensure food security and nutrition at the household level. Upon the gram panchayat’s request, the women’s SHG group took on the production of the bio inputs for the other women farmers of the 5 villages, using their own group’s funds. They successfully supplied inputs worth 146,000 INR (1,652 Euro) and earned a net profit of 70,000 INR (792 Euro), which was split equally between the 15 group members. These women now provide a vital support to farmers in their village and to others in the neighbouring villages who are beginning their organic cultivation journey, or who often have no time or indeed the appropriate skills to produce the much-needed bio inputs themselves.

However, it has not been an easy journey for these women. Without an advance commitment from guaranteed buyers or projects to supply to, they would face heavy losses and no potential to earn any funds from their hard work. The IP is working to support the efforts of these women by scaling up the use of their bio-inputs in nearby villages to ensure its continued demand. The women in the group have also taken steps themselves to promote their product by meeting with farmers and group leaders in several villages. They plan to increase production to supply to more farmers and are confident that with the support from the IP and village leaders, their enterprise will flourish in the years to come.
Members of the Women's Self Help Group in OCA's Farm Programme. Odisha, India. Photo: OCA

A member of the Women's Self Help Group in OCA's Farm Programme adds a mixture of cow dung and urine to a mixing vessel as she prepares bio pesticides. Odisha, India. Photo: OCA

A member of the Women's Self Help Group sells jeevamrutha, a liquid bio fertiliser, to an organic farmer. Odisha, India. Photo: OCA
Context is Everything
Interrogating our Key Indicators

The real value of the extensive data that OCA collects at farm-level emerges when we interrogate the details of individual projects, farmers, investigating specific factors and the spread of the data. Context is everything, and to drive continuous improvement with both our individual farm group partners and farmers, we pair this data with lessons from other projects and translate these insights into tangible actions.

In the graphs below we present the spread of the data from the 20/21 season of our Farm Programme: focusing on the key indicators of Yield and Net Income per Hectare for both organic programme farmers and conventional farmers. We do this because it tells a complete and more honest story. It shows the nuance of the nature of this work, where sometimes things improve and sometimes things regress. And most importantly, it challenges us to ask, ‘how can we do better next time?’

Insights from the Farm Programme: Yield Analysis

Distribution of Seed Cotton Yield (MT/ha)

The bell curve above shows how seed cotton yields vary across the Farm Programme. Along the X-axis seed cotton yield (MT/ha) is plotted, whilst along the Y-axis probability density is plotted. Together these two values represent a bell curve which provides an indication of the typical yields OCA reports across the Farm Programme. The closer to the peak of the bell curve (~median yield) the more common that yield occurred. The further one moves away from the peak down to the minimum (lowest yield) and maximum yields (highest yield) the less likely that yield is to occur. Labels 1, 2 & 3 are anonymised projects from this season’s Farm Programme.

But what explains this variation in yield across the Farm Programme? Starting with the lowest yield project (0.7 MT/ha), this is an in-conversion project in its second year on its journey to being certified organic. It is typical to encounter reduced yields during the in-conversion process as a farmer transitions from their previous farming technique to one that follows organic principles.

Additionally, the farmers in this project location are allocating more percentage area for border crops and intercrops which are grown in cotton plot. In the majority of the projects, we observed the area allocated for border and intercrops is anywhere between 5-10% but in this instance, it is between 10-20% reducing the area available for cotton production.

The high yielding project (2.2 MT/ha) comprises of farmers who have been certified organic farmers for many years, are fully irrigated with good fertile soils and access to high quality bio-inputs all of which boost their yields.

In between these two projects, we find the median project (1.6 MT/ha), which is the most representative of a ‘typical’ farm project out of these three examples. This project comprises of fully certified organic farmers, and whilst they have good access to inputs and practice inter-cropping, this project is fully rainfed to inputs all of which boost their yields.

The two bell curves above are plotted allowing the comparison of the average net income of OCA farmers (Ghite) against that of the Control farmers (Grey). In this example, the average net income is plotted along the X-axis, whilst again the probability density is plotted along the Y-axis.

Together these two values represent a bell curve which provides an indication of the typical net income OCA reports across the Farm Programme. Comparing these two groups of farmers in such a manner, reveals that organic farmers on average generate a higher net income whilst seeing increased variability around that average, whilst the control farmers received a lower net income, and tend to be clustered more closely around the average.

The low performing business case (61 EUR/ha) project is linked to the poor yields generated in this project, the reasons for that yield were explained in the previous bell curve. In addition to the poor seed cotton yield, the procurement in this project also happened earlier in the season when seed cotton prices were lower due to high availability of the crop following the first harvest, further hampering the farmer’s business case.

The high performing business case (1,094 EUR/ha) is due to high yields seen in the project, partially down to the 100% irrigation seen in the project and highly efficient organic cultivation practices conducted by those farmers. Additionally, the farmers in this project were paid well per kg of seed cotton, receiving slightly above the Minimum Support Price and market price for their produce, as well as receiving a premium that was also above the OCA Farm Programme average. Procurement continued until late in the season, when seed cotton prices increased sharply. These factors all combined to create a more compelling business case for the farmers in this project.

The median net income project (660 EUR/ha) is closest to the average net income for OCA Programme farmers this year. This project itself had a slightly above average seed cotton yield, but the procurement happened earlier in the season when market prices were lower. Whilst this project generated slightly higher yields, this also came with higher costs of production which ate into some of the additional profit.

Insights from the Farm Programme: Earnings Analysis

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Insights from the Farm Programme: Yield Analysis

Distribution of Seed Cotton Yield (MT/ha)

The bell curve above shows how seed cotton yields vary across the Farm Programme. Along the X-axis seed cotton yield (MT/ha) is plotted, whilst along the Y-axis probability density is plotted. Together these two values represent a bell curve which provides an indication of the typical yields OCA reports across the Farm Programme. The closer to the peak of the bell curve (~median yield) the more common that yield occurred. The further one moves away from the peak down to the minimum (lowest yield) and maximum yields (highest yield) the less likely that yield is to occur. Labels 1, 2 & 3 are anonymised projects from this season’s Farm Programme.

But what explains this variation in yield across the Farm Programme? Starting with the lowest yield project (0.7 MT/ha), this is an in-conversion project in its second year on its journey to being certified organic. It is typical to encounter reduced yields during the in-conversion process as a farmer transitions from their previous farming technique to one that follows organic principles.

Additionally, the farmers in this project location are allocating more percentage area for border crops and intercrops which are grown in cotton plot. In the majority of the projects, we observed the area allocated for border and intercrops is anywhere between 5-10% but in this instance, it is between 10-20% reducing the area available for cotton production.

The high yielding project (2.2 MT/ha) comprises of farmers who have been certified organic farmers for many years, are fully irrigated with good fertile soils and access to high quality bio-inputs all of which boost their yields.

In between these two projects, we find the median project (1.6 MT/ha), which is the most representative of a ‘typical’ farm project out of these three examples. This project comprises of fully certified organic farmers, and whilst they have good access to inputs and practice inter-cropping, this project is fully rainfed which limits the maximum yield possible from the cultivated land.

The two bell curves above are plotted allowing the comparison of the average net income of OCA farmers (Ghite) against that of the Control farmers (Grey). In this example, the average net income is plotted along the X-axis, whilst again the probability density is plotted along the Y-axis.

Together these two values represent a bell curve which provides an indication of the typical net income OCA reports across the Farm Programme. Comparing these two groups of farmers in such a manner, reveals that organic farmers on average generate a higher net income whilst seeing increased variability around that average, whilst the control farmers received a lower net income, and tend to be clustered more closely around the average.

The low performing business case (61 EUR/ha) project is linked to the poor yields generated in this project, the reasons for that yield were explained in the previous bell curve. In addition to the poor seed cotton yield, the procurement in this project also happened earlier in the season when seed cotton prices were lower due to high availability of the crop following the first harvest, further hampering the farmer’s business case.

The high performing business case (1,094 EUR/ha) is due to high yields seen in the project, partially down to the 100% irrigation seen in the project and highly efficient organic cultivation practices conducted by those farmers. Additionally, the farmers in this project were paid well per kg of seed cotton, receiving slightly above the Minimum Support Price and market price for their produce, as well as receiving a premium that was also above the OCA Farm Programme average. Procurement continued until late in the season, when seed cotton prices increased sharply. These factors all combined to create a more compelling business case for the farmers in this project.

The median net income project (660 EUR/ha) is closest to the average net income for OCA Programme farmers this year. This project itself had a slightly above average seed cotton yield, but the procurement happened earlier in the season when market prices were lower. Whilst this project generated slightly higher yields, this also came with higher costs of production which ate into some of the additional profit.
Spotlight on Seed
A Common Framework for Non-GM Seed Production

The market demand for organic cotton is growing. As the seed forms the starting point of the cotton value chain, to meet such demand, we need to secure the availability of reliable non-GM seed, an essential requirement in organic farming. However, in countries where GM cotton dominates the market – like India, accidental GMO contamination at seed level may occur, making it challenging to secure the basic characteristics of the seed required by organic farming regulations and jeopardising the integrity of the broader organic cotton sector.

Responding to this critical need of the sector, OCA released the Non-GM Cottonseed Production Guidelines in 2020, which provide the textile sector with a key tool for safeguarding the integrity of organic cotton at the seed level - the very start of the supply chain. These guidelines aim to create a standardised industry approach for the production of non-genetically engineered (non-GM) seed marketed to organic cotton growers, and as such improve the integrity of the entire organic cotton value chain from seed to shirt.

Led by OCA, these guidelines have been developed in consultation with sector experts and via field pilots at three Indian seed producers. They are now made available to producers of non-GM cottonseed who want to implement solid practices to monitor and prevent GMO presence along their seed supply chain. Ultimately, these guidelines are set to help the growing number of Indian organic smallholder farmers by increasing their access to non-GM seed and strengthening the integrity of organic cotton produce for brands and retailers.

Investing in Partnerships with Indian Seed Producers

OCA has already started rolling out the implementation of the guidelines in India, starting with the company Partech Seeds. Through its Non-GM Seed Assurance Programme, OCA is providing capacity building support to Partech with expert consultation by bioRe India to help them identify risks of contamination and prevent GMO presence in their cottonseed lots. bioRe will take the lead in assessing Partech’s needs and addressing them through a continuous improvement process involving regular training with farmers and its staff and streamlining its production systems.

OCA will verify Partech’s compliance to the non-GM Seed Production guidelines using second-party verification audits at the end of 2021. This will enable Partech Seeds to differentiate themselves in the marketplace, while their clients will feel more confident to use them to source reliable non-GM seed for their organic cotton needs.

Building a Portfolio of Benefits for Seed Producers

Additional visibility to OCA’s farm group partners and access to capacity building support under the Seed Assurance Programme are just two of the benefits to seed companies who work with OCA.

We also aim to support seed producers in estimating the forecasted seed volumes demanded by organic cotton farm groups one season ahead, to limit the risks and challenges linked to the under- and over-production of seeds. We will also provide them with organic cotton market intel to support their product introduction and sustainability strategies.

Finally, OCA is currently working hard to set up a joint seed trial network across all of our Farm Programme partners. This means that seed producers partnering with OCA will get the opportunity to have their seed varieties tested and evaluated directly by their potential clients under local organic farming conditions and therefore obtain the feedback they need to continuously improve their product portfolio.
Outlook
Sustained Growth in Farmer Numbers

Looking ahead to the 21/22 season we are pleased to share that we will be working with 10 brands and retailers, 11 Implementing Partners and a total of approx. 79,000 farmers across six Indian states. We are happy to see further diversity in these numbers as 58,000 of these farmers are certified organic and 21,000 are in-conversion farmers.

Figure 10: Growth of Farmer Numbers in OCA Farm Programme

Accelerating OCA’s In-Conversion Strategy

This year, OCA expanded to include its first full ‘in-conversion’ projects. A key move for us as we see the conversion period as a practical business transformation project for the farm. By helping farmers navigate the challenges of the in-conversion period, we can improve their livelihoods in the same way we do for organic certified farmers and increase the supply of organic cotton—a win for all.

Our Farm Programme removes the very real barriers to conversion: from finding the right seed to suit a farmer’s regional environment, assisting farmers by pre-financing their seed costs, ensuring they have the coaching they need to change cultivation methods and the training required to learn how to make their own inputs.

Most importantly, we make sure that farmers have a guaranteed buyer for their cotton, to illustrate that it does pay to farm organically. This is possible because more brands are adopting in-conversion cotton showing that they are willing to invest now to access this increased supply in the future. Our Contributors have managed to grow the number of in-conversion farmers in the current 21/22 season to 21,000 farmers.

We are also supporting our eligible existing farm partners by inviting them to apply for additional OCA funding to support their in-conversion farmer activities from the start of the 22/23 farming season. This contribution plus the strong brand support in the Farm Programme will help us meet our goal to significantly grow the global number of organic farmers by 2030.

Fast-tracking Field Staff Capacity Building

The Project Capacity Building Workshops, are a tool to enable capacity building and cross-learning are organised remotely with help of matter experts – Abhinav AHRDO. A series of interactive online sessions were organized for the project teams of OCA farm groups after carefully assessing the needs of the project teams and seeking inputs from individual farm groups on ground. In addition to the lecture style sessions, digital tools like short advisories, cotton package of practices, etc. were developed to help the field staff better their outreach with farmers.

The workshop saw active participation from over 200 participants from across states. What was initiated as a mitigation plan to combat covid led limitations proved to be an efficient and innovative capacity building tool with a powerful potential for scale up. Digital trainings have proven to add value for the project teams on an ongoing basis throughout critical points in the season. This has paved way for OCA to scale up digital learning and establish a collaborative platform to allow farm groups to share their best practices and enable cross learning.

Pakistan Market Entry

As part of the OCA 2030 strategy Pakistan was identified as the next opportunity where OCA’s Farm Programme can make a difference. In 2021, OCA began preparing for our Pakistan market entry by partnering with agriculture specialist organisation “CABI” who are based in Islamabad. Their work will help us understand the national organic growers’ challenges and opportunities across the new and existing cotton growing regions. CABI’s report will inform our key decisions and frame OCA’s mission in Pakistan.

We also partnered with local third-party verifiers “GL Sustainable Business Consulting” to pilot OCA’s M&E framework amongst the recently established organic cotton farmers in the Balochistan province and look forward to seeing the results from those projects. We want to thank all participating partners and new Contributors in Pakistan for the support we have experienced. We are positive that this collaborative spirit will be a key ingredient to nurturing a thriving organic cotton farming system within Pakistan.

Figure 11: OCA’s Pilot Projects in Pakistan

NOTE: Map is for representation only.
Acknowledgements

We would like to thank our Contributors for their unwavering support to our collective action. Your commitment continues to help steer, guide and advice our mission.
Annexes
ANNEX 1

OCA Farm Programme Guidelines and Verification Methodology

The OCA Farm Programme is a direct-to-farm sourcing model and capacity-building programme which aims to advance farmer prosperity while creating a resilient, responsible, and transparent supply chain for all players. Together with our Brands and Retailers and on-the-ground Implementing Partners, the Farm Programme works with tens of thousands of farmers across India. The Farm Programme provides farmers with access to seeds, training, market linkages to sell their organic cotton and better prices for their products so they can earn more for farming organically – all aimed at enabling better livelihoods for organic farmers and transparent supply chains and quantified impact for committed Brands and Retailers.

It is important to mention that OCA’s Farm Programme functions within a system of existing and regulated standards (NOP/NOP as part of the IFOAM family of standards) and certifying bodies. What makes OCA unique, is that whilst we aim to operate on top of the standards, our role is to make use of verified data as a baseline to drive improvement. In this capacity we support both the organic farming standards and the organic farming community.

To ensure our Farm Programme is making a meaningful difference, OCA operates a Monitoring & Evaluation (M&E) system which allows us and our stakeholders to measure the influence of the Programme against its results framework. Our M&E system is embedded in the ‘OCA Farm Programme guidelines’ which amongst its action based guiding principles provides the basis for our Monitoring, Validation, Evaluation, Learning and Reporting (in short our M&E) cycles. In addition, several of our projects are Fairtrade or ROC certified.

Monitoring the scale of the Farm Programme is important; but looking beyond the total number of farmers, hectares of land, and metric tonnes of cotton sourced through it, is critical too. As a multi-stakeholder organisation committed to unleashing the positive impacts for organic cotton for people and planet, we must understand whether our work is delivering against that mission. To do that, we champion data-driven insight, looking beyond the results alone and monitoring the inputs, activities, and outputs that underly those results.

We work with third-party agencies who collect, verify and validate the field level data for our Farm Programme and this data enables us to measure and monitor the real change our organic cotton farmers experience in varied contexts; from in-conversion farmers starting their organic cotton journey to certified organic farmers.

No matter the farmer’s background or geographic location, the inclusion of third-party verified data in our Monitoring & Evaluation system provides confidence and enables continuous improvement in farmer livelihoods; whilst building transparency, integrity and supply in the organic cotton sector. Validated and verified data provides input for impact reporting across several categories, such as, seed plus input provision and selection, agronomic result and yields, farmer general data, implementation partner provided support, operating cost and revenue, business case and payment verification, adherence to the standards and integrity, quality and lint volume output. In addition to our annual Farm Programme Impact Report we make use of our data pool to drive continuous improvement, through our multi-stakeholder platform, in the areas of: seed variety, seed growers, improving integrity in the sector, sharing of best practice and training and volume reconciliation.

Our Farm Programme Guidelines, M&E system and Verification and Validation Manual for Third Party Auditors function as a framework to the Farm Programme data flow of: input, programme activities, expected output, outcome and impact. To ensure a robust M&E system and up to date ‘Farm Programme Guidelines’ we make use of external consultants to review and update our farm programme guidelines, verification manual and third-party service agreements.
ANNEX 2
Monitoring and Reporting Methodology

Sample selection for validation
For the validation of indicator data collected by the Implementing Partners in the Farm Programme, a sample reference group of over farmers is chosen using a stratified random sample method from the complete list of farm programme listed farmers. The selected farmers are visited in the field (see also; The impact of COVID-19 on validation in the 20/21 season) by third-party validation teams and in some projects, purposive sampling took place.

Control farmers
To understand the impact of the programme on farmers, a control sample of conventional representative farmers who are not participating in the Farm Programme is chosen from the different project villages. Control farmers grow non-organic (conventional) cotton and are selected based on similar land size categories to farmers in the Farm Programme. The identification of control farmers is based on information provided by the project field staff and the farmers. The comparison of farm economics data of project farmers with the conventional control farmers allows for the assessment of the business case for organic cotton farming.

Qualitative information and case studies
In addition to quantitative data, qualitative information was also gathered through case studies and focus group discussions with farmers. The qualitative component of the data covered the following themes: farmer’s perceptions about changes in their livelihoods due to organic cotton farming, access to services, farmer’s satisfaction with their ability to access services that typically increase productivity, the future of organic cotton farming, farmer’s motivation to continue with organic farming.

All results are consolidated, checked and analysed by a third party, and presented in this report by OCA to report on progress against our collective ambitions.

ANNEX 3
Managing Integrity at the Farm Level

Diagnosing, managing and improving integrity of organic cotton at farm-level is a key deliverable for OCA. Targeted projects and activities are spread across the Seed Programme and the Farm Programme. Within the Farm Programme, measuring integrity is diagnosed, managed and improved through our onboarding process, ongoing Monitoring and Evaluation activities as well as frequent sampling at different stages.

When reviewing the GMO testing results across the Farm Programme, it is important to note that organic is not a claim of absolute freedom from contamination by GM materials. It is a claim that organic producers do not deliberately or knowingly use such technology, and that they take steps to avoid the presence of GM products in their systems and products. OCA’s objective is to measure and deliver continuous improvement across all its projects.

OCA supports the use of qPCR (Real-Time Polymerase Chain Reaction) tests conducted following the ISO’s recently established IWA 32-2019 Screening of Genetically Modified Organisms (GMOs) in Cotton and Textiles. In addition to the summary of lab test results presented in this report, many farm projects also performed on-site BT strip tests and in some cases ELISA tests, to control for GM presence. GMO testing can detect GM presence early so corrective measures can be taken to prevent or minimise GM presence in downstream product flows by excluding the contaminated sample source (seedlot/farmer field/seed cotton batch or heap) from further processing and distribution. In addition to testing, Farm Programme partners implement tactical measures to maintain integrity at farm level including, sourcing non-GM cotton seed for their farmers and training farmers in border cropping and segregation practices to ensure the separation of organic from non-organic cotton in post-harvest storage and processing to prevent GM presence in the production cycle of organic cotton. Work is ongoing around strengthening the existing infrastructure, particularly at seed production, to support efforts to maximise integrity within the supply chain and at the farmer level.

ANNEX 4
Access to Documents
Farm Programme documentation is available on our website www.organiccottonaccelerator.org/resources
1. Farm Programme Guidelines
2. Verification Manual
3. Requirements for Third-Party Verifiers
4. Approved Verifier List
5. Standard Operating Procedure for GMO Sampling and Testing