9 tips on how to go digital in the cocoa sector

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The cocoa trade is still mainly handled through personal relations and traditional trade. However, technological developments have improved many areas of the cocoa supply chain. This includes traceability, farm mapping, farming practices and market analytics. In this study, we share practical tips on how digitalisation plays a role in the cocoa sector and what this could mean for you.

Contents of this page

- 1. Understand the level of digitalisation that works for you
- 2. Consider B2B or B2C e-Commerce platforms to sell your products
- 3. Only invest in new technologies or AI if you already use advanced technology
- 4. Combine remote and big-data with on-the-ground data
- 5. Use digital payments to give more benefits to farmers
- 6. Use digital tools to get access to financial institutions and lenders
- 7. Invest in traceability and geolocation tools
- 8. Use digital tools to improve farming practices
- 9. Work with partners that have a network or experience in your region

1. Understand the level of digitalisation that works for you

Digitalisation can help to improve your business. All actors along the supply chain, including cocoa producers and exporters, are being asked for more information. This includes information on quality, origin and sustainability. It is also important in order to comply with new laws and regulations. Digitalisation can help you collect and share this information in an easier way.

There are many ways to benefit from working more digitally in the cocoa sector. There are also many different tools to choose from, in all parts of the cocoa supply chain. Before choosing the digital tools that work best for you, it is important to consider what you want to achieve with the tools. It is also important to evaluate your current level of digitalisation first.

Determine your current level of digitalisation

When you are choosing a tool, it is important to ask yourself if these tools can be used in your organisation. For some tools, users will need to have more digital knowledge than for others. Consider questions such as:

- Which digital tools are you already using?
- What is the current level of digital skills of your employees (the people that will use the tools)?
- Who are the main users of digital tools in your organisation right now? Will they also be the main users of any new tools, or will these be other people in your organisation?

These steps can help you to evaluate how ready your organisation is for new digital tools. They will also help

you to find out what is needed when you choose a tool. New users might need training, or you might need to hire new people.

Determine where digital tools can help you improve the most

Next, look closely at where a digital tool can help you the most. Think about your main challenges or needs. Developing a process map of your operations can help to identify your needs. For example, the biggest need for some exporters might be mapping the cocoa farms and production zones you source from. For other exporters, this might be improvements further down the supply chain, such as traceability or processing improvements.

There are many types of digital tools to choose from. Some examples are:

- Tools to improve cocoa production;
- Traceability tools;
- Mapping, monitoring and remote sensing tools;
- Sales platforms/digital buying tools;
- E-commerce platforms; and
- New technologies such as AI, drones, Internet of Things, blockchain.

Choose the digital tools that are right for your organisation

Consider what the new tools will require from you. If they involve a big step up in digitisation, it might be better to take a smaller step first. For example, if you use paper-based traceability, it might not make sense to go straight to full blockchain traceability. A simpler, off-the-shelf solution might be a better choice. In some cases, a simple Excel-based administration makes more sense as a first step.

Consider multiple user cases that a digital tool can support

It is important to consider the wider benefits of a digital tool. Data collection is often done with one objective in mind. But this data might help you improve in other areas as well. It is therefore important to think about how the tool or data can serve multiple purposes. This can help you get more value out of your investment.

For example, as a producer, you can share geolocations with your buyer to comply with the new European Union Regulation on Deforestation-free products (EUDR). However, once you have these maps, there are other benefits beyond compliance. For example, more accurate data on expected yields, weather predictions or other ways to improve farming.

Make sure that you own your data

Data on farmers and farms has been collected for many years. This includes data on household income, cocoa production, good agricultural practices and many other aspects. Companies, certification programmes and NGOs have collected a very large amount of data over the years. The aim of this data is to help farmers improve their production practices and their yields. However, this data is often not shared between the people involved in the industry. Farmer data is often not owned by the farmers themselves.

As a producer, there are many benefits of owning your own data. It makes it easier to sell cocoa to new buyers and you can use the data to improve your own business. It is important to make sure that your organisation owns all the data that is collected about your business or cocoa production.

Tips:

Invest in tools that can meet multiple needs. Think about ways in which the data that is collected with a tool can help you improve in other areas. For example, mapping data can help with compliance, but it can also help with yield estimates, buying the right amount of fertiliser and using weather data, or even reducing the risk of child labour.

Look for tools that can be linked with other tools. Digital tools are more useful when they can be linked. Also talk to your current buyers about digital tools. They might have digital solutions available that apply to you as well. However, if you use your buyer's tools, you might depend on the buyer in order to access or share data with other clients or partners. Think carefully about the possible consequences of this choice.

Determine how ready your organisation is for new digital tools. New users might need training, or you might need to hire new people.

Make sure that you own your data, also if it is collected by someone else. Negotiate about data ownership with your buyers, certification schemes or NGOs.

2. Consider B2B or B2C e-Commerce platforms to sell your products

Face-to-face contact and long-term trade relationships are key in the cocoa market. Cocoa beans are normally not sold online. However, digital marketplaces might be an interesting way to showcase your products, learn about your competition and find new buyers.

There are several digital marketplaces where buyers and sellers can meet. There are 2 types of platforms: business-to-business (B2B) and business-to-consumer (B2C).

B2B marketplaces for cocoa beans or derivatives

B2B marketplaces for cocoa beans and cocoa products usually focus on high quality or specialty cocoa. Examples include Almacena Platform, Cocoa Hub, Leroma, Green Trade, Producers Market and Tridge.

There are also B2B marketplaces in producing countries. An example is the ProColombia marketplace, which sells cocoa beans, products and chocolate. The Cocoa Supply platform sells specialised beans from Ecuador and other Latin American countries.

Only a very small part of global cocoa production is sold through B2B platforms. It could be interesting to look at a few examples to find new buyers. These platforms also help you learn about the key information a buyer is looking for. However, the most common way to sell cocoa is still by working with buyers directly.

B2C marketplaces for chocolate exports

B2C platforms sell directly to consumers. These platforms are rarely used for cocoa beans or derivatives (liquor, butter, powder). This is because consumers buy chocolate products for consumption, not cocoa beans or derivatives.

There are many examples of chocolate products from producing countries that are sold online in the European Union (EU). If you are a producer and exporter of chocolate, it is useful to check the possibilities for online selling. Examples of chocolate products from producing countries that are sold online include Beyond Good (Madagascar), MIA (Madagascar and Ghana) and Virunga Origins (Democratic Republic of the Congo).

There are also marketplace websites that sell products from chocolate producers. Take a look to see whether these websites are interesting places for you to sell your chocolate. Contact the websites to talk about selling your chocolate on the platform. Examples include Cocoa Runners (United Kingdom), Club del Chocolate (Spain) and The Chocolate Shop (Netherlands).

This study focuses on exporting cocoa beans and cocoa products. A study on exporting chocolate to the EU is expected to be published on the CBI website in 2024. Read that study for more information about exporting chocolate.

Tips:

Digital platforms are not commonly used in the cocoa trade. Only use digital platforms as an addition to the traditional cocoa market and not as a replacement. Many cocoa buyers continue to do trade in the traditional way. It is important to keep investing in relationships with them.

Check what kinds of products are sold on digital platforms. If a platform sells mainstream cocoa qualities and you manage higher-quality products, the platform might not be the right match for you.

To do business through digital channels, you need to be quick and organised. Check your communication channels regularly and answer within one or 2 days at the most. Keep your information up-to-date and be honest about what you can offer. Transparency and trust between the buyer and seller are key in the cocoa sector.

If you produce and export chocolate, think about how you can sell your product. If you are selling it on your website, look at the websites of other chocolate sellers for inspiration. Think about joining B2C ecommerce websites.

3. Only invest in new technologies or AI if you already use advanced technology

Artificial intelligence (AI) in the food and drinks market is estimated to grow by more than 35 billion USD between 2024 and 2028. Al in the food service industry could improve efficiency, reduce operational costs and improve overall product quality. Although it is not always accessible for cooperatives and SMEs (small to medium-size enterprises), it is important to understand what happens in this domain, because AI is here to stay.

Al is most relevant for companies in the supply chain that are already using advanced technology. However, most cocoa is produced by smallholder farmers with low levels of digitisation. Technology is more advanced in large-scale cocoa farming and in export. The most advanced new technologies are therefore more commonly used towards the end of the supply chain.

One way that AI is being used is to help with design, processing and flavour development. 3D printers are used to design chocolate in specific shapes. Processing steps like tempering can be improved with more precise technology. AI is also used in flavour development. Some brands are even using augmented reality (AR) in packaging or to connect bakers, pâtissiers and chocolatiers.

Al can also be used for improvements at the beginning of the supply chain. For example, research has shown that Al could improve the economic conditions of smallholder farmers by providing access to information on prices, weather and production techniques. Another study showed that Al can help to combat cocoa disease and pest infestations in Ghana. Al can also help by using machine learning to help cocoa farmers in Côte d'Ivoire improve farming methods and water management. Another example is Cropin, which uses Al to solve issues in the supply chains.

Al can also be used to power drones. Drones can be used to monitor deforestation. However, the use of satellite technology has been more successful, affordable and efficient in identifying deforestation. Drones can be interesting to use for creating videos about cocoa and forests, to create awareness about the issue or to

promote your cocoa production. Drones are not used at scale to monitor deforestation.

Tips:

Take a look to see if AI can be a useful tool for your business. But focus on more established and simpler digital tools or technologies before investing in new and advanced technologies. AI and the Internet of Things are most interesting for producers and exporters who already have a high level of digitalisation. This applies mainly to larger multinational traders and specialised exporters.

Read more about using technology to monitor deforestation in the section on geolocation tools.

4. Combine remote and big-data with on-the-ground data

Big data refers to large amounts of data that are produced very quickly by a high number of diverse sources. Data can be created by people or by machines. This data is used for machine learning projects, predictive modelling and other advanced analytics applications.

Large amounts of data are collected in the cocoa sector. In some cases, data can be classified as big data. New technology can be used to learn new things from the data.

Market access

Big data can be used to improve market access for producers. One example is a pilot project in Colombia implemented by Earth Big Data and Frontier Tech Hub. It aims to integrate satellite data and data collected on the ground by mobile phones. The application uses machine learning algorithms to create useful information for farmers, investors and buyers. The goal is to create a market for isolated farmers who do not have access to international markets.

KIT has developed a machine learning tool that estimates the annual income of cocoa farming households. The goal of this tool is to improve the monitoring and evaluation of household income. Helping producers achieve a living income is key for a sustainable cocoa sector. Tools such as this contribute to that goal.

SME exporters can benefit from this technology by partnering with organisations that are specialised in big data collection and processing. Buyers can be included to share investment costs.

Futures market and digital buying

Big data is also used on the cocoa futures market. Big data, algorithms and computer buying is becoming more common. Larger SME exporters can use the futures market to hedge the price of cocoa (offset the risk of negative price changes) and reduce their exposure. With a lot of competition, speculation on the futures market is a risky strategy.

Speculation can contribute to big changes in cocoa prices. The price of cocoa futures increased from around 2,500 USD in January 2023 to 10,000 USD in April 2024. Hedge funds and speculative traders contributed to the price increase by buying futures contracts. Farmers do not benefit from speculation on the futures market.

Tip:

Consider whether big data collection and analysis is useful for your organisation. Big data is most interesting for producers and exporters who are already technologically advanced. However, more

tools are becoming available to smaller organisations.

5. Use digital payments to give more benefits to farmers

Good purchasing practices are key to a sustainable cocoa sector. This includes long-term relationships, fair contracts and transparency. It also includes rewarding farmers fairly for their work. Transparently reporting on your purchasing practices can help to attract buyers who pay more attention to sustainability.

Digital payments to farmers give a higher assurance that the payments reach the farmers. They are more secure and make it easier to create a record of the payments. Digital payments also help to create income records for farmers. These can help farmers and farmer groups get better access to finance.

There are 4 key building blocks for responsible and scalable payment digitisation for cocoa buyers and other value chain actors:

- 1. Know your smallholder farmers.
- 2. Build the internal and external value proposition for digitisation.
- 3. Enable farmers to spend funds and access services digitally. This means creating an ecosystem where farmers can buy goods and services digitally without using cash and can turn the digital payments into cash.
- 4. Teach your staff and farmers about the value of digital payments by developing materials and explaining the benefits.

Mobile money is already available at scale in some countries. For example, M-PESA has more than 51 million customers across 7 countries in Africa. Most cocoa farmers in Ghana use mobile money services. The electronic payments market in Africa is expected to continue to grow. However, mobile money is not yet used at scale for payments in cocoa farming. An Earthworm survey showed that only 2% of farmers interviewed use digital payments for cocoa beans and for receiving premiums.

Many companies are starting to pay farmers digitally. For example, the Nestlé Income Accelerator Programme pays farmers via secure 'mobile money' transfers. Barry Callebaut is scaling digital premium payments across West Africa, Indonesia and South America.

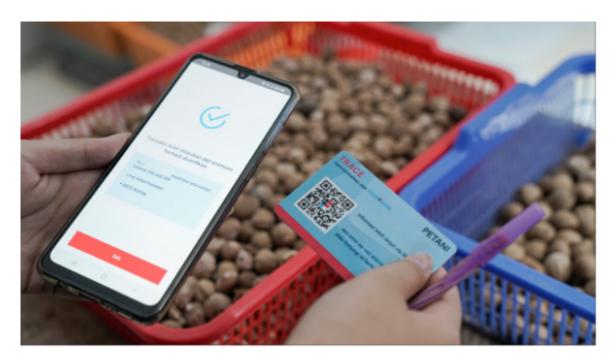
An alliance of the World Cocoa Foundation, Better than Cash Alliance, Cocobod and Licensed Buying Companies have promoted digital payments since 2018. The alliance is now scaling this work and making digital payments part of the Cocoa Management Systems (CMS). The aim is to digitise the cocoa sector for 800,000 farmer households, prioritising female farmers.

There are many tools available for digital payments. Often, the tools also give farmers extra benefits. Examples include:

- Agri-wallet: gives supply chain actors access to finance from a global network of lenders. This includes farmers, buyers and suppliers. For farmers, it means that they receive income in a digital wallet in the form of either mobile money or tokens. The money received in the Agri-wallet can be spent on inputs, such as seeds or fertilisers.
- KoltiPay: a digital payment solution developed by Koltiva. KoltiPay offers loans, savings, micro-insurance and the payment of bills and prepaid top-ups. It can also be used for cocoa price and premium payments.
- Connect: a payment verification tool developed by Fairfood. Many smallholder farmers do not have a smartphone or access to the internet. With Connect, farmers receive a Farmer Card that they use to verify that they have been paid. Farmers do not need a mobile phone. The collector uses the Connect app to record the transactions. The app can also be used without access to the internet, with data synchronised later. The

tool can be used for product delivery, premiums, bulk premium payments, deferred premiums and other payment types.

Figure 1: The Farmer Cards developed by Fairfood



Source: Fairfood

Tip:

Read the website of the Better Than Cash Alliance for more information about how everyone can benefit from using digital payments.

6. Use digital tools to get access to financial institutions and lenders

A lack of access to finance is an important issue in cocoa production. Many cocoa producers need access to finance to invest in their farms or sustain themselves between harvests. Access to credit has helped cocoa farmers with their productivity in many cocoa-producing countries, including Côte d'Ivoire, Ghana, Cameroon, Nigeria and Liberia.

Smallholder farmers are often seen as high-risk for banks. Digital tools can help producers and exporters get access to finance by showing their credit worthiness. The credit situation of the farmer is clearer to financial institutions when farmers have digital money rather than paper money. Village Savings and Loans Associations (VSLAs) can help make it easier for banks to give farmers access to finance. Digital payments can also help farmers get better access to financial services such as savings accounts, credit and insurance. For example, Cargill has developed a Mobile Money programme to give farmers better access to banking and saving services.

Tips:

If you want to access larger loans, it is important to build credit worthiness. This means keeping accurate business records and data related to your business. This could include a clear business plan, information on your credit history and your assets.

Support cocoa producers in getting access to finance with digital payments, Village Savings & Loans Associations and bank accounts.

7. Invest in traceability and geolocation tools

The cocoa industry has invested in traceability technology for many years. To make the cocoa sector more sustainable, it is crucial to know where your cocoa comes from. If you don't know where it comes from, it is also not possible to make the production of the cocoa that you buy more sustainable. This is why many companies have made big investments in traceability over the past years.

Recently, traceability has also become more important for (mandatory) compliance. A key regulation is the EU Regulation on Deforestation-free products (EUDR). As part of this regulation, companies must do thorough checks to ensure that the cocoa they buy is not produced on land that was deforested after 31 December 2020. Companies must comply to the EUDR from 30 December 2024 onwards (SMEs have more time). Traceability is needed to prove that the cocoa comes from somewhere that was not recently deforested. Traceability has therefore become more important than ever before. For more details on the EUDR, see the CBI's study on Tips to go green in cocoa and the EUDR study that we expect to publish on the CBI website in 2024.

Learn about available traceability systems

The cocoa industry has done a lot of work to make the cocoa in the supply chain more traceable. This is needed to make improvements in cocoa production. Through traceable supply chains, it is easier to see where the inefficiencies are in the supply chain. Knowing where the cocoa comes from also makes it possible to support producers and make sustainability improvements in your own supply chain.

Most large cocoa and chocolate companies have their own internal traceability platforms. Certification programmes such as Rainforest Alliance and Fairtrade also have their own systems. Many service providers have also developed their own traceability solutions. These include Source Intelligence, Cropin, Fairfood, Farmforce, Global Forest Watch, Satelligence, Sourcemap and Trade in Space.

Producing countries are setting up their own national traceability systems. Examples of national traceability systems include the Ghana Cocoa Traceability System (GCTS) in Ghana and the National Coffee-Cocoa Traceability System in Côte d'Ivoire. Both of these systems aim to be completed before the EUDR applies. Similar systems are considered or being developed in countries like Colombia and Cameroon.

As a result, there are many traceability systems that sometimes trace the same volumes of cocoa, but often are not linked to each other. Supply chain actors often need to use multiple systems to trace the cocoa. This can make it inconvenient and confusing for users. However, there are examples of traceability systems that are designed to link with other systems. This makes the traceability of the cocoa throughout the supply chain smoother and simpler.

An example of a traceability system that links with other systems is the Tony's Chocolonely Bean Tracker. Tony's Chocolonely is a Dutch chocolate company that has sustainability as its most important goal. The Bean Tracker is built with technology from Chainpoint. It makes it possible to trace the cocoa fully transparently from

bean to bar. This means that Tony's Chocolonely knows the origin, the flow and the quantities of the beans.

However, the Bean Tracker is not a system that has to be used by all companies in the supply chain. Instead, it connects with the other traceability systems that are already in place. After the cocoa reaches the processing stage, the Bean Tracker links to the system of the processor that Tony's Chocolonely works with. In this way, the Bean Tracker doesn't become an extra traceability tool that needs to be used. This makes it simpler for companies in the supply chain to be part of the Tony's Open Chain. It also makes data more transparent for other actors in the chain.

Consider whether blockchain is useful to you

Several traceability systems also use blockchain technology. Blockchain is an open system of decentralised data tracking and storage. Blockchains store data in blocks that are linked together via cryptography. It is used to increase accountability, transparency and traceability along the supply chain. The system requires each actor along the chain to join the blockchain technology. This allows the entire journey of cocoa beans to be traced back to the origin.

Various blockchain projects have been set up by NGOs, support organisations and the private sector. One example is COCOBLOCK, which was developed and tested by the French NGO Nitidae in 2019. The pilot project showed that blockchain technology can contribute to better traceability at a micro level. Another example is research done by Wageningen University and Research (WUR). The research shows that blockchain technology can help monitor and prevent child labour in cocoa production.

Koa uses blockchain technology to verify payments for cocoa farmers in Ghana. With the Seedtrace tool, consumers can see how much a cocoa farmer was paid in real-time. Other examples of blockchain-based platforms are farmer connect and GrainChain. Koa also uses blockchain for mobile payments.

Blockchain can be an important tool as a public source or record. It is transparent and can be audited and it can be used for innovative solutions such as improving transparency and efficiency in carbon markets. However, it is not required or necessary for cocoa traceability. It has also not been used at scale in the cocoa sector. The industry understands its potential, but it is not used at scale as part of the traceability solution.

Learn about new traceability innovations

There are many other new technological and digital innovations.

One solution is to use technology to make it possible to validate the country of origin of the cocoa that you buy. For example, SourceCertain can verify whether a product comes from a specific country of origin, region, or even the specific plantation. This is done by a combination of isotope, trace elements and chemical analysis. Buyers can compare the origin of the cocoa reported by their suppliers to the origin determined by SourceCertain. The process helps to identify cases that may involve fraud, substitution or mislabelling. This gives buyers more certainty about the origin of their cocoa.

Invest in mapping and monitoring

Cocoa production has been associated with deforestation for many years. This has resulted in a lot of investment in deforestation tools. This includes mapping farms and landscapes and remote sensing. Remote sensing means remote monitoring of the landscape, for example by using satellites. By combining these maps and through remote sensing, the cocoa industry monitors deforestation and other environmental indicators.

Farm mapping started many years ago. Certification programmes have already required the GPS mapping of cooperatives or farms for many years. Companies have been mapping farms at a large scale since the start of the Cocoa & Forests Initiative in 2017. National governments have also invested in mapping cocoa growing areas to detect deforestation and to prepare for the EUDR.

The EUDR requires GPS or polygon mapping of farm plots. GPS points are needed for plots of less than 4 hectares, and polygons are needed for plots above 4 hectares. These plots must be compared with maps of protected areas and classified forests to ensure that the cocoa is not produced illegally. They also need to be overlayed with deforestation and land change maps. This is done with monitoring and remote sensing, using geographic information systems (GIS).

An important use of remote sensing is to comply with deforestation targets or regulations such as the EUDR. A deforestation claim can only be made by a company if remote sensing proves that deforestation has not taken place. One example is the innovative field verification app developed by Mars. The app collects evidence that the trees were already there before the cut-off date. It also validates the land use history.

Another use of remote sensing is measuring biomass on cocoa farms. This technology is used by ACORN, which is part of Rabobank. ACORN works with farmer cooperatives and other local partners to help cocoa farmers set up agroforestry systems. The technology allows ACORN to measure the biomass that is generated on the farm and converts this into carbon removal units (CRUs).

The approach benefits companies, farmers and the planet. The CRUs are sold to organisations to offset or inset their carbon footprint. This can help them meet their climate goals. Farmers also benefit from generating CRUs. 80% of the income from CRU sales flow back to the original smallholder. The planet benefits through increased biodiversity and by removing CO2 from the atmosphere.

Tips:

Note that the cocoa buyer or importer is responsible for complying with the EUDR. However, demonstrating that your cocoa complies with EUDR can give you a competitive advantage compared to other exporters. Invest in a system that provides buyers with the data and traceability they need for EUDR compliance. This may especially be the case in the first period after the start of the EUDR in 2025, when many other exporters may not yet be ready for compliance.

Use cocoa farm mapping and supply chain traceability to improve other areas of the cocoa value chain. See the next tip for more information about this.

8. Use digital tools to improve farming practices

The most important part of the cocoa supply chain is the production of cocoa. All the tools described above can contribute to improved farming in some way. As mentioned, a digital tool should not be used to only solve one part of the cocoa supply chain. You should always consider how the tool or the data that is collected can support other parts of your business.

Examples of digital tools to improve cocoa farming practices are:

- CocoaLink, developed by Farmerline in partnership with Hershey and the World Cocoa Foundation. The app shares information on good agronomic practices, input information and weather forecasts.
- CocoaWise, developed by Cargill. This platform helps farmers make informed decisions based on agronomy, weather and market access information. It also supports the collection of farm data.
- FarmGrow, developed by the Rainforest Alliance and Grameen Foundation. FarmGrow combines farmer household data with information about the cocoa plots. It then helps create a business plan for farmers. The app helps to increase productivity.
- AgroCares is a tool that can give a report that includes the soil status, the soil's nutrient needs and a

fertiliser recommendation.

- Agri-Logic has developed the Farmer Field Book. This is a data collection method and a software package which helps users calculate their return on investments.
- Farmerline gives farmers access to quality inputs, training and markets through their digital platform Mergdata. The tools on this platform can be used to improve their yields and income.
- PlantwisePlus is an app thathelps address plant health threats and reduce crop losses. The focus of the app is on preparing against pests, reducing pesticide risks and advising farmers.

Figure 2: Using digital tools for soil analysis



Source: Ruben Bergsma at Long Run Sustainability

Many farmer groups and farmers do not own the data that is collected about their farms and households. They often do not have the polygon or GPS data to share with buyers who need it for EUDR compliance. In many cases, this data is owned by one of their key buyers, who invested in the mapping but has not shared the data.

Farmers and farmer groups need to own the data about their farms and households. This gives them more freedom in who they sell to and to explore new market opportunities. This can lead to more financial security for farmers. As an exporter, it is therefore important to share data collected from farmers with the farmers and groups that they are part of. Exporters can support producer groups in setting up the systems to store and share this data, for example by helping them with the digital tools described in this study.

Tips:

Research the possibilities. This study gives several examples of digital tools, but there are many more tools available. Find the tool or platform that works best for you.

Be accurate when collecting data. Only correct and detailed information will help you make the right decisions. It is important to have a quality control system in place to check the quality of your data.

Read the CBI studies on Tips to go green and Tips to become more socially responsible for more

information about sustainability in the cocoa industry.

9. Work with partners that have a network or experience in your region

Most of the technology providers mentioned in this study also have a local presence or experience in producing countries. If you explore options with a technology provider, always ask about their experience with other companies in your country or region. The local context can be very different between countries. It is crucial to learn from others if they already have some experience.

It can also be helpful to check whether they have staff based in your country. This will make it easier for them to support you in implementing the tool. It also gives you more confidence that they understand the local context.

Check out international organisations such as TechnoServe, Rikolto, Agriterra and Solidaridad to see if they offer assistance and practical guidance on digital tools in your country.

Connect to your country or region's sector association to see whether they can offer support. For example, connect with the Cocoa Association of Asia or Cocoa Abrabopa Association (Ghana).

Tips:

Check whether technology providers have local presence and experience in your country.

Reach out to local organisations (NGOs, certification programmes, researchers) active in the cocoa sector to see whether they are involved in or know about digitalisation projects that match your interests and needs.

Visit the website of the GIZ Innovation Fund (and their LinkedIn page and YouTube page) to see if they are working on any digitalisation projects in your country.

Visit the members page of AfricaGoesDigital to see an overview of data technology suppliers in Africa.

Long Run Sustainability carried out this study in partnership with Ethos Agriculture on behalf of CBI.

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