This report celebrates our subsidiary in Nigeria, which we highlight through a strong focus on our initiatives in the West African country.
His Majesty the King Mohammed VI of Morocco
In a context of climate crisis coupled with a food crisis, the world is facing complex, changing and unprecedented challenges, which can only be solved on a global scale. In this new framework, Africa is in a position to contribute decisively to the search for sustainable solutions, by taking the path of permanent innovation, whether technological, financial or social.

Mostafa TERRAB
Chairman and CEO of OCP Group
INTRODUCTION
Who we are

OCP Africa is a subsidiary of the OCP Group, a century old fertilizer manufacturer, which holds custody of the world’s largest phosphate reserves.

With the OCP Group headquartered in Morocco, and serving clients across the world, it became apparent that in order to properly serve the African market, a subsidiary that only focused on the unique needs of the continent was required. This led to the launch of OCP Africa in 2016, which has since grown to have a presence in 12 countries, including Benin, Burkina Faso, Cameroon, Cote d’Ivoire, Ethiopia, Ghana, Kenya, Nigeria, Rwanda, Senegal, Zambia, and Tanzania.

Our work across the continent is focused on improving crop productivity and socio-economic empowerment of smallholder farmers by addressing the challenges they face along the value chain.

Our projects are built on numerous partnerships with private players, governments, and developments organizations to provide smallholder farmers with access to quality inputs, finance, agricultural technologies, knowledge, training, and linkage to the market.

Our Vision

At OCP, we believe that Africa can be a world leader in sustainable farming, using its vast agricultural resources to produce enough food to feed itself and with surpluses to export. We aim to be part of this incredible food system transformation journey by enabling the people who will make this a reality - Africa’s smallholder farmers - shift away from subsistence agriculture to productive farming for nutrition security and income generation.
It is now five years since OCP Africa was launched as a subsidiary of the world-renowned OCP Group. In that short period, we have established a strong presence in 12 countries, through which we continue to equip the continent’s agricultural producers with the inputs, technologies and knowledge needed to transform their farms into profitable enterprises.

We are now entering a new strategic period, which we have aptly titled “Green Africa”, as it reflects our ambition to transform Africa’s agricultural lands into platforms for sustainable food production. Our various teams spent several months this year preparing for the successful deployment of the Green Africa strategy, which runs until 2026. The Green Africa offering is structured around five pillars – Customization; Digitalization; Research & Development; Supply chain and Innovation. These pillars are integrated to offer wholesome solutions for some of Africa’s biggest farming problems.

Under Green Africa, envisioned as a strategy of rapid development, we intend to reach many more farming households through holistic solutions under our flagship programs, including the Farm & Fortune Hub, which provides solutions that enable farmers to optimize their yields, boost farm productivity and increase their profitability. This, and our many other programs will be supported by our highly-motivated Agripromoters, whose number we expect to grow in the coming years.

Our Agribooster flagship will continue to dominate operations in the coming years because it directly ascribes to farmer interactions through the strengthening of input supply chains, market linkages and financial inclusion. We also have new flagships in the pipeline, all of which prioritize the interests and needs of Africa’s smallholder farmers, as a way of growing their enterprise.

In this report, we have elected to spotlight our work in Nigeria, which has witnessed increased activity across all our flagship programs. In the coming annual reports, we plan to devote more focus to each of our subsidiaries in the different countries we serve.

As you will read in this report, our presence in Nigeria has been an adventure of agricultural success driven by partnerships and collaboration, and grounded in research and innovation for the benefit of farming communities. Our fertilizer industrial project in the country is now taking off after we signed agreements earlier this year, for the actualization of the $1.5 billion plant. We hope to have this plant operational starting 2025. In the meantime, in 2021 we inaugurated a state-of-art blending plant in the country, with two more under development, and planned for launch in June and October 2022. These units will help boost the local production of crop and site-specific fertilizer blends.

Across the business, we continued to grow in terms of reach and coverage, distributing about 2 MT of different fertilizer products to farmers in Africa. We are looking to ride on this success for more growth in 2022 and beyond. I also wish to recognize our different partners across Africa, who helped accelerate our farmer reach through last mile advancements.

Thank you and I hope you find this report an informative read.
# 2021 Highlights

## 2021 at a glance

<table>
<thead>
<tr>
<th>Country</th>
<th>Summary</th>
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</thead>
<tbody>
<tr>
<td><strong>2M tons</strong></td>
<td>Quantity of OCP Africa fertilizer sold in Africa</td>
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</table>

### School Lab

<table>
<thead>
<tr>
<th>Location</th>
<th>Summary</th>
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</thead>
<tbody>
<tr>
<td>Tanzania</td>
<td>14K soil samples collected from 400 villages</td>
</tr>
<tr>
<td>Tanzania</td>
<td>136 extension agents involved</td>
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<tr>
<td>Tanzania</td>
<td>13,915 farmers received soil test results</td>
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<tr>
<td>Tanzania</td>
<td>41,093 farmers trained in GAP</td>
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<tr>
<td>Nigeria</td>
<td>8 site-specific fertilizer formulations developed</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Location</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Côte d’Ivoire</td>
<td>20,500 farmers trained in GAP</td>
</tr>
<tr>
<td>Côte d’Ivoire</td>
<td>320 villages visited</td>
</tr>
<tr>
<td>Côte d’Ivoire</td>
<td>10K farmers received soil analysis</td>
</tr>
<tr>
<td>Côte d’Ivoire</td>
<td>45 cooperatives affected in the Rice and Maize sectors</td>
</tr>
<tr>
<td>Kenya</td>
<td>6K soil samples analyzed in 3 counties</td>
</tr>
<tr>
<td>Kenya</td>
<td>15K farmers targeted</td>
</tr>
<tr>
<td>Kenya</td>
<td>10 farmer field day events organized</td>
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### Agribooster

<table>
<thead>
<tr>
<th>Location</th>
<th>Summary</th>
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</thead>
<tbody>
<tr>
<td>Ghana</td>
<td>4,9K farmers reached by women in Agribooster program</td>
</tr>
<tr>
<td>Ghana</td>
<td>7 aggregators involved</td>
</tr>
<tr>
<td>Côte d’Ivoire</td>
<td>Nearly 6M seedlings raised in OCP Africa-supported greenhouses</td>
</tr>
<tr>
<td>Nigeria</td>
<td>1,500 project beneficiary producers</td>
</tr>
<tr>
<td>Nigeria</td>
<td>300 direct jobs created</td>
</tr>
<tr>
<td>Senegal</td>
<td>19 field schools installed</td>
</tr>
<tr>
<td>Senegal</td>
<td>40 project beneficiary cooperatives in 5 regions</td>
</tr>
<tr>
<td>Kenya</td>
<td>1,500 banked producers</td>
</tr>
<tr>
<td>Kenya</td>
<td>1,500 project beneficiaries</td>
</tr>
<tr>
<td>Kenya</td>
<td>5K farmers reached</td>
</tr>
<tr>
<td>Kenya</td>
<td>30 demo sites</td>
</tr>
<tr>
<td>Kenya</td>
<td>6 Farmer field days</td>
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</tbody>
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* NFWM: New Fertilizer With Micronutrients
2021 Highlights
2021 at a glance

- **Industrial platforms**
  - $5.0bn
    - Value of manufacturing plant projects under development
    - $2.2bn Fertilizer plant in Ethiopia
    - $1.5bn Fertilizer plant in Nigeria
    - $1.3bn Fertilizer plant in Ghana

- **Digitalization**
  - 2K farmers
    - in Côte d’Ivoire & Ghana involved in GoMobile digital survey
  - Udongo App
    - 1,200 users

- **Development of specific formulas**
  - 2 new CACAO formulas developed in partnership with the CCC* and the CNRA**
    - * Conseil Café Cacao
    - ** Centre National de Recherche Agronomique

- **Demo Sites**
  - 350 Demo Sites
    - implemented in collaboration with SeedCo Limited

- **Financial inclusion**
  - $4M
    - credit guarantee initiative with AFFM*

- **Awards**
  - 1st
    - in agricultural inputs at Food and Agriculture Benchmark of the World Benchmarking Alliance (WBA)
    - 4/350 - overall

- **3 new blending units**
  - developed in Nigeria
  - 500,000 annual production capacity

- **5 blenders**
  - under construction in Senegal, Côte d’Ivoire, Ethiopia and Rwanda

- **200K enrolled operators**

- **55 Field Days**

- **$1M**
  - received in credit guarantee facility

- **9 specific formulas**
  - developed for maize, tomato, wheat, potato and oil palm.

- **13 specific formulas**
  - developed to increase yields on acid soils

- **20K Farmers trained**

- **430,000 farmers**
  - to be reached in three years

- **104,000 women farmers**
  - targeted in Côte d’Ivoire & Ghana

* Africa Fertilizer Financing Mechanism
** Centre National de Recherche Agronomique

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9 specific formulas developed for maize, tomato, wheat, potato and oil palm.

13 specific formulas developed to increase yields on acid soils.
OUR PERFORMANCE IN 2021
For Farmers

OCP Africa’s strategy in Africa ensures that smallholder farmers have the best agricultural inputs for better crop quality and increased yields.

For this reason, we have dedicated resources to training farmers on the importance of modern and improved agricultural inputs, as a factor of increased agricultural production. Beyond the trainings, field demonstration plots show farmers how to practically use and manage the recommended inputs for a transformation in their yields.

To ensure that the farmers continuously apply the guidance in their production, we strategically deploy agripromoters, who act as extension agents, recommending the appropriate agricultural practices and inputs for optimum harvests.

The agripromoters are also central to the provision of soil-testing and mapping services, which are instrumental for increased and sustainable agricultural productivity. From the mapping exercise – OCP Africa has mapped over 30 million hectares across Africa – unique soil nutritional breakdowns are created to show farmers which fertilizers will best suit their soil and crops. Our involvement has enabled over one million farmers to gain the capacity to implement sustainable plant nutrition techniques on their farms, leading to increased and higher-quality harvests.

As the farmers gain new production knowledge and witness a transformation in the quantity of their harvests, many are inspired to increase their production for commercial purposes, but this expansion often comes at a cost that they may not immediately be able to meet. To bridge this gap, OCP Africa has several partnerships with financial institutions to support the delivery of agricultural loans for smallscale producers. In some of these partnerships, OCP serves as a concessional partner making the loans affordable to farmers, while de-risking the lending for providers.

Such loans have been instrumental in helping farmers acquire mechanization capabilities, and post-harvest handling technologies. As the farmers’ output increases, they require the markets to sell their surpluses, with the profits made being used to sustain or grow their production capabilities. It is, therefore, imperative that they access the most lucrative markets, a linkage OCP Africa provides through its Agribooster program and by using its various partnerships and technologies to identify areas of surpluses and directing them to areas of increased demand.
In 2021, OCP Africa engaged in various activities that sought to improve the welfare of different farming communities across Africa. The outcomes of these investments are highlighted below.

**Transforming African farming through better financing options**

Towards the end of 2020, the African Development Bank approved the participation of the Africa Fertilizer Financing Mechanism (AFFM) in a $4 million partial trade credit guarantee with OCP Africa. OCP Africa and the AFFM will each contribute $2 million in trade credit guarantees.

The three-year partnership, which officially commenced in 2021, aims to reduce the potential risks along the agricultural value chains, to improve the access to quality inputs, including fertilizers, in Côte d’Ivoire and Ghana.

In total, the project will support 430,000 smallholder farmers, including 104,000 women, in the two countries, by facilitating their access to quality and affordable agricultural inputs, as well as training on good agricultural practices.

The project is built on OCP Africa’s Agribooster initiative, which relies on an inclusive approach to provide farmers access to quality inputs, training, finance and market linkages for improved yields, incomes and livelihoods.

The financing partnerships is expected to boost productivity, increasing maize yields in Ghana by 35% and rice yields in Côte d’Ivoire by 30%.

### Soil testing and mapping for all

One of the key aspects of increased agricultural productivity is soil testing, which works to help farmers in making the right selection of fertilizers for their crops and regions. With most farmers being either unaware of the need for soil testing or unable to pay for it, OCP Africa designed the School Lab, a mobile soil laboratory that travels to remote areas, providing free soil testing and giving recommendations for the right fertilizer application.

In 2021, the OCP Africa School Lab addressed four regions (spanning 400 villages), in Tanzania, where 13,915 samples - against a target of 12,000-14,000 - were collected and tested.

Through the 136 extension service providers in the project, the School Lab trained 41,093 farmers on good agronomic practices, against a target of 40,000.

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**13,915 Soil samples collected and tested in Tanzania**

**41,093 farmers trained on good agronomic practices**
Delivering the best production inputs to farmers

Agribooster is OCP Africa’s unique initiative for food crops that supports farmers holistically.

The program, which was launched in 2018, also helps farmers in accessing financing and insurance.

In 2021, the Agribooster program targeted 5,000 smallholder women farmers, but ended up surpassing it by reaching 10,000 women in five different regions in Ghana. The registered farmers received 3,600 Mt of NPK through seven aggregators. In addition, over 16 field demonstrations on maize and rice cropping systems were implemented in three regions, over 10 districts.

This was as field days in November showcased good agronomic practices to farmers, while creating an environment for interaction with other stakeholders.

In Côte d’Ivoire, the Agribooster program sustained its focus on key value chains (rice and maize). The project addressed problems in a combined coverage of 8,500 ha, including 3,500 ha for rice and 5,000 for maize. Through a network of public and private partners, the program has, so far, benefited more than 3,000 farmers, who have reported yields between 4 and 4.5 tons per hectare.

Beyond inputs, these farmers have benefited from capacity-building programs and access to digital means of payment.

Using popular media to educate farmers

With the Covid-19 pandemic complicating the interactions between people due to social distancing and limitation of movements, the Farm & Fortune TV and radio show bridged the gap in the availability of information on good agronomic practices. This was as the School Lab initiative, which also plays a role in educating farmers and farming communities, was limited by lockdowns. Filmed and recorded in Nigeria, the Farm & Fortune show is a variety TV and radio program that is focused on promoting agricultural best practices.
OCP Africa and APNI promote adoption of multi-nutrient fertilizers in Kenya

As part of an ongoing collaboration with APNI that started in 2019, OCP Africa Kenya promoted the adoption of multi-nutrient fertilizers in Kenya during seasons 2021A (Sept 2020 to Feb 2021) and 2021B (Mar to Aug). A total of 460 demonstration plots at farmers’ fields and research stations were set up and 50 field days conducted to train 60,000 farmers and village-based advisors on good agronomic practices, and to sensitize policymakers on the need for multi-nutrient fertilizers.

Leveraging ICT to support women farmers in Ghana

Millennium Promise Alliance (MPA) and OCP Africa signed a Cooperative Agreement on November 2020 to implement a TeleAgric Project in four districts in Ghana. The agreement seeks to leverage MPA’s TeleAgric technology to provide access to training for the Women in Agribooster project.

As part of the agreement, MPA redeveloped its TeleAgric system and developed customized Farmer Registration and Farm Mapping Applications, as well as a virtual farmers’ field school, which has been deployed in the four project districts.

For farmers in 2022 and beyond

Based on learnings from 2021, OCP Africa will continue in 2022 to prioritize investments that yield optimum benefits for the continent’s smallholder farmers. The Agribooster program will continue expanding to reach more farmers with the right inputs and agricultural production knowledge, as well as markets and financial support. We expect the Farm & Fortune program to continue growing in terms of reach and impact, and once the Covid-19 pandemic is under control, the School Labs will be back on the road delivering the much-needed soil testing and mapping resources to underserved farmers.
Our partnerships in 2021

Since OCP Africa was founded in 2016, our mission has been to deliver the solutions that Africa’s farmers need to transform their agricultural activities from subsistence to profitable businesses. We continue to do this by availing the solutions that lead to the nutritional transformation of soils, while ensuring that farmers have access to other high-production inputs like improved seeds.

We also ensure that they have access to the financial support required to acquire the best inputs, mechanization and other technologies. This is in addition to linking them with better markets for increased incomes. We understand that for even greater impact we need to reach as many as possible of the hundreds of millions of smallholder farmers in Africa. This is not an easy task, but one that can be achieved through collaboration with like-minded stakeholders in the agricultural value chains. Working together with other players in the private sector, development community and governments, we are effectively promoting value chain growth and diversification, leading to sustainable agricultural ecosystems.

Joining forces to boost local production capacities

In March 2021, OCP Africa signed a commencement deal with the Fertilizer Producers & Suppliers Association of Nigeria (FEPSAN) and the Nigerian Sovereign Investment Authority (NSIA) to establish a USD1.5 billion fertilizer and ammonia plant in the country. This was part of the ongoing agreement with the Nigerian Government to ensure that farmers in the country had regular access to affordable fertilizers of the highest quality. The plant is set to begin production in 2025, with an estimated annual output of 750,000 tons of ammonia and 1 million tons of fertilizer, with surpluses of ammonia being exported to countries like Morocco, where it is needed to sustain OCP Africa’s largest fertilizer plant.

Meanwhile, OCP Africa, FEPSAN and NSIA are collaborating to support the PFI in its second strategic phase by jointly offering customized solutions capable of ensuring long-term sustainable development for Nigerian agriculture. The first phase of the PFI focused on establishing blending platforms and producing the basic widely demanded NPK 20.10.10 and 15.15.15. This phase was regulated and the government guided the product types and pricing as a way of stabilizing the market.

750K tons of Ammonia

1M tons of fertilizer
A grant to finance farmers’ training in Côte d’Ivoire

The International Islamic Trade Finance Corporation (ITFC), a member of the Islamic Development Bank (IsDB) Group, approved a $107,000 grant to drive our Agribooster program’s reach to 20,000 rice farmers in Côte d’Ivoire, as a way of enhancing agricultural value chains in the country. Part of the funding will be used to train the farmers on good agricultural practices including soil fertility management through the use of high-quality fertilizers, and increasing yields through hybrid seeds.

ITFC’s grant for the OCP Africa Agribooster program in Côte d’Ivoire, will help keep global food supply chains alive and enhance agricultural value chains in the country especially during the difficult circumstances.

Hani Salem SONBOL
CEO of ITFC, Eng.

Improving the Agricultural Value Chain in Africa through strong partnership

OCP Group and the International Finance Corporation (IFC), signed a milestone financing agreement in June. This partnership will help support OCP in expanding its value chain in Africa, as part of its effort to contribute to the economic development of the continent and to set up sustainable food systems in the region.

IFC’s $100 million financing will help OCP Africa expand its logistics networks and increase the availability of fertilizers adapted to local soils and crops in Côte d’Ivoire, Ethiopia, Ghana, Kenya, Nigeria, Senegal, and Tanzania. The funds will also be used to put in place additional farmer development programs.

The strategic partnership between OCP Group and IFC continues to grow, and today’s agreement is a testament to the shared values and high level of trust our institutions enjoy.

Mostafa TERRAB,
Chairman & CEO of OCP Group

The repercussions of the pandemic on food security call for new holistic models to produce enough food in Africa. The Agribooster program is a good example of an initiative designed to support African food systems to become more resilient, and we are glad to have the ITFC as a strong partner in Côte d’Ivoire.

Dr Mohamed Anouar JAMALI
CEO of OCP Africa

Through our partnership, smallholder farmers will be able to access climate smart agriculture practices, increase productivity thus improving their livelihoods; and communities will be able to better withstand the impact of climate change.

Makhtar DIOP,
IFC’s Managing Director

Dr Mohamed Anouar JAMALI
CEO of OCP Africa
Signing ceremony with Nigerian delegation

To strengthen our impact in Nigeria, earlier this year we hosted a high-profile delegation led by the Minister of Petroleum Resources of Nigeria, Hon. Timipre Marlin Sylva. The visit sought consensus on the next steps of the industrial project that was officially launched in June 2018 and to strengthen the bilateral collaboration following the success of the first phase of the Presidential Fertilizer Initiative (PFI) supported by OCP Africa. During the week-long engagement, we signed various Memorandums of Understanding (MoUs) and other agreements that will strengthen our support of farmers across the country through locally-produced, high quality and competitively-priced fertilizers that are adapted to the needs of their soils.

- **MoU with the Fertilizer Producers & Suppliers Association of Nigeria (FEPSAN) and the Nigeria Sovereign Investment Authority (NSIA)**
  This MoU guarantees our commitment to the second phase of the Nigerian Presidential Fertilizer Initiative (PFI 2). This partnership extends our successful collaboration with FEPSAN and NSIA under PFI 1. Our initial collaboration spanned the entire agricultural value chains including the introduction of customized fertilizers adapted to local soils and crops and increasing the availability of fertilizers in the local market at competitive prices.

- **Agreement with NSIA**
  This agreement aimed at creating a joint-venture company JVC that oversee the development of an industrial platform for the production of ammonia and fertilizers in Nigeria. The industrial platform aims to utilize Nigerian gas and Moroccan phosphate to produce 750,000 tons of ammonia and 1 million tons of phosphate fertilizers annually by 2025.

- **MoU with MPN, NNPC, GACN and NSIA**
  To support the industrial platform, we had a gas-supply Framework Agreement with Mobil Producing Nigeria (MPN), the Nigerian National Petroleum Corporation (NNPC), the Gas Aggregation Company Nigeria (GACN), and the NSIA.

- **MoU with NNPC and NSIA**
  This agreement seeks to evaluate the opportunity of an equity investment by the NNPC in the JVC and for its support in gas acquisition.

- **MoU with the Akwa Ibom State and NSIA**
  This MoU covered land acquisition, administrative facilitation and common agricultural development projects in the southern State.
Sustaining the growth momentum across Africa

Ethiopia is one of Africa’s largest agricultural producers for commodities such as maize pulses. The country’s agricultural sector is also growing rapidly, propelled by the government’s prioritization of agriculture as a key contributor of development. With increased activity in agricultural production comes the need for production inputs like fertilizer, which is insufficiently used with Ethiopia’s farmers using an average of 36kg/ha against a 50kg/ha target agreed on by African leaders at the 2006 fertilizer summit.

To bridge this gap, in 2021, OCP and the Ethiopian government signed a joint development agreement to build a $3.7 billion fertilizer plant in the gas-rich region of Dire Dawa in the northern part of the country. The project involves the construction of a fertilizer plant with a production capacity of 3.8 million tons per year on 40ha of land.

The project will be developed in two phases, the first one using an investment of $2.4 billion to build a 2.5 million-tonne fertilizer production unit, combining urea and NPK/NPS products, with expansion to reach the 3.8m target in the second phase.

$3.7 billion will be invested to build a fertilizer plant by OCP and the Ethiopian government

Transforming the fertilizer sector through dialogue mechanisms

The first-ever Ghana Fertilizer Platform (GFP) was established at the third fertilizer stakeholders’ roundtable meeting in Koforidua, the capital of Eastern Region in southern Ghana, during which OCP’s General Agronomist, Richmond Dogbe, was elected as co-chair of the committee. The roundtable was organized by the Ghana Fertilizer Expansion Program (GFEP)/MoFA with support from the IFDC.

The GFP was created to increase the active participation of value chain actors in a more sustainable transformation of the fertilizer sector through dialogue mechanisms. This is part of members’ commitment to support the Government of Ghana’s flagship Planting for Food and Jobs (PFJ), which aims to achieve the twin goals of reducing the costs incurred by farmers in acquiring inputs and introducing farmers to new agricultural technologies that boost productivity.
Using the right technology to tackle production challenges

Noting a gap in Nigeria’s tomato value chains, in 2020, OCP entered into a partnership with the Syngenta Foundation for Sustainable Agriculture (SFSA) to equip farmers with the right knowledge to transform their production. The partnership uses Agripromoters and Hub managers to train farmers on good agronomy practices including modern vegetable nursery establishment and management, retail business management, and digital data capturing and management tools.

In its second year (2021), the partnership helped address constraints that hinder the growth of tomatoes in Nigeria and improve agricultural productivity and standardization of outputs. Building on OCP Africa’s flagship platform Farm & Fortune Hub and SFSA’s Farmer Hub, the project focused on establishing greenhouses and input hubs across tomato farming locations for easy access to seedlings, modern agricultural technologies, training, and guided practices. The project also provided market linkages through guaranteed connections to commercial processors.

Collaborating with like-minded partners to train farmers

OCP & Seed Co train Kenyan farmers

During season 2021B (March - August), OCP Kenya Ltd teamed up with seed manufacturer Seed Co to train 5,000 smallholder farmers on good agronomic practices. The project established 350 demonstration plots both at roadside locations and centers of agriculture excellence, and five farmer field days out of the scheduled 30 were held reaching at least 5000 farmers. 25 field days were suspended due to Covid-19 containment restrictions.

Working with other researchers to reclaim problematic soils

In 2021, we signed a memorandum of understanding with the Nigeria Institution of Soil Science (NISS) to improve problematic soils in the country. This is upon the realization that the productivity per hectare of Nigeria’s soils is low compared to that of developed countries, owing in part to poor soil conditions, that leaves some as either acidic, alkaline or saline. Such damaged soils inhibit the development of plant root systems leading to low productivity.

As part of the partnership with the NISS, we work to deliver the supply of fertilizers and other farm inputs that rejuvenate problematic soils. Following field assessments and soil mapping activities in target areas to promote crop and site-specific fertilizer blends. This is in addition to bridging the education gap by supporting extension workers to support farmers through training on the management of problematic soils using sustainable agronomic techniques.
Boosting innovation capabilities

Early 2021, OCP S.A. agreed to a 50/50 joint venture with Chinese listed company Forbon to develop a new generation of fertilizers and smart agriculture technologies, leveraging the innovation capabilities of both companies. This is part of OCP’s strategy to use innovative partnerships to avail the best agricultural inputs and associated resources to farmers across Africa.

The Joint Venture will have access to a dynamic network of innovators as well as leading universities and research centers in China. Later in the year, during a workshop in El Jadida, Morocco, OCP Africa’s Business Disruptive Development team discussed possible collaboration opportunities with Forbon in many aspects of innovation.

Reducing overreliance on imports

Despite Senegal being one of the few countries with a natural resource base of phosphate, which is used to produce fertilizer, it imports up to $58 million worth of fertilizer every year. To boost local production, in 2021, OCP supported the acquisition of three smart blending facilities by a local partner, Allah Holding, and trained its staff in handling the equipment, in addition to leading the production of blend formulas for agronomic trials on 75 peanut farms.

Partnerships with Kenyan Government Agencies

In 2021, we renewed our contracts with two key government agencies under the Ministry of Agriculture - National Cereals and Produce Board (NCPB) and Kenya National Trading Corporation (KNTC) - and continued supplying fertilizer to smallholder farmers in main agricultural zones through their main depots.
Research & Development

The OCP Group has remained competitive for over 100 years by using a science-led approach to find solutions for farmers. It is these principles that gave OCP Africa a rapid take-off when it was founded in 2016, to offer holistic support to the continent’s farmers through improved agricultural technologies and production training.

Investments in 2021 focused on gathering the evidence needed to show farmers the transformative impact of fertilizer use and integrated soil fertility management (ISFM) techniques. One of our flagship programs, ISFM aims at maximizing the agronomic efficiency of applied nutrients for increased crop productivity. Our ISFM strategy is based upon an understanding of local soil nutrient and water supply as well as knowledge on crop nutrient demand (attainable yield and required nutrient concentrations) to deliver the products and agronomic practices that increase harvests.

Exciting harvests from soybean trials sway Ghanaian farmers

Our four-year fertilizer trial program in northern Ghana reached closure in 2021 after successfully training farmers in 30 communities across 12 districts on the usage of rock phosphate (RP) and customized NPS fertilizers to increase their yields. The trials were undertaken on soybean, a crop that is relatively new in Ghana, but is quickly gaining economic prominence in the country following increasing popularity and uptake by farmers.

The trial involved the evaluation of rock phosphate as a soil amendment material for reducing acidity on the acid-dominant soils, thereby enhancing nutrient uptake, and effectively, increasing the growth and yield of soybean. Many farmers attested to the effectiveness of rock phosphate in combination with triple superphosphate (TSP) as a soil amendment material, citing impressive yields.

Following the successful trials, which received the endorsement of local chiefs, farmers expressed an eagerness to purchase and incorporate OCP’s soil amendments onto their fields for the next cropping seasons.

Using rock-phosphate + TSP:
- 62% yield increase over national average
- 140% yield increase over field control

The trial also evaluated the impact of customized NPS fertilizers on yields. In a production field where NPS and RP + TSP (4:1 ratio) were used, massive yields were reported, and in general, the fields treated with NPS got more positive feedback than all other soil treatments displayed.

Using NPS + RP + TSP:
- 100% yield increase over national average
- 150% yield increase over field control

Following the successful trials, which received the endorsement of local chiefs, farmers expressed an eagerness to purchase and incorporate OCP’s soil amendments onto their fields for the next cropping seasons.
Evidence-based promotion of production technologies

Together with the Africa Plant Nutrition Institute (APNI), we are implementing a Nutrient-Catalyzed Agricultural Transformation (NUTCAT) project, which encompasses both training and research to improve precision nutrient management in Africa. The project is currently operational in Kenya, where 11 NUTCAT sites across six counties have been established for maize. The sites were established in Siaya (2), Kakamega (2), Makueni (1), Machakos (2), Embu (3) and Meru (1) during season 2022A (Sept 2021 to Feb 2022).

The site layouts were optimized for farmer practice and treatment, as part of an evaluation of strategies for sustainable intensification. The project seeks to enhance the impact and value generated through plant nutrition for farmers and value chain stakeholders by the inclusive development and dissemination of farmer-centric solutions for sustainable nutrient management.

Combining modern inputs with existing natural resources for greater productivity

As part of our bid to transform the yields of Africa’s farms through strategies aimed at promoting cost-effective soil nutrient recovery and elevation, we engaged in 2021 farmers in the Tigania administrative area of Meru, a county in the north-east of Kenya’s capital Nairobi, on Integrated Soil Fertility Management (ISFM).

Our ISFM strategy aims to deliver productivity gains, increased resilience, and mitigation of damage through practices affecting crop choices and techniques, fertilizer use and organic resource usage by smallholder farmers.

Covering season 2021A (Sept 2020 to Feb 2021), the project delivered to farmers a diverse range of services, including soil testing, on-farm demonstration during a farmer field day. Based on soil analysis recommendations from the region, four treatments i.e., non-application (Farmer practice 1); DAP & CAN (Farmer practice 2); DAP-manure-lime-CAN, and NPSB-manure-lime-CAN were adopted. All soil amendments were applied at recommended rates i.e., 250 kg/ha for planting fertilizers (DAP & NPSB), 150 kg/ha for top-dressing fertilizer (CAN), 4T/ha for lime, and 8 T/ha for manure.
Using digital technologies to accelerate uptake of beneficial inputs

Prior to us presenting and/or recommending any of our soil amendments to farmers, we go through an extensive research process to test their suitability for use based on different variables that we collect from an intensive soil mapping exercise.

Groundnut in Kaffrine

In tight collaboration with OCP Africa partners (ISRA-INP-ASPRODEP) a soil mapping project has been developed to increase groundnut production and to meet farmers as well as agribusiness (oil producers) needs through increasing yield by developing and widely extending to farmers new fertilizer products that give a net improvement in groundnut production soils covering an area of approximately 1 Mha and it will contribute to the rice self-sufficiency policy.

3 fertiliser domains were retained (SN1, SN2, SN3) and 3 new fertiliser formulas were developed and produced. The site-specific new fertilizers aim to enhance the productivity of irrigated rice and their effectiveness is validated by an experimental campaign during 2021. Results of the experimental trials have showed a yield increase of 25% compared to blanket recommendations (DAP + Urea). The experiment is designed such that a distinction can be made between the effect of the site-specificness and the composition of the new fertilizers.

**Partners**

**Soil mapping in Senegal**

As a part of the digital soil mapping strategy and in tight collaboration with its partners; Wageningen university /ISRIC, ISRA,SAED, ICRAF and OCP Africa aimed to develop new fertilizer formula adapted to Senegal Rice production soils covering an area of approximately 1 Mha and it will contribute to the rice self-sufficiency policy.

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**Partners**

**Specific Fertilizers Triumph**

Acronyms: NFWM – New Fertilizer With Micronutrients; NFWM/oM – New Fertilizer Without Micronutrients

- **25%** Grain yield increase using NFWM over default blanket recommendation

- **39Kg/ha** Difference in output using NFWM vs NFWM/oM micronutrients in SN3 domain

- **315Kg/ha - 319Kg/ha** Quantity of production by which NFWM/oM outperforms NFWM in SN1/SN2 domains.

Meanwhile, we are working with ISRA-INP-ASPRODEP on a project in the Kaffrine region of Senegal’s peanut basin to develop fertilizer products that lead to a net improvement in nut yields. Two fertilizer formulae were developed from an initial soil mapping activity in 2021, and 75 validation trials are currently being implemented to assess their performance.

**Partners**

**African soil Microbiome Project in Senegal, Tanzania, Nigeria**

For a sustainable strategy to maintain soil health and quality in agriculture, OCP Africa in partnership with OCP Group, Mohammed VI Polytechnic University, Institut sénégalais de Recherche Agricole (ISRA), Université d’Ibadan (UI) and institut international d’agriculture tropicale (IIA) developed the soil microbiome project in three African countries: Tanzania, Senegal, and Nigeria.

The project aims to accelerate the discovery of African Soil Microbiota, describe the bacterial, fungal, and mycorrhizal taxonomic richness across agroecosystems, and develop a statistical predictive model of soil microbial biodiversity and overall soil health. The project will also identify the core microbiome of each soil type knowing that little or no knowledge is available on the diversity and structure of microbes of major food production ecosystems in Africa.

In this perspective, soil sampling will be conducted in the three countries. The samples will be analyzed at Mohammed VI Polytechnic University’s laboratories to identify soil microbes that play a crucial role in plant growth and soil health.

**Partners**

**Development of Industrially Scalable Rhizobacteria Inoculants in Ghana and Nigeria**

With this project, OCP Africa aims to develop in partnership with: Mohammed VI Polytechnic University, Consultative Group for International Agricultural Research (CGIAR) centers, Bayero University and Savanna Agriculture Research Institute an industrially scalable methods for producing rhizobia inoculants with better shelf life, high stability, persistency and viability of living microorganisms under field soil conditions that effectively increase legumes yields and incomes for farmers in Nigeria and Ghana.

In this perspective screening of soybean varieties for nodulation, growth and Biological Nitrogen Fixation (BNF) testing and evaluation has been done in both greenhouse conditions and field to evaluate the varietal response of soybean to inoculation and substrate preferences under different soil types in Ghana and Nigeria.

In the meantime, field sampling of soil and plant in Ghana and Nigeria is completed and the next step is to isolate and characterize indigenous rhizobia from the respective sites to identify performing strains to increase yield sustainably.

**Partners**
A systematic approach for a better understanding of fertilizer science and technology

The Fertilizer Research & Responsible Implementation (FERARI) program proposes a systematic research approach that increases our understanding of fertilizer science and technology in interaction with actor-based processes which will catalyze large-scale fertilizer adoption. Special attention is given to targeting interventions to the spatial-temporal dimensions of the transformation processes and actor involvement.

The FERARI project is integrating education, research, and implementation programs; this has proven effective for motivating students, as they understand the necessity and experience the impact of their work. In this research and development program, the project developed a comprehensive package of Ph.D. and Postdoc research activities that support, and are supported by Ph.D. students. The project is demonstrating the development of sustainable agricultural intensification by means of knowledge-intensive and location-specific fertilization, with the goal of creating jobs and improving food and nutrition security.

In 2021, 170 trials were conducted and students are conducting analysis for their theses. FERARI is currently preparing 180 trials for the coming season. In addition, the project supported the formal establishment of the Ghana Fertilizer sector stakeholder Platform (FPD) in November 2021. FERARI continues to supervise Ph.D. and Master’s students from Ghanaian universities and UMP, who are conducting research that is relevant to the program. The innovative mode of operation and supervision is changing the way scientists supervise their students and is impacting the research agenda of the institutions.

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Unlocking the potential of acid soils

Sub-Saharan Africa has more than a third of its land covered by acid soils. Their agriculture productivity is low and rapidly declines under cultivation due to poor fertility, aluminum toxicity, and fragile structure. Liming of acid soils is considered the first step toward balanced nutrition of cultivated plants affecting nutrients availability and microbial breakdown of organic matter.

Alongside its partners, OCP Africa launched in 2021 the DAQARA project, which aims to provide a coherent and interdependent tripartite system of diagnosis of acidity (DA), quality of amendments (QA), and recommendation in calcium amendments (RA) for different agrosystems. It will ensure the adequacy between the needs for calcium amendments that protect soil productivity and the qualities that suppliers guarantee for adequate and sustainable use in the different agricultural systems. First field and laboratory activities are set to begin in 2022 in six African countries: Ghana, Côte d’Ivoire, Mozambique, Malawi, Zimbabwe, and Zambia.
Digitalization for farmer empowerment

Mobile technology has rapidly evolved in Africa in the past decade with 495 million people subscribed to mobile services at the end of 2020, representing 46% of the region’s population, and growing by more than 20 million between 2019 and 2020 alone.

The adoption is expected to grow further as the continent’s youthful population, the majority of whom are under 15 years, gains the power to purchase mobile devices, and as telecommunication coverage expands to reach more regions - by 2025, 4G coverage in sub-Saharan Africa will double to reach 28%.

It is against this backdrop that OCP Africa has developed digital products targeting farmers with information for increasing their productivity, as well as helping the company to gain insights on farmers’ priorities for agricultural transformation.

In 2021, we prioritized digitalization projects that enable us to analyze the impact of our various investments in different countries as well as those that increase how we reach farmers across the continent with our yield-increasing technologies. Key to these were investments in Ghana and Côte d’Ivoire that connected smallholder farmers to digital tools for information gathering and sharing.

Using digital tools to identify intervention gaps

To monitor the qualitative impact of our School Lab program, we launched a survey of beneficiary farmers via the GoMobile app. The initial survey of the ongoing program targets 2,000 farmers in Ghana and Côte d’Ivoire, with the collected feedback allowing us to improve our farmer databases.

The survey technology also enables farmers in remote areas, and who do not have access to the internet, to receive personalized, interactive voice messages on feature phones, a service which is also essential for illiterate farmers.

The initial survey of the ongoing program targets 2K farmers in Ghana and Côte d’Ivoire

In 2019, we launched Udongo, a web and mobile application that provides farmers with key production information, including advice on the right inputs to use, where to source them from as well as available markets.

The app was initially launched in Nigeria, and to 2021 we rolled it out in Ghana and Côte d’Ivoire. The deployment in Côte d’Ivoire is part of the launch of Quick-Win with the Ministry of Agriculture of Côte d’Ivoire. As of now, extension agents use Udongo in real-time to assist farmers and collect data during the farming season. Our team in Côte d’Ivoire is continuously monitoring these activities through the website www.udongo.ci. Through the Udongo application, 5,000 farmers were onboarded for OSL and Agribooster projects during the pilot.

So far, the platform has 1,200 users and more than 200,000 enrolled operators in all countries.

Udongo training session for Extension Agents in Korhogo, Côte d’Ivoire
Our commitment to Sustainability

In the past five years that OCP Africa has been in existence, we have made it our mission to promote sustainability in agricultural production. Over the years, we have worked to develop the soil maps that determine the right fertilizer to use for different sites and crops.

Using our network of extension agents, we have ensured that farmers are continuously educated on modern agricultural techniques, which lead to optimize crop production, and, therefore, rising household incomes. Similarly, we remain part of international discourse on resilient food systems, where we engage with different stakeholders in the agri-food value chains on the promotion of sustainable production strategies.
OCP’s sustainability engagements in 2021

UN Food Systems Summit sustainability activities

In September 2021, the UN Secretary-General António Guterres convened a Food Systems Summit (FSS) as part of the Decade of Action to achieve the Sustainable Development Goals (SDGs) by 2030. The Summit reviewed the progress towards the achievement of the 17 SDGs, each of which has some linkages to sustainable and equitable food systems. As a key player in Africa’s food systems, OCP actively engaged with the activities leading up to the summit, and later at the main event in New York, all of which provided the opportunity for us to share experiences from our engagements with smallholder farmers.

Among our earliest engagements at the UN FSS was in the Food Systems Game Changer’s Lab, a global program to build a better food future by supporting ideas, enterprises and initiatives that have the potential to transform our world’s food systems. We submitted four initiatives to the first phase - the Global Open Call - all of which were selected to proceed to the second phase from a pool of more than 500 initiatives worldwide. These projects were: Agribooster, School Labs, Farm & Fortune and Farmer House. The four initiatives moved forward into the 12-week Solutions Accelerator Program, which provided us with customized curricula, feedback, and partnership opportunities to amplify game-changing solutions.

Separately, our CEO, Dr. Mohamed Anouar Jamali, was selected as one of the 10 business leaders invited to physically attend the UN FSS Pre-Summit in Rome, where he was asked to speak in a plenary session dedicated to the living incomes coalition.

“Programs that support women’s economic empowerment, youth, or diversification of incomes can benefit households or enable the household to develop their incomes in the agriculture value chain.”

Dr. Mohamed Anouar Jamali
CEO, OCP Africa

Meanwhile, OCP Africa contributed two chapters to the World Business Council for Sustainable Development (WBCSD) Food and Agriculture Roadmap, which was prepared as part of the literature around the UN FSS. For the publication, we presented work on the policy and science in the promotion of equity, including a case study from the Agribooster program.
Soil health: OCP joins worldwide coalition for improving food systems

In 2021, we joined other private sector leaders representing the entire agricultural value chain at the UN Food Systems Summit (UN FSS) in discussions around the investments needed to foster food systems transformation, with notable focus on soil health protection. A broad Coalition for Soil Health was developed to deliver a high-level ambition and set of commitments that will resonate with stakeholders and governments looking for tangible outcomes. At OCP, we fully support the coalition, which we see as timely in identifying the gaps in global agricultural transformation objectives, by consolidating productive ideas from different private sector players in the promotion of soil health initiatives.

OCP Group ranks fourth in the Food and Agriculture Benchmark

The OCP Group, our parent company, topped the list of agricultural players in the Food and Agriculture Benchmark of the World Benchmarking Alliance (WBA), which reviewed food system players from across the food value chain based on their environmental, nutritional and social impact. Overall, OCP was fourth out of 350 enterprises in the assessment, with notable distinction in the governance and strategy measurement area, due to our comprehensive sustainability strategy.
FOCUS ON OCP NIGERIA
Contributing to unlock Nigeria’s agricultural potential

Interview with Mohamed Hettiti, Managing Director OCP Africa Nigeria Fertilizers and Senior Vice President West Africa at OCP Africa

The main advantage for Nigeria is that natural gas and other ingredients for fertilizer production are locally-available.

How did OCP enter the Nigerian market?

OCP’s role in the Nigerian fertilizer industry started in 2016, when His Majesty, the king of Morocco was hosted by H.E. President Muhammadu Buhari and when several MoUs were signed. Among these MoUs was a commitment by OCP to support the Presidential Fertilizer Initiative (PFI), by making available raw materials for local production, by making available, tailored natural gas and other ingredients needed to produce fertilizer manufacturing within the period of 2017 to 2020 known as PFI-I has evolved to PFI-II in 2021 with the ingenious idea of OCP Africa Nigeria and its partners.

What were OCP’s initial investments in Nigeria?

Research and development is a major pillar of our strategy in Nigeria, and we have, so far, developed more than 12 fertilizer formulas for the country’s major crops. We have also mapped more than 21 million hectares of soil, data that we are sharing with players in the entire ecosystem.

How OCP Africa Powers Domestic Fertilizer Production with PFI-I & Expand the Market with PFI-II?

With Nigeria’s population at 206 million, over 70% rely on agriculture, not merely for food but as a means of livelihood. This dependence tasks the agricultural ecosystem and value chain, particularly because about 95% of the 70% are compelled to be indulging in subsistence farming. The impact of high level of poverty on the farming segment of the population is such that farmers cannot care about the health of the soil or other constituents, which aggravates the poverty levels in addition to reducing the possible nourishment of the people and the ecosystem.

OCP has chosen to address the situation of food insecurity strategically and boldly through the support for local production of fertilizers and support for smallholder farmers. Hence, OCP decided to support the Presidential Fertilizer Initiative (PFI) since 2017 to help domesticate local production of fertilizer and recently, have also engineered the innovative idea that has transform to PFI II starting from 2021.

What started as a partnership between the Nigeria Sovereign Investment Authority (NSIA) and OCP, by making available raw materials for local fertilizer manufacturing within the period of 2017 to 2020 known as PFI-I has evolved to PFI-II in 2021 with the ingenious idea of OCP Africa Nigeria and its partners.

During a recent MoU, a number of projects were included in OCP Nigeria bouquet. What are these projects and which funds are involved?

Under the new arrangement, which is to kick-start the second phase of the Presidential Fertilizers Initiative (PFI II), we are working with different institutions including NSIA, FEPSAN, Mobil Producing Nigeria (MPN), Nigerian National Petroleum Corporation (NNPC) and the Gas Aggregation Company Nigeria (GACN). We signed different agreements with these institutions that for the establishment of a $1.5 billion ammonia and DAP industrial plant.

We, together with NSIA, are the main project sponsors, and we are targeting to deliver the industrial plant by 2025. The industrial plant is expected to produce annually 750,000 metric tonnes of ammonia and 1 million metric tonnes of DAP and NPK. Two thirds of the Ammonia will be exported to Morocco, in exchange for the phosphoric acid that is needed to produce DAP and NPK in Nigeria.

What have been the main benefits of the PFI II?

The PFI-II is a concept where blenders acquire and own raw materials for processing into fertilizers, as against PFI-I, where government takes ownership of raw material and finished good before it gets to the farmers. PFI-II, allows the blending companies take ownership of finished products, hence help in extensive market expansion through competitive pricing and product development activities. This concept has really helped to deepen the market with an estimated annual NPK fertilizer production at 1.2 million metric tons in 2021 (the highest blended annual fertilizer volume in Africa), as against the era of the initial PFI-I (2017-2000) which was less than 500,000 metric tons of blended NPK fertilizers annually.

PFI-I helped in increasing blending capacities, as the number of blending capacities has increased from 8 blending units to over 50 blending units, while PFI-II, has helped to increase fertilizer offtake for the increased production capacity witnessed in the PFI-I.

The key objective of both initiative is to strengthen the local production, by making available, tailored made fertilizer for Nigeria soil, at an affordable price and at the right time, by transforming natural resources through higher value addition capabilities, leading to job creation and help to sustain food security in the country.
OCP NIGERIA’S OVERALL IMPACT IN 2021

- Pioneered one of the biggest consortium of private sector partners in Nigeria’s ag. sector
- Financed over USD33m worth of inputs to 210k smallholder farmers in 12 states
- Achieved average yield increases of up to 44% from previous years
- Equipped a private extension network of 200+ Agripromoters
- Covered 34 local government areas (LGAs) in 12 states in the ginger, maize, rice, sorghum and tomato value chains
- Reached and trained 149,600+ farmers
- Engaged 141 Agripromoters and 20 Hub Managers
- Disbursed 38,452K of fertilizers; 500,432 litres of CPP, and 19,169K of seeds
- Equipped Agripromoters with 141 mobile tablets and motorbikes
- Produced 5,529,600 seedlings across 20 greenhouses using 8,000 seed trays and 5,562 tables
- 3,000 women smallholder rice farmers received the Agribooster package, including access to a vegetable greenhouse with an attached water borehole system.
- Created linkages with major FEPSAN blenders and input dealers for sourcing of quality NPK and urea fertilizers
- Supported the setting up of 50 Produce Aggregation hubs (mini FFH)
- Built and equipped 3 Seedling greenhouses to support vegetable growing communities in Akwa Ibom, Kishi community and Nigerian Army farm, Ibadan
- GAP training and Extension service for Ginger, Maize, Rice, Sorghum and Tomatoes.
- 200 youth directly employed and over 1000 indirect jobs created
- 3,000 women smallholder rice farmers received the Agribooster package, including access to a vegetable greenhouse with an attached water borehole system.
- Created linkages with major FEPSAN blenders and input dealers for sourcing of quality NPK and urea fertilizers
- Supported the setting up of 50 Produce Aggregation hubs (mini FFH)
- Set up of 2 Farm and Fortune Hubs to support tomato and armed forces project
- Built and equipped 3 Seedling greenhouses to support vegetable growing communities in Akwa Ibom, Kishi community and Nigerian Army farm, Ibadan
- GAP training and Extension service for Ginger, Maize, Rice, Sorghum and Tomatoes.
Adventure of agricultural success

With a GDP of $432.3 billion, Nigeria is Africa's largest economy. It is also the fastest growing economy with a gross national income of $1.03 trillion (PPP) as of 2020, according to the World Bank. The West African country is the largest agricultural producer in the continent, leading in cassava production and home to one of the largest herds of cattle in the world. But it is also the most expensive country in Africa to feed, owing to its large population of 206.1 million people, 43% of whom are under 15 years of age. However, low incomes, small sizes of productive land per household, a lack of access to affordable financing, insufficient technical skills, inadequate storage facilities and the pervasive traditional farming techniques have limited the modernization of most of the country’s agricultural value chains, leaving it to struggle with food insecurity, with nine out of every 10 people unable to afford healthy diets.

This has left the country dependent on imports as its current food production remains insufficient to meet domestic needs. Nigeria, for example, produces 60,000 metric tons of wheat per year, against an annual demand of 4.7 million metric tons, leaving a considerable deficit. However, with proper management of its agricultural resources, Nigeria could transform its agricultural output to radically cut down on food imports, starting with rice, of which the country only produces 2 metric tons per hectare, which is about half the average achieved in Asia.

The West African country is the largest agricultural producer in the continent.

It is against this backdrop that OCP Africa Fertilizers Nigeria Limited was launched in 2016 in the light of the realization that Nigeria is a key pathway for quickly advancing Africa’s agricultural transformation objectives. Comprising 20% of the continent’s population, any solutions leading to the improvement of Nigeria’s food security would, essentially, imply an improvement in the lives of hundreds of millions of Africans. OCP Africa’s approach to addressing the identified challenges included a framework partnership with the Fertilizer Producers & Suppliers Association of Nigeria (FEPSAN) to support the Presidential Fertilizer Initiative.

OCP Africa also sought to deliver farmer-centric programs, customized fertilizers, research and development resources, financial support, women and youth empowerment and digital technologies.
**Strong partnerships across the entire value chain**

**Interview with Caleb Usoh, Country Manager, OCP Africa Nigeria Fertilizers**

How can you describe OCP Africa’s strategy in Nigeria?

The intent of OCP is to invest in the entire agricultural value chain in Nigeria. This goes in sync with our vision of contributing to the transformation of our continent’s food system. Our approach is not just about fertilizers; it involves investments in every activity that can unlock the potential in the agricultural value chain. If we can unlock those opportunities, the yield parameters for the farmer will be greater, the market will be expansive, and everybody that plays a role in the value chain will be better off.

If we are saying the farmers today are using suboptimal volumes of fertilizers and their yields are very low, if we can help them achieve higher yields with better fertilizer, the market space for fertilizer will expand as well as that for seeds, agrochemicals and training. With the expansion of the entire agricultural value chain, everyone will benefit.

What partnerships have you developed in Nigeria to ensure that you fast-track the attainment of this strategy?

At OCP, we’re trying to expand the entire ecosystem and to do that, we require willing partners who see that there is value for them as well. We are working with partners that understand our vision with the clarity that it will bring value in the long run. Some of these partners are research institutions, development finance providers, NGOs, national governments, sub-level governments like Nigeria’s state governments, private companies and associations.

At OCP, we’re trying to expand the entire ecosystem and to do that, we require willing partners who see that there is value for them as well.

What specific roles does OCP Africa play within these partnerships?

With the Fertilizer Producers and Suppliers Association of Nigeria (FEPSAN), the umbrella organization for all producers of fertilizers in Nigeria, we are helping in availing the technologies and training needed by blending plants. We are also providing linkages to phosphate, a key fertilizer ingredient, in addition, we are now expanding our development of specialty fertilizers through a USAID grant, and we are developing soil maps for the country using specialty fertilizers.

We have partnerships with Thrive Agric, Babanghana, AFEX, and farmer organizations for promoting technology and innovation, on the understanding that our R&D efforts require large groups of farmers to provide the real picture on fertilizer needs. Without these partnerships it might be difficult to sell our customized fertilizers to the everyday farmer that is buying in small quantities. But we also have partnerships going on several commercial farms.
Thriving through partnerships

Commencing operations in 2017, and as part of its inaugural strategy for the country, OCP Africa Fertilizers Nigeria Limited collaborated with FEPSAN and the Nigerian Sovereign Investment Authority (NSIA) to give farmers the solutions needed to improve their soil health. This ongoing collaboration spans the entire agricultural value chain, allowing the introduction of smallholder farmers to fertilizers that are adapted to local soils and crops at competitive prices.

It is through this collaboration that in 2018, OCP Africa Nigeria signed a memorandum of understanding (MOU) with the Nigerian government to build a $1.5 billion ammonia and fertilizer plant in the country. By the end of 2021, OCP Africa had established the partnerships needed to actualize the plan, with the plant set to start producing late 2025. The key objective of the project is to strengthen the Nigerian industrial base through support to the Presidential Fertilizer Initiative (PFI), through a transformation of natural resources through higher value addition capabilities, leading to job creation. By securing the availability and affordability of raw materials for local blending units, the project will contribute to the development of an effective and sustainable ecosystem. Initial projections show that the industrial platform will utilize Nigeria’s gas and Morocco’s phosphate to produce:

- **Ammonia:** 750K tons annually
  > To export surpluses to Morocco

- **Fertiliser:** 1M tons per year
  > Expected to help increase OCP’s fertilizer supply in Nigeria

OCP Africa’s blending plant in Kaduna, Nigeria
Expanding blending capabilities

More benefits await Nigeria’s farmers as OCP Africa is set to launch an additional three blending units currently under development in Kaduna (90%), Ogun (65%) and Sokoto (51%). All these are expensive investments, but they are based on partnerships that the company has established around the world. The development of the Kaduna plant, for example, is being supported by the West Africa Trade & Investment Hub (Trade Hub) through a $1.4 million co-investment grant using funds from the United States Agency for International Development (USAID).

With a combined production capacity of 500,000 tons of fertilizers per year and a storage capacity of 100,000 tons, the new blending units will serve as centers of excellence to promote exceptional agricultural practices and control technical aspects of fertilizer quality. Through the blending facilities, OCP Africa will introduce specialty products to supply underserved markets while stabilizing market prices by filling supply gaps.

Oluwatoba Clement Asana, Head of production and technical, OCP Africa, Nigeria

Please take us through the ordering process for raw materials used in fertilizer production

When we want to produce any specific blend, we’ll use the formulation based on the trials that we have conducted in this country. So, depending on the blends we want to produce, we select the right formulation from our control system. And then when we are ready to produce, the order is sent and once fulfilled, we start the production activity. This is the best you can get in fertilizer blending in this country. The industry is evolving and we are evolving with it.

How many blending facilities are there in Nigeria, and what improvements have been made to the blending capabilities over the years?

We currently have three facilities in Nigeria with a combined output of 500,000 metric tons per annum. We are also developing our fourth unit, but this is not just a blending facility, it is a center of excellence. This is the only plant in Nigeria or one of the very few that can produce fertilizer blends with micronutrients. Through it, we will have the capability of adding at least three micronutrients in granular and at least two in liquid form. We are not just producing generic fertilizer, even though we are going to make generic fertilizer blends available to our farmers. We believe that for us to be able to feed the Nigerian population and the rest of Africa, we need to be a little bit more technical by applying specialty fertilizers. So, in this plant here, we are going to produce fertilizer blends with micronutrients that are adapted to the soils and crop of focus.
Collaborations for rapid impact

Through the partnership with FEPSAN, OCP Africa has reduced the costs of fertilizer in Nigeria by two times in addition to transforming the in-country blending industry via:
• The revamping of existing blenders;
• The setup of integrated distribution networks with storage facilities;
• The training of extension agents on GAP.

Other benefits accrued from the partnership:
• 140,000 indirect jobs created;
• Rail links to both Southern and Northern Nigeria restored.

Progress Driven by Research and Development

Customized fertilizers

On the understanding that soil-health is intricately linked to human health, through the improvement in the nutritional quality and quantity of consumed food, OCP Africa continues to make investments that increase crop yields by translating the science of known and proven technologies into action for widespread adoption.

In its operations, OCP Africa has set the stage for the exchange of ideas on how science can influence agriculture in Africa by championing site and crop specific fertilizers fortified with micronutrients. OCP Africa’s customized fertilizers are developed after a soil mapping exercise, that ensures that only the right nutrients are available for each region.

For example, performant fertilizer for maize was developed after the collection of 3,000 samples from 22 million hectares of land in eight regions. Other mapping activities have addressed the needs of different crops leading to the creation of digital soil maps for over 10 million hectares in the cocoa and oil palm belt, and for 14 million hectares in the tomato belt. Guided by these soil maps, OCP Africa has, so far, developed and validated specific fertilizers for maize, tomato, wheat, potato and oil palm.
Tripartite partnership for precision agriculture

interview with Dr Celestine E. Ikuenobe, Executive Director, CEO of Nigerian Institute for Oil-Palm Research (NIFOR)

Briefly explain what NIFOR does?

NIFOR is a public research institute owned by the Nigerian government and working on the oil palm, coconut, shea and raffia value chains. Our business is to conduct research, develop technologies and deliver production and market information to farmers. Within our raft of technologies is soil fertility management, and our partnership with OCP Africa ensures that the available fertilizers meet the needs of farmers.

NIFOR has been working with OCP in supporting transformation within the oil palm value chains. What have you achieved through this partnership?

Since 2019, we’ve been discussing with OCP Africa on the need to develop oil palm specific fertilizer for the oil palm belt in Nigeria. We needed customized fertilizers for the different types of soils across the whole belt. We signed an MoU with OCP Africa, along with the Institute for Agricultural Research and Training of Ibadan, to first map the soils on the major states of oil palm belt of Nigeria, and then later, identified soil status to develop the required fertilizer. We went on to do some soil analysis across the spectrum as well as plant tissue analysis to be able to find out the nutrient elements that were already available in the plants. After defining the specific fertilizer blends that each soil needed, OCP formulated the formulas that are now being validated in the fields, across the oil palm belt, through demonstration trials that we are conducting in collaboration with the IART and OCP Africa.

Interview with Dr. Vincent Aduramigba Modupe, Project coordinator, Institute of Agricultural Research and Training, Obafemi Awolowo University, Ile

You are leading a fertilizer project that is funded by OCP Africa. What has been the outcome, so far?

The essence of this project is to develop specialty fertilizers for wheat, tomato and oil palm. The broad objective was to increase yields, therefore, improving the livelihood of Nigerian farmers and contributing to our economic growth and national development.

Which partners are involved in the project?

The project is being implemented under a tripartite relationship between OCP, soil research institute and crop-based research institutes. The NIFOR has a mandate for oil palm research, while the Institute I work for (IART) has a mandate for soil. Meanwhile, the Nigeria Institute for Horticulture Research (NIHORT) has a mandate for tomato, while the Lake Chad Research Institute has a mandate for wheat.
What has been the outcome of using the new specific fertilizer formulations?

After formulating the special fertilizer for the different crops, we have to test them for two years through validation trials. We are expecting between 50% and 60% yield increase, which will translate to more income for farmers. With more revenues, the farmers will be able to take good care of their families and contribute more to the national economy. In addition, because some of these crops are going to be exported, the foreign earnings are expected to increase.

We have gone through the soil mapping phase, which has led to fertilizer formulation, and what we are doing now is to validate - testing how the crops will respond to those fertilizers. The fertilizer is being applied in the different states during the research, and around May or June this year, we will have the annual yield data that shows how the crops responded to the fertilizers.

We will do another confirmation in 2023, and, hopefully, by the end of that year, we will be through with validation trials, and we can go to the next stage of making specialty fertilizers available to farmers all over the country for use on their crops.

What has been the impact of OCP’s partnership?

OCP Africa, as the third party on this tripartite partnership, provided the funding for the research institute to solve a national problem. This project will enable us to do precision agriculture because the farmers will not be using the same fertilizer for all crops.

In the next two to three years after the validation trial, we know we will have record harvests. This will make us proud as the entire process has been conducted by Nigerian scientists to solve real challenges for the farmers in our country. We can, therefore, conclude that OCP is helping the Nigerian government fulfill its agriculture promotion policy.
Case study

Expanding cultivated areas in Nigeria: OCP Africa’s strategic collaboration with emerging model farms

The problem

According to the Food and Agriculture Organization (FAO), Nigeria would be unable to meet its food needs with low inputs levels and is likely to remain so with intermediate levels of inputs between 2011 and 2025. Commercial agriculture is therefore crucial to alleviating food insecurity among Nigeria’s growing population.

To meet the challenges posed by commercial agricultural development effectively, external assistance from financial and technical partners becomes necessary, given the magnitude of the efforts and resources required.

Supporting such struggling commercial farms is crucial to achieving the food security agenda of most African governments, as well as the UN sustainable development goals. Also, it is strategic for OCP Africa to provide support to emerging commercial farms to make them model farms and lead in the drive to exterminate hunger in Nigeria and beyond.

The solution

In 2021, OCP Africa provided support to two emerging commercial farms, Kilimanjaro Farms Ltd and Stanton Seeds Ltd, in the need area of:

- Agronomy due diligence
- Precision agriculture
- Training & extension service

Impact on Kilimanjaro Farms Ltd

The first season of OCP Africa’s intervention to Kilimanjaro Farms has moved the farm from cultivating on a 150Ha land to 467Ha, representing a 211% increase in land use with a projection of reaching a 433% increase in land use expansion in the coming season. OCP Africa has provided human resources capacity building and organizational restructuring of the Kilimanjaro farms. Thanks to 4R principles of nutrient management, site-specific fertilizers, and good agronomic practices, the yield increased by about 17% on average. As a result, the number of arable lands under cultivation in the country has also increased marginally and, by extension, fertilizer consumption.

Impact on Stanton Seeds Ltd

Stanton Seeds Nigeria Limited started operations in 2021. With the mission of revolutionizing the maize and soybean value chain in Nigeria through high-yielding hybrid varieties of maize and soybeans, the company began operating on a 40Ha of land. OCP Africa provided support for expansion and capacity for all-year-round production. Stanton seeds have planted 180 hectares of maize this season, representing an impressive 350% increase in operational land and a 60% yield increase from the previous season.

The result

- 350% increase in operational land
- 60% yield increase
- 211% increase in land use
- 17% on average yield increase
OCP Africa in communities

As a business whose sustainability is pegged on the success of farmers, OCP Africa runs initiatives in Nigeria designed to help them increase their productivity and success in markets. These projects include: Agribooster, Farm & Fortune Hubs, School Labs, as well as different projects aimed at promoting youth inclusion in agricultural transformation work in addition to the usage of digital technologies to connect different stakeholders.
A flagship program eyeing new value chains in the future

Interview with Akintunde Akinwande, Head of Business Development and Digital, OCP Africa Nigeria Fertilizers

Agribooster is a key element of OCP’s strategy for Nigeria. Kindly explain what this program entails?

The OCP Agribooster is a demand creation program that aims to improve the livelihood of farmers through increased yields and incomes. The Agribooster is based upon four primary pillars, which we found out through years of research to be critical in the productivity of farmers. These are:

1. **Access to quality inputs**
   - i.e., fertilizer, seeds and chemicals.

2. **Access to quality markets**
   - which allow farmers to sell profitably.

3. **Access to finance**
   - Allowing farmers to get the credit needed to finance the purchase of inputs and other farming requirements.

4. **Access to knowledge**
   - Best practice knowledge about good agronomic practices and things that have been done everywhere else in the world to increased productivity.

Aside from those main pillars, there are some other secondary offers like insurance, digitalization and mechanization. But those four pillars are actually the core.

What has been the impact of the agribooster program in Nigeria?

Over the last five years, we have reached over 350,000 smallholder farmers - farmers with an average of 1ha of land – who were connected to about $50 million of credit. We have also created a demand and market for all the other players within the sector. In this period, the average farmer that participated in the Agribooster program reported a yield increase of about 45% and as much as 77% return on investment. In 2021, we had eight different partnerships reaching a combined total of 149,499 farmers. Four new partnerships were established this year with focus on new value chains and a unique set of smallholder farmers:

1. **Agribooster Ginger**: reaching over 10k Ginger farmers in Kaduna with a bundle of Agribooster offerings tailored to Ginger farming
2. **Agribooster Tomatoes**: About 10k farmers across 5 states benefitted from access to quality seedlings, GAP knowledge and extension service at 22 Greenhouse hub locations
3. **Agribooster Women**: We focused on all-women smallholder farmers producing Rice in key growing communities in Kaduna state
4. **Agribooster Armed Forces**: An offer targeted at men and women of the Nigerian Air Force in Benue state who have access to Agricultural land for profitable farming.

How do you see the future panning out?

As a manufacturer focused on specific and crop-centric fertilizers, by 2025 we should have almost 50% of our target farmers using high-yielding fertilizers for increased productivity. We are also eyeing some new value chains; for example, wheat and tree crops. We will continue backing the efforts of the federal government in ensuring adequate food provision and food security by intervening in value chains that require more support.

The average farmer that participated in the Agribooster program reported a yield increase of about 45% and as much as 77% return on investment.
**AGRIBOOSTER BOOSTING TRANSFORMATION IN FOOD SYSTEMS**

### AGRIBOOSTER GINGER - KADUNA

- **Farmers**: 10,958
- **Training Engagement**: 10 field extension staff, 5 facilitators, 15 Motorcycles/Tablets
- **Disbursed Inputs**:
  - Fertilizer: 2,203 MT, GPP: 22,032 litres, Seeds: 16,524 MT
- **Seedlings Produced**: 5,529,600
- **OCP Intervention**:
  - 7 Farm & Fortune hubs (FFHs), 22 Greenhouses
  - 22,000 trays, 1,080 tables
- **Inputs Sold**: Over $336,037
- **Impact**: % increase from Previous Year: 227%, Farmer’s ROI: 155%

### AGRIBOOSTER TOMATO KADUNA, KANO, NASARAWA, ABUJA, JIGATTWA

- **Farmers**: 10,958
- **Training Engagement**: 10 field extension staff, 5 facilitators, 10 Motorcycles/Tablets
- **Disbursed Inputs**:
  - Fertilizer: 60.2 MT, GPP: 2,204 litres, Seeds: 42.14 MT
- **Seedlings Produced**: 5,529,600
- **OCP Intervention**:
  - 7 Farm & Fortune hubs (FFHs), 22 Greenhouses
  - 22,000 trays, 1,080 tables
- **Inputs Sold**: Over $336,037
- **Impact**: % increase from Previous Year: 227%, Farmer’s ROI: 155%

### AGRIBOOSTER WOMEN - KADUNA

- **Farmers**: 3,000
- **Training Engagement**: 3 field extension staff, 2 facilitators, 3 Motorcycles/Tablets
- **Disbursed Inputs**:
  - Fertilizer: 60.2 MT, GPP: 2,204 litres, Seeds: 42.14 MT
- **Seedlings Produced**: 5,529,600
- **OCP Intervention**:
  - 7 Farm & Fortune hubs (FFHs), 22 Greenhouses
  - 22,000 trays, 1,080 tables
- **Inputs Sold**: Over $336,037
- **Impact**: % increase from Previous Year: 227%, Farmer’s ROI: 155%

### AGRIBOOSTER ARMED FORCES - BENUE

- **Farmers**: 1,000
- **Training Engagement**: 2 field extension staff, 2 facilitators, 2 Motorcycles/Tablets
- **Disbursed Inputs**:
  - Fertilizer: 143.05 MT, GPP: 1,624 litres, Seeds: 38.56 MT
- **Seedlings Produced**: 5,529,600
- **OCP Intervention**:
  - 7 Farm & Fortune hubs (FFHs), 22 Greenhouses
  - 22,000 trays, 1,080 tables
- **Inputs Sold**: Over $336,037
- **Impact**: % increase from Previous Year: 227%, Farmer’s ROI: 155%
OCP aims to reach 5 million farmers by 2024 through agripromoters, FFHs and related initiatives. On this path, and based on the previous success of the FFH initiative, and learnings therefrom, OCP Africa will develop in 2022 an additional 50 Farm & Fortune Hubs running on a franchise model, and with a focus on southern Nigeria, and a plan to have 250 FFHs by 2025.

Farm & Fortune Hubs

In October 2019, OCP launched its Farm & Fortune Hubs (FFHs), which focus on addressing the last-mile challenges in the access by smallholder farmers to modern inputs and knowledge on good agronomic practices. The FFHs bring all basic farm inputs (fertilizers, improved seeds and agrochemicals), training on GAP and extension services under one physical roof. The FFHs are stations from where smallholder farmers can access the knowledge needed to raise their productivity, leading to increased food security and increased household income. Each FFH has classrooms, offices, water boreholes, a digital soil testing lab, a greenhouse and a smart blender. The FFHs are supported by Agripromoters, who are OCP Africa’s extension agents, and are attached to the FFHs to deliver farm inputs, farmer training and demo plot activities.

Farm & Fortune Hubs

Farm & Fortune Hubs are present countrywide:

- Number of FFH outlets: 80
- Number of states in Nigeria with Farm & Fortune Hubs: 20
- Number of farmers trained through Farm and Fortune Hubs since 2019: 256,865
- Number of communities given access to clean water: 80
- Farmers reached with:
  - 7,558 mt fertilizers
  - 42,819 kg seeds
  - 62,069 liters agrochemicals
- Jobs across 65 outlets in 2021: 1,069
- Collaborated with:
  - State Government: 3
  - Private partners, who managed and operated 61 outlets as operating partners: 26
- Model Farm, as physical learning centers on GAP: 30
- Maize demo plots: 105 ha

Created: 2021
Established: 2019
Collaborated with: 2021
Transforming community livelihoods

Farm & Fortune Show
To reach as many smallholder farmers as possible, OCP Africa supports a TV and Radio program focused on promoting agricultural best practices. The show is filmed/recorded in and around Nigeria, and features a multi-presenter studio format. It is aired in -30 minute TV episodes, -15 minute radio drama series and -5 minute daily radio broadcasts. Show hosts examine real stories and scenarios from the farm and review farming practices with experts who proffer valuable guides. The program leverages the competencies and influence of the hosts to drive audience engagement, who are educated by an expanding list of experts (now at 25) on eight focus crops. The topics cover good agronomic practices, value chain growth, and soil management. So far, 19 episodes of the Farm & Fortune TV show, 22 of the drama series and 205 of the daily update have been aired to an audience of over 50 million Nigerians. This is as 15 million have been reached via the show’s online and social media platforms.

19 episodes of the Farm & Fortune TV show
22 of the drama series
205 of the daily update
have been aired to an audience of over 50 million Nigerians

Secrets of the Soil
S01 EP01 Secrets of the Soil
farmandfortune
37 views • 1 y 7 mths
2.48
S01 EP02 Secrets of the Soil
farmandfortune
22 views • 1 y 7 mths
2.55
S01 EP03 Secrets of the Soil
farmandfortune
43 views • 1 y 7 mths
4.59
S01 EP04 Secrets of the Soil
farmandfortune
41 views • 1 y 7 mths
2.21

Full Episodes
S02 EP12 | Farm & Fortune TV Show: Cashew - Sweet in th... farmandfortune
13 k views • 1 y 2 mths
S02 EP11 | Farm & Fortune TV Show: Cashew - Better... farmandfortune
14 k views • 1 y 3 mths
S02 EP10 | Farm & Fortune TV Show: Cocoa Hack farmandfortune
19 k views • 1 y 9 mths
S02 EP10 | Farm & Fortune TV Show: Cocoa Hack farmandfortune
22 views • 1 y 3 mths

OCP School Labs
Launched in 2017 in Nigeria, the OCP School Lab is a mobile school and laboratory that goes to the most remote areas during two to three defined campaigns. Each campaign lasts six to 10 weeks with the vehicle continuously on the road. Every day, the OCP School Lab stops in a new village to meet with smallholder farmers. So far, the School Lab has already supported 327,448 farmers with soil analysis services, agronomic training and fertilizer use recommendations.

Scan the code to access the Farm & Fortune’s Youtube page

This kind of informative program is long overdue. Thanks, can’t wait to be part of it.
@realgentlehawk

I am watching your program for the first time today. I am in the army and I’m a farmer. I need an address of a rice producer I can learn from, for better yield. Please, I am serving in 82 division Enugu.
Umar Bala
Empowering African youth

The development of agriculture in Nigeria relies on its youth as they would be the ones to replace the aged and ageing farmers and Agripreneurs in the country. The need to create opportunities and the enabling environment for wealth creation by arming the youth with requisite agricultural skills, knowledge and resources that will make them productive cannot be overemphasized. In Nigeria for instance, the youth unemployment rate stands at 34.9%, this makes Nigeria’s large army of youths vulnerable and used as resources for propagation of criminal activities and other kind of unrest in the country such as banditry, kidnapping and terrorism.

Therefore, in a quest to support in the reduction of poverty and creating an economically empowered youth population that is strategically positioned to contribute to nation building through Agriculture, OCP Africa initiated the Empowering African Youth (EMAY) to address youth unemployment and participation in Agriculture.

The Empowering African Youth (EMAY) empowers young Africans to become agents of positive change, through capacity development, powerful linkage for technology transfer and advisory services in the Agricultural sector. The Young Leaders are trained and certified to become experts and ambassadors in Agriculture by the University partners, empowered with agricultural tools, such as digital soil testing laboratories, tricycles for farm input distributions, electronic tablets and small handheld implements such as planters, sprayers and threshers to help deliver value to smallholder farmers through increase yield and profit.

Young leaders, whose point of contact is the OCP Africa Farm & Fortune Hubs, renders services ranging from training smallholders’ farmers on Best Agricultural Practices (BAP), render extension services, conduct soil testing and fertilizer recommendations, sales, and delivery of quality farm inputs to smallholder farmers in the rural communities and this serves as means of livelihood for the young leaders.

This scheme has added to my knowledge of soil analysis and fertilizer recommendations. I have gained a lot of experience in training skills and acquired a means of livelihood.

Pwaka Arthur, Gombe State

From the inception of the project in 2020, 40 young leaders from eight states in Nigeria have been onboarded onto the project and collectively, they have supported over 60,000 farmers with training, extension services, quality farm input supply, soil testing, fertilizer recommendations, and advisory services, among others. OCP Africa plans to onboard 200 young leaders by year 2025.

Thanks to OCP Africa for the privilege given to be part of the scheme. Now I am financially independent. Farmers are happy with the input delivery service I render using the tricycle provided by OCP Africa addition to the soil and training services.

Bukola John Olawuro, Nasarawa State

The EMAY project has contributed to the employability of African youths, increased African youth participation in Agriculture, helped to disseminate Best Agricultural Practices (BAP), increase income of Smallholder farmers, and increase yields and food production in the country.

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Udongo

The Udongo application aims to unlock digital opportunities in the agricultural sector and spur collaboration between actors in the value chain. Available on web and mobile, Udongo was launched in Nigeria in 2019 and expanded to Ghana and Côte d’Ivoire in 2021 with new features. The platform currently holds 1200 users and more than 200,000 farmers data.

Objectives

- Enhance collaboration in the ecosystem
- Improve operational efficiency of the actors in the value chain
- Create easy access to quality inputs and agriculture produce
- Increase the use of improved agricultural inputs in farming
- Promote digitization in the industry

Benefits

- Increase input distribution channels
- Easy access to the market
- Increase transparency in the market
- Easy access to farm records
- Online tracking of inventory
- Increase farm yield

An integrated application to enhance business developments initiatives of OCP Africa in Nigeria

Digital innovation provides a scalable and minimal-cost approach in conjunction with all other business initiatives to reach smallholder farmers with tailored products and services at their locations.

Udongo offers a wide range of services for farmer and key stakeholders

<table>
<thead>
<tr>
<th>Udongo key features</th>
<th>Target</th>
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<tbody>
<tr>
<td>Business Management</td>
<td>• Agrodealers</td>
</tr>
<tr>
<td>Farm Management</td>
<td>• Distributors</td>
</tr>
<tr>
<td>Agronomy</td>
<td>• Wholesalers</td>
</tr>
</tbody>
</table>

Key Achievements in Nigeria (launch till date)

- 200,904 Farmer data
- 75 Input Providers
- 81.44% Engagement rate
- 297 Agrodealers
- 1,311 Active device installations
- 561 Extension Agents
- 22,832 Page views

Agribooster:
Agromotor/EMAY:
School Lab:
Farm & Fortune:

Holistic value-chain productivity offer for SMF in clusters
Extension service and distribution network support to SMF
Mobile soil testing laboratory and training
Using new generation media as a tool to reach a wider set of existing and emerging farmers
Moving forward - Enhance the value proposition

Features currently under development

Weather Advisory Services
Provide general weather updates from an integrated API from a partner.
Provide specific farm activity schedules to farmers based on current and projected weather conditions to farmers, Extension agents and Agro-dealers on Udongo.
Weather forecast and Agronomy advice will be delivered via SMS to 5000 farmers for the pilot phase.

Fertilizer Recommendation (AGRO+)
A digital platform and support tool for soil nutrient management that automates the provision of site-specific fertilizer recommendations to smallholder farmers using machine learning, artificial intelligence, and georeferenced soil tests.

Access to Finance
Provide product loans to farmers through partnerships with financial institutions.
Build credit profile of farmers to access other benefits across the value chain.

E-Learning Academy
Piloting OCP E-learning that provides a platform through Udongo for extension agents and farmers to take short courses that gives them better insights on Modern Agriculture and Good Agricultural Practices. This platform will also issue certificates at the course.
This Academy will leverage our existing partnerships with Research Institutes through the Agronomy department to develop modules and video tutorials that will be published on the platform.

Market Update
Bridge Market Access gap for farm produce by linking farmers to a large and global online market.
Build business affiliations along the market value chain.
Build a price index platform for produce.
Smallholder farmers are at the center of OCP Africa’s business in Africa informing investments by the group to ensure that producers have the necessary resources to optimize their output.
2016 – 2020: Five years of transformative impact and learning

OCP Africa 2016 - 2020

A key motivation behind the establishment of OCP Africa in 2016 was to extend OCP Group’s agricultural innovations to as many of Africa’s 33 million farming households as possible. At the time, the OCP group had been in existence for nearly one century, during which time it had grown to be an industry leader in the production of fertilizers while holding more than 70% of the world’s phosphate reserves.

In this period, OCP had through extensive investments in scientific research developed soil amendments that considerably increased crop yields and quality. Based in Morocco, OCP delivers these high-quality fertilizers across Africa and beyond.

By 2016, farmers’ interest in OCP’s products had skyrocketed, prompting the creation of OCP Africa as a subsidiary to drive the company’s expansion into sub-Saharan Africa.

This interest also led to the creation of a platform that would make it easier for farmers across the continent to access the agronomic training and market linkages needed to transform their enterprise from subsistence farming to profitable businesses.

Our initial strategy covered the period 2016 during which time the following key achievements were made:

- New influential partnerships with 11 governments & organizations such as the AfDB, IFC etc.
- >2m tons amount of fertilizer sold across Africa in 2020 versus 1m tons in 2015
- 1m of farmers reached with OCP’s farmer centric programs
  - Agriboster
  - Farmers Hubs
  - Agri promoters
  - Farm & Fortune
  - Udongo App
- +30m Ha of soil mapped
- 22 customized formulas developed
- 12 OCP Africa’s offices in addition to Casablanca Hq
- 2m tons of fertilizer sold across Africa in 2020 versus 1m tons in 2015

In 2016 – 2020: Five years of transformative impact and learning, OCP Africa has made substantial progress in transforming the agricultural landscape in Africa.
OCP Africa 2021 – 2025
(Green Africa Project)

Vision: To be a key partner of the continent’s food systems by providing holistic agricultural solutions in partnership with key stakeholders.

Started in 2021, we are embarking on a new five-year strategic period, under the name “Green Africa”, which picks up on the lessons from the previous years to inform the approaches that we will take in delivering productive agricultural inputs, technologies, financial services and markets to Africa’s farmers. In this new strategy, we are embodying our core principles from OCP 1.0, including an alignment with the interests of smallholder farmers, the strategic priorities of the countries where we operate, and the development of partnerships with the main players in the value chain. We have developed a roadmap with our various subsidiaries and the support of recognized food systems’ experts, which is based on four strategic pillars: Customization, Digitalization, R&D and innovation, and Supply chain.

Our strategic approach in this new phase complements the work done in OCP 1.0 around four key pillars:

1. Customization of key agricultural solutions
   - Application of digital farming techniques through a holistic approach that involves farmer training, farmer-centric solutions, soil characterization, the development and testing of customized formulas, and the dissemination, production and distribution of new formulas backed by appropriate services.
   - Value chain structuring (e.g. rice / cotton in CIV)
   - >100 formulas to be developed
   - >10m farmers to be reached
   - >340 Farmer Houses & Ag service centers
   - GMV - 100 OneCrop
   - One Village
   - >1,000 ha commercial farm CIV

2. Research and development and disruptive innovation
   - New projects related to climate resilient ag, Nutrition, Biodiversity and smart innovative ag
   - African soil fertility and soil nutrient management platform
   - Digital platform to reach >2.7m farmers via value chain player
   - Data analytics to provide relevant analysis to businesses
   - Digital farming school CIV
   - ~20m Ha soil mapping (innovative approach)

3. Development of optimal supply chains
   - Up to 13 owned logistics platforms
   - Soybean transformation & export project Ethiopia (TSP potential)
   - Agribusiness supply chains program
   - Agribusiness supply chains program

4. Value chain structuring
   - Up to 14 owned logistics platforms
   - Digital platform to reach >2.7m farmers via value chain player
   - Data analytics to provide relevant analysis to businesses
   - Digital farming school CIV
   - GMV - 100 OneCrop
   - One Village
   - >1,000 ha commercial farm CIV

As we look forward to implementing our Green Africa strategy, it is important to note that its ambitious roadmap will rely on synergies with OCP Group and all entities, and will be based on learnings from the implementation of our strategic flagship programs in the past.

Meanwhile, we are currently conducting an impact assessment that will help us evaluate our achievements and adjust our future approach if needed. Having achieved considerable success in Nigeria, we will continue using our work in the country as a benchmark for our work in other countries across the continent. Our focus is on the OCP Africa School Lab and Agribooster flagship programs, both of which were launched at the beginning of our journey in 2016. A review of the two programs will allow us to understand their role in creating and sustaining a fertilizer demand across Africa.

At the same time, it will be an opportunity to design new and innovative initiatives on the four strategic pillars, holding the African smallholder farmer at the center of each idea.

Finally, we continue to seek new ways of bridging the gaps in the access of agricultural technologies and in the Green Africa strategic period, we will be leaning from the success of our latest project to implement refined programs for the benefit of Africa’s smallholder farmers.
Events: our main interactions with the ecosystem in 2021

International Scientific Symposium on Sustainable Land Management

17-21 May - A panel on the sustainable transformation of agricultural production systems, held on the sidelines of the International Scientific Symposium on Sustainable Land Management, featured Aniss Bouraqqadi, Head of R&D at OCP Africa, who discussed the major challenges of agricultural modernization.

The modernization of agriculture, which must lead to a sustainable increase in agricultural production and productivity, should be inclusive, participatory and respond to the needs of African agriculture and farmers.

Africa Green Revolution Forum (AGRF)

Sep 7-10 - This year, the AGRF was held virtually due to Covid-19 restrictions. OCP Africa was well represented with Faycal Benamer, EVP East Africa, and Akinunde Akinwande, Head of Business Development & Digital projects in Nigeria.

"It was very insightful moderating the AgTech & Digitalization workshop at the 2021 AGRF Summit. A clear message from this event is the need for synergies and partnerships among Digital Innovators across various AgTech sub-sectors in providing customized bundled services to smallholder farmers in Africa. At OCP Africa, we are indeed happy to explore many more collaborative partnerships that would help us contribute to a sustainable transformation of our continent’s food systems, leveraging Digital Innovation."

Akinunde Akinwande

Africa Agri Forum

On 25 and 26 October, OCP Africa co-hosted the 7th edition of the Africa Agri Forum, organized by I-Conferences, the Ministry of Agriculture and Rural Development of Cameroon, the Ministry of Agriculture, Fisheries, Rural Development and Water and Forests of Morocco, the African Union, and Digital Africa. Moulay Lahcen Ennahli, EVP West Africa gave the welcoming remarks while Jean Bosco Onguene, Agronomy Manager in Cameroon, animated a session about "Innovation as a lever to drive agricultural transformation in Africa".

East and Southern Africa Fertilizer Financing Forum

During the East and Southern Africa Fertilizer Financing Forum, organized on 28 October 2021 by The Africa Fertilizer Financing Mechanism (AFFM), in collaboration with the African Fertilizer and Agribusiness Partnership (AFAP) and AFRIQOM Faycal Benamer, our EVP East Africa, took part in a panel about the Role of Development Financial Institutions in Stimulating the Industry Growth and Fertilizer Consumption. He shared our expectations in partnerships with DFIs to improve intra-Africa fertilizer production as well as experience and actions to cope with the scarcity and affordability of fertilizer in Africa.

Kenya Fertilizer Club

24-26 Nov - OCP Africa was host and partner of Afriqom’s first edition of Fertilizer Club in Nairobi. We were represented by Faycal Benamer, EVP East Africa, Nidal Belharraga, Senior Sales Analyst, and Peter Simmon Swire, a soil scientist in Kenya. Afriqom’s Africa Fertilizer Clubs are tailored and laser-focused in-person conference series for each key hub/country in Africa. The format allows the fertilizer ecosystem to deliver its views and recommendations, with the common goal of developing further the Agricultural sector for the benefit of smallholder farmers.

Illustrer avec photo dossier Kenya Fertilizer Club (voir newsletter novembre décembre)

Choiseul and ASPEN talks

24-28 Nov - In a bid to develop its network of European and African partners and explore new partnership opportunities, OCP Africa’s top management took part in high-level panels and discussions at Choiseul Institute (Nice) and ASPEN Institute (Annecy) in France. Our CEO Mohammed Anouar Jamali and its chargé de mission Moulay Lahcen Ennahli shared our vision for African agriculture and our thoughts on Europe-Africa relations with a broad audience of private and public players.
OCP Africa, IAR&T, NIFOR Partner To Boost Oil Palm Production In Nigeria

OCP Africa, a Moroccan company renowned for fertiliser production, the Institute of Agricultural Research and Training (IAR&T), Ibadan and the National Institute for Oil Palm Research (NIFOR) have entered into a partnership which would see to increased palm oil production in Nigeria.

Morocco-Nigeria: $1.3 Bln fertilizer production plant project advancing

Following the telephone conversation held last month between King Mohammed VI and President Muhammadu Buhari, a Nigerian delegation led by minister of Petroleum Resources Timipre Marlin Sylva is visiting Morocco to set out the next steps of the $1.3 Bln fertilizer production plant project launched in June 2018.

Côte d’Ivoire: OCP Africa and ITFC partners to boost agriculture

OCP Africa and the International Islamic Trade Finance Corporation (ITFC) support agriculture in Côte d’Ivoire. OCP Group’s African subsidiary has just joined forces with ITFC to boost agricultural production in Côte d’Ivoire and develop the skills of 20,000 farmers.

OCP pledges continuous support for Young Agripreneurs at 4th AG-STUD Bootcamp

OCP Africa, the main organizing sponsor, represented by Country Manager in Ghana, Mr. Samuel Oduro-Asare, in an opening remark on the first day of the bootcamp, encouraged the young students and agripreneurs to make the most of the opportunities the sessions of the bootcamp would introduce them to in the course of five days, stressing that, the country’s agricultural sector was a viable space for young people to explore and reiterated OCP support towards young agripreneurs.

Rethinking the future of the agriculture sector through sustainability and modernisation

Oxford Business Group launched its latest Focus Report: Agriculture in Africa 2021, in collaboration with OCP Group, that analyses the opportunities and challenges for the agricultural sector and different key aspects such as fostering an agri-tech ecosystem, empowering farmers, promoting entrepreneurship and the use of fertilisers. In this context, we had the pleasure to talk to Mohamed Anouar Jamali, CEO of OCP Africa on some of these topics and gather his thoughts on what the future holds for the sector.

Mr. Jamali, who holds a PhD in Supply Chain Management from University of Laval, shared his views on the current state of the agriculture sector in Africa, namely on promoting sustainability to fight climate change, boosting innovation, entrepreneurship and the use technology as a growth driver, as well as on the opportunities brought by the Covid-19 pandemic to strengthen the value chain in the continent.

Leveraging fertiliser initiative to check inflation, forex savings

The NSIA and the OCP Group of Morocco have partnered to boost fertiliser production and agricultural development in Nigeria. This followed an agreement signed between the Federal Government of Nigeria and the OCP Group of Morocco at the University Mohamed VI Polytechnic in Morocco by OCP Africa. Minister of Petroleum Resources Timipre Sylva chaired the Nigerian delegation.
Over one million African farmers have benefited from OCP programs

OCP Group has launched over the past 6 years a program to bring customized fertilizers closer to the African market at fair prices and has deployed training programs on best practices to improve production to the benefit of one million African farmers so far.

Morocco: IFC provides $100 million in financing to OCP for its expansion in Africa

The Office chérifien des Phosphates (OCP) signed a $100 million financing agreement with the International Finance Corporation (IFC) on June 28. This package should enable the Moroccan group’s African subsidiary (OCP Africa) to develop its operations in several countries on the continent.

Why we are building a $13.4 million fertilizer plant in Kaduna – Country Manager, OCP Africa

Earlier this month, the USAID-funded West Africa Trade & Investment Hub (Trade Hub) awarded a $1.4 million co-investment grant to OCP Africa Fertilizers Nigeria Limited (OCP Africa), a firm in the production of phosphate-based fertilizers, to install modern blending equipment within its fertilizer blending plant facility under construction in Kaduna State.

OCP trains agro entrepreneurs on access to local food, jobs

To ensure that farmers in underserved markets have seamless access to fertilizers and other quality inputs, OCP Africa Fertilisers Nigeria Limited (OCP Africa), is establishing 55 one-stop-shop Farm & Fortune Hubs across the country.

OCP’s activity on an upward trend

Through its subsidiary OCP Africa, the group has multiplied its operations and partnerships in recent years in order to impose its range of specialty phosphate fertilizers, adapted to enrich soils and increase agricultural yields.

Fertiliser plant to be complete by next year

“The development follows a joint venture partnership reached between Rwanda Fertiliser Company Ltd (RFC) and OCP Africa (OCP), a subsidiary of the Moroccan public-private company OCP Group, one of the leading phosphates producers in Africa.

The move is expected to switch from generic to tailor-made fertilisers as part of the efforts to reduce the cost of fertilisers, as well as boosting agricultural output and farmers’ income.”

OCP Group commits to further developing Nigeria’s agricultural potential

OCP Group is contributing to the development of Nigeria’s agricultural potential by adapting a holistic approach that supports players along the entire agricultural value chain.