

## Financial products and services for African agripreneurs

Agriculture represents the backbone of most African countries. However, a large percentage of micro, small and medium entrepreneurs (MSME) in agriculture suffer from low access to finance. As financial inclusion is a mean for poverty reduction and essential for business expansion, ability to buy quality inputs and producing high-quality products, the previously described lack of access must be tackled (Rainforest Alliance & Citi Foundation, 2013).

Financial inclusion starts with means of payment and delivery modes that do not only include cash. Payment services that do not require cash or a bank facilitate life and business and guarantee that MSME have the same possibilities as others on the market. Financial inclusion continues with access to financial institutions for opening accounts to save money, apply for credits, engage into leasing contracts, and the access to insurance. For starters having savings in an account instead of at home holds several advantages that will be described later in detail. However, having a savings account also facilitates the access to credits as a saving history can easily be presented and sometimes membership at the bank is required in order to obtain a credit. Insurances are also closely connected to e.g. credits as sometimes financial institutions demand the client to take an insurance in addition to be granted a credit.

One major obstacle for the lack of access to finance for agripreneurs is the perceived default risk in agriculture. Many financial institutions (FIs) and banks react with high interest rates on credits or do not serve the agricultural sector at all. Those FIs and banks who indeed serve the agricultural sector are, hence, even more important. Please find below a table regarding the most common types of risks in the agricultural sector. The annex also contains a table including risk reducing measures to be taken.

<b>Types / sources of loan risks</b>
<b>Erratic weather and climate change</b> (long term)
<b>Markets and price volatility</b>
<b>Loan packages without clear technical basis</b>
<b>Weak competitiveness of the target product to be financed not considered</b>
<b>Clients use deficient production techniques</b>
<b>Delayed credit disbursement</b>
<b>Delayed input supply</b>
<b>Deficient input quality</b> loan takers buy inputs anywhere → risk: fake inputs that are not effective
<b>Inappropriate reimbursement periods</b> before full harvest, no storage included, sales during low price season
<b>Weak business / financial mgt. skills of producers</b>
<b>Lacking certainty on existence and size of plots</b>
<b>Weak or absent producer organization</b>
<b>Delayed payment of product</b> can lead to side selling
<b>Weak irrigation management</b>
<b>Weak understanding of Financial Institutions of commercial agriculture</b>

Table 1: „Thoughts about „The“ default risk of credits in agriculture - Dr. Annemarie Matthess (2013)

In order to grant **credits** (i.e. reduce default risk), providers serving agripreneurs conduct **technological standard analyses** and **credit worthiness assessments** before entering a

credit contract: The provider contracts an agent / advisor / technician / specialist who is knowledgeable in agricultural value chains and usually much closer to the agripreneur or cooperative. This expert goes into the field to assess the production or processing of the credit applicant – including an ex-ante profitability assessment of the business. He/she then assists in designing the credit product to the needs and possibilities. Sometimes even laboratory tests are conducted to better assess the quality of the produce to ensure the product has good chances on the market and hence, that the agripreneur can pay back the credit. Often, GPS measurement of the field is conducted and sometimes, credit products also require the participation in a specific educational measure in order to receive the product. Technological standard analyses/credit worthiness assessments not only come in terms of profitability and quality checks they also comprise the following analyses:

- Financial: cost factors, financial flows, non-farm income
- Technical: business management, technical know-how, experience and other risk management aspects
- Economic: national and regional implications, macroeconomic or sectoral circumstances, market accessibility affecting the client's ability to repay the loan.

As credit products are designed according to the analyses' results (cover less or more aspects, more or less expensive / requirements), these resulting credit products – although they can be considered a specific type of credit e.g. a working capital, investment or input loan – are individual. Hence, these products can differ for each business, crop or depending on whether the client is a processor or producer.

Instead of receiving a personal credit, credits can also be granted to a group. Of course, this possibility offers certain advantages, but it is nevertheless also risky. As the group lending is special, this is described as separate case later.

**Agricultural insurance** provides a downside protection, helps building resilience and can reduce the default risk. However, African insurance providers trying to serve the agricultural sector as well as agripreneurs themselves face manifold challenges (Allendorf & GIZ, 2020):

<b>Challenges for insurance providers</b>	<b>Challenges for agripreneurs</b>
<b>Costly &amp; complicated</b> to provide suitable solutions	<b>Lacking understanding</b> of complex insurance products
<b>Providers are too small/too poorly capitalized and too less diversified in order to serve the agricultural sector</b> (climate affects whole regions) --> experience shows that agricultural insurance schemes below 100,000 policyholders are not sustainable	<b>Insurance does not fit the needs</b> e.g. often only available for cash crop
<b>Moral hazard &amp; adverse selection</b>	<b>High costs</b>
<b>Low profitability</b>	<b>Travelling to traditional insurance companies</b>
<b>Lacking government support</b>	<b>Low trust in insurers</b>
<b>Low data quality and/or data availability</b>	<b>Indemnity insurances might pay very late</b> (loss assessment)
	<b>Psychologically difficult to accept decision based on remote-sensed data instead of field visits</b>

It is best to combine agricultural insurances with a good risk management. Risk can be reduced or even avoided by the following activities / tools:

- Diversification
- Specific varieties e.g. drought resistant or preventive measures like irrigation and water reservoirs --> can be obtained via credits

- Education / training on production practices and quality inputs
- Good management of the business
- Proper timing of production
- Social insurances to avoid having to spend lots of money privately instead of investing in the business
- Risk sharing via e.g. contract farming, price guarantees, bulk purchases
- Savings
- Adapting modern and climate-smart farming practices, GAP
- Disaster warnings, weather forecast SMS
- Good marketing

An agripreneur will therefore, make a cost-benefit assessment of whether he/she will get an insurance to cover the remaining risks (Allendorf & GIZ, 2020).

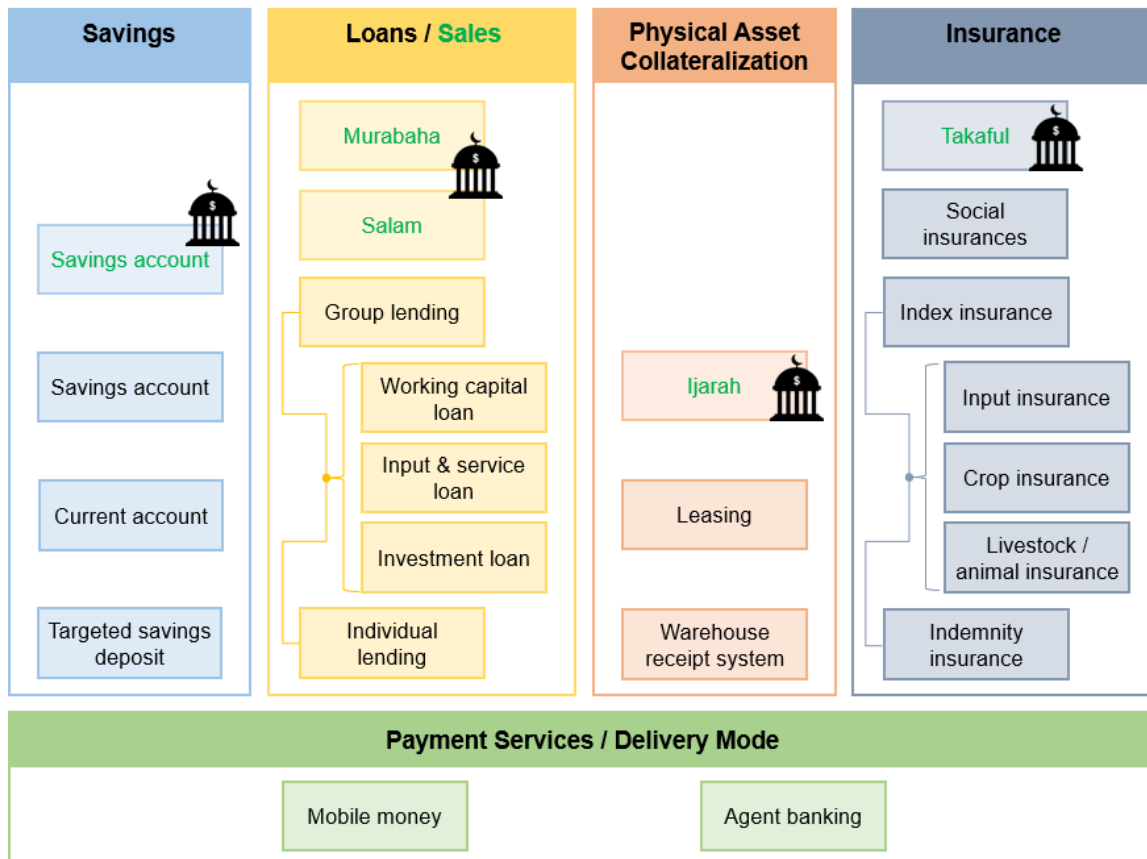
The reach and impact of agricultural insurances can be improved by bundling it with well-known products e.g. purchase of fertilizer or funeral or life insurance, as well as trusted agents e.g. agro-dealers. Especially funeral insurance is very popular and well accessible and hence, could serve as an entry insurance product to build insurance literacy and trust in providers. Like this hybrid products were developed: e.g. credit-linked insurances which means that agripreneurs receive a loan easier based on e.g. life insurance, crop insurance. Or hybrid products with contract farming meaning that the premiums for a crop insurance are pre-funded under a contract farming scheme together with seeds and fertilizer and the farmer commits to selling his/her produce to the company. The loan is then paid with the profit from sale and the potential pay-out from insurance (Allendorf & GIZ, 2020).

However, as insurances often do not pass a cost-benefit check (operational costs and risks outweigh the benefits) or provide too little added value, the best way for many agripreneurs is not having agricultural insurances at all (Allendorf & GIZ, 2020).

Another way of providing protection against climatic risks is the African Risk Capacity (ARC) which is an index-based insurance risk pool that allows countries to manage drought risk as a group and receiving payouts that will be redistributed to affected inhabitants ([ARC](#)).

In order to further increase scale with financial products and services, insurance and credit providers can partner with MNOs to use the mobile infrastructure for accessing and communicating with rural customers like agripreneurs and cooperatives. Registration, location data provision, information on products and services, and informing about events that triggered the insurance can be done via phone. Also, mobile money can be used for the premium collection and payouts. Sometimes, MNOs themselves provide financial services like savings, credit, and insurance products. This, however, leads to them falling under banking regulations in the respective countries (Allendorf & GIZ, 2020).

The remainder of the document presents the most common and important financial products and services for African agripreneurs – conventional and Islamic banking products. Despite the shortcomings of insurances in the African market, the most common agricultural insurance types are presented as well.



## Content

<b>1. Payment services / Delivery mode</b> .....	<b>6</b>
Mobile money .....	6
Agent banking .....	7
<b>2. Savings</b> .....	<b>8</b>
Savings account .....	8
Current account .....	9
Targeted savings deposits .....	10
<b>3. Credits</b> .....	<b>11</b>
Group lending .....	11
<b>3.1 Credit types (individual and group)</b> .....	<b>13</b>
Working capital loan .....	13
Input & Service loan .....	15
Investment loan .....	16
<b>4. Physical-asset collateralization</b> .....	<b>17</b>
Warehouse receipt system / Inventory credit .....	17
Leasing.....	18
<b>5. Insurance</b> .....	<b>19</b>
Social insurances .....	19
Index insurance .....	20
<b>5.1 Insurance types (indemnity and index-based)</b> .....	<b>22</b>
Input insurance .....	22
Crop insurance .....	23
Livestock insurance .....	24
<b>6. Islamic Banking</b> .....	<b>25</b>
<b>6.1 Savings Islamic Banking</b> .....	<b>26</b>
Savings account .....	26
<b>6.2 Sales Islamic Banking</b> .....	<b>28</b>
Murabaha .....	28
Salam .....	30
<b>6.3 Physical-asset collateralization Islamic Banking</b> .....	<b>32</b>
Ijarah (Leasing) .....	32
<b>6.4 Insurance Islamic Banking</b> .....	<b>34</b>
Takaful .....	34
<b>Annex</b> .....	<b>36</b>
<b>Sources without links</b> .....	<b>39</b>

## 1. Payment services / Delivery mode

The following tables present types of payment services or delivery modes that are most important to people living in remote and rural areas in Africa. Of course, other payment services e.g. online banking, cheques exist. However, the latter are usually hard to access as either a stable internet connection is needed, or the client must be present at a bank which might be far away. Hence, only the services that are of most use to African agripreneurs are presented.

Mobile money	
<b>Purpose</b>	Paying service without the necessity of having a bank account, mobile banking or visiting a bank.
<b>Description</b>	<ul style="list-style-type: none"> <li>▪ Sending, storing and receiving money via mobile phone;</li> <li>▪ funds stored in electronic account linked to the mobile phone number;</li> <li>▪ independent of traditional banks;</li> <li>▪ no bank account required as mobile money account is used.</li> </ul>
<b>Client</b>	Everyone with a phone, including agripreneurs
<b>Advantage client</b>	<ul style="list-style-type: none"> <li>▪ No bank account needed: Alternative to cash and bank;</li> <li>▪ can be used wherever there is mobile signal;</li> <li>▪ enables to build payment history;</li> <li>▪ money arrives instantly;</li> <li>▪ possibility to transfer very small amounts as well.</li> </ul>
<b>Provider</b>	Mobile network operator (MNO); specialized mobile money service providers; entity partnering with MNO
<b>Advantage Provider</b>	<ul style="list-style-type: none"> <li>▪ Expanding their services &amp; customer base;</li> <li>▪ becoming more attractive as mobile network provider</li> </ul>
<b>Requirements</b>	Mobile phone
<b>Risks for client</b>	Fraud, e.g. identity theft (SIM swaps), phishing
<b>Source</b>	<a href="#">Mobile Money Note 2019</a>

Agent banking	
<b>Purpose</b>	Branchless banking for formerly unserved population.
<b>Description</b>	Agents can register new clients on behalf of the bank and offer the bank's services.
<b>Client</b>	Especially rural population including agripreneurs
<b>Advantage client</b>	<ul style="list-style-type: none"> <li>▪ Low distances to access accredited financial services;</li> <li>▪ low entry barriers;</li> <li>▪ able to build credit history.</li> </ul>
<b>Provider</b>	Banks
<b>Partner</b>	Agent: markets, mobile network operators, petrol filling station, dealers
<b>Advantage Provider / Partner</b>	Increase in customer base / outreach, building market share.
<b>Requirements</b>	Usual requirements to open accounts, receiving credit etc. depending on product and provider.
<b>Risks for client</b>	<ul style="list-style-type: none"> <li>▪ Struggles between provider and agent might fall back on clients;</li> <li>▪ if agent shuts down client has to travel again to access banking services</li> </ul>
<b>Source</b>	<a href="https://www.beroeinc.com/category-intelligence/agency-banking-africa-market/">https://www.beroeinc.com/category-intelligence/agency-banking-africa-market/</a>

## 2. Savings

In the following the most common conventional savings products for African agripreneurs are presented. Except for the structured saving, the accounts can be opened whenever it is desired, i.e. no timing issues must be adhered to.

Savings account	
<b>Purpose</b>	Keeping money safe and saving money to invest it into the business.
<b>Description</b>	<ul style="list-style-type: none"> <li>▪ Open savings account and put money in it to keep it safe;</li> <li>▪ to take money out of the account, client has to be present at the bank;</li> <li>▪ client receives interest on the savings e.g. every 3 months, 6 months depending on bank's policy;</li> <li>▪ money taken out or paid into account is recorded in savings booklet of client;</li> <li>▪ having a savings account can facilitate access to credit;</li> <li>▪ with savings an agripreneur can invest in his/her business to improve revenue (e.g. certified inputs).</li> </ul>
<b>Term</b>	Medium to long-term
<b>Client</b>	Everyone including agripreneurs
<b>Advantage client</b>	<ul style="list-style-type: none"> <li>▪ Money is kept safe and pays interests;</li> <li>▪ protected against inflation;</li> <li>▪ might be basis for obtaining a loan;</li> <li>▪ helps control spending.</li> </ul>
<b>Provider</b>	Banks
<b>Partner</b>	Cooperatives / APOs (potentially as members of cooperatives also open savings accounts)
<b>Advantage Provider</b>	<ul style="list-style-type: none"> <li>▪ Liquidity;</li> <li>▪ increasing customer base.</li> </ul>
<b>Requirements</b>	Being member of a cooperative or becoming client of the bank
<b>Risks for client</b>	<ul style="list-style-type: none"> <li>▪ Insolvency of bank;</li> <li>▪ bad governance</li> </ul>
<b>Source</b>	FBS notebook; Mr. Paul Banouga (CamCCUL)



Current account	
<b>Purpose</b>	Keeping money safe while having possibility of accessing it any time without telling the bank beforehand.
<b>Description</b>	<ul style="list-style-type: none"> <li>▪ Cash deposits made for safekeeping;</li> <li>▪ easy access to money at any time without telling bank beforehand;</li> <li>▪ no interest, sometimes fee for safekeeping and provided services;</li> <li>▪ usually used to pay for everyday expenses.</li> </ul>
<b>Term</b>	Short to medium-term
<b>Client</b>	Everyone including agripreneurs
<b>Advantage client</b>	Easy access at any time (bank, ATM, cheque, net banking) while money is kept safe
<b>Provider</b>	Banks
<b>Partner</b>	Cooperatives / APOs (potentially as members of cooperatives also open current accounts)
<b>Advantage Provider</b>	<ul style="list-style-type: none"> <li>▪ Liquidity;</li> <li>▪ fees for services provided;</li> <li>▪ increasing customer base</li> </ul>
<b>Requirements</b>	Being member of a cooperative or becoming client of the bank
<b>Risks for client</b>	<ul style="list-style-type: none"> <li>▪ Insolvency of bank;</li> <li>▪ bad governance</li> </ul>
<b>Source</b>	FBS notebook; Mr. Paul Banouga (CamCCUL)

Targeted savings deposits	
<b>Purpose</b>	Saving for a special investment in the near future e.g. for replantation, to expand production.
<b>Description</b>	<ul style="list-style-type: none"> <li>▪ Targeted savings as a money amount is set as target to meet an investment;</li> <li>▪ fixed amount is saved periodically until target is met, then money is withdrawn;</li> <li>▪ attractive interest rate is paid as deposits are stable and predictable, paid according to the amount in the account and depends on how long the money will stay in the account;</li> <li>▪ if money is withdrawn before the end of the agreed period, the bank will charge a fee for withdrawal;</li> <li>▪ account can be used, e.g. by an agripreneur who plans to replant his plantation.</li> </ul>
<b>Term</b>	Agreed timeframe
<b>Timing</b>	Start depending on requirements and set final date (start early enough in order to save enough for timely achievement of target)
<b>Client</b>	Everyone including agripreneurs
<b>Advantage client</b>	<ul style="list-style-type: none"> <li>▪ Planning security of when to deposit which amount;</li> <li>▪ helps to keep focus;</li> <li>▪ attractive interest rate.</li> </ul>
<b>Provider</b>	Banks
<b>Partner</b>	Cooperatives / APOs (education on financial products and related obligations)
<b>Advantage Provider / Partner</b>	Planning security as deposits are stable and predictable, helps in planning which credits can be handed out
<b>Requirements</b>	<ul style="list-style-type: none"> <li>▪ Being member of a cooperative or becoming client of the provider;</li> <li>▪ depending on provider</li> </ul>
<b>Ex-ante analysis</b>	Some providers require the client to undergo an education on financial products and the related obligations
<b>Risks for client</b>	<ul style="list-style-type: none"> <li>▪ Insolvency of bank;</li> <li>▪ bad governance;</li> <li>▪ fines in case of earlier withdrawal.</li> </ul>
<b>Source</b>	USAID & Land O'Lakres, Inc., 2010; Mr. Paul Banouga (CamCCUL)

### 3. Credits

Credits can be granted to individual persons or to a group. As the group lending is special, this is described as separate case. After that different types of credits are presented which can be handed out either via group lending or to individuals.

Group lending	
<b>Purpose</b>	Being eligible for a credit despite of scarce collateral.
<b>Description</b>	<ul style="list-style-type: none"> <li>▪ Borrow money as a member of the group (group solidarity loan);</li> <li>▪ group can be a cooperative, a registered farmers' association or a structured group of another kind;</li> <li>▪ especially used in case of no or scarce collateral: moral obligation in the group (other members are happy to keep you in the group if you pay in time), group structures and related economic viability replace needed collateral.</li> </ul>
<b>Term</b>	Depends on type of loan
<b>Timing</b>	Depends on <ul style="list-style-type: none"> <li>▪ agricultural calendar (depends on product, being producer or processor etc.);</li> <li>▪ provider's policy</li> </ul>
<b>Client</b>	APO or structured groups
<b>Advantage client</b>	<ul style="list-style-type: none"> <li>▪ No need for collateral in order to receive a credit;</li> <li>▪ profit from good group performance</li> </ul>
<b>Provider</b>	Financial institution with a focus on agricultural sector; agricultural banks
<b>Partner</b>	Might be MNOs to facilitate communication and premium collection
<b>Advantage Provider / Partner</b>	<ul style="list-style-type: none"> <li>▪ Shortcut to cover a large number of people;</li> <li>▪ increasing customer base;</li> <li>▪ receiving interest rates.</li> </ul>
<b>Requirements</b>	<ul style="list-style-type: none"> <li>▪ Structured group e.g. registered or successfully active for many years;</li> <li>▪ list of group members &amp; identity card copies;</li> <li>▪ business plan;</li> <li>▪ etc. depending on provider.</li> </ul>
<b>Ex-ante analysis</b>	<ul style="list-style-type: none"> <li>▪ Verification in the field whether group is structured and hence eligible;</li> <li>▪ technological standard analyses and credit worthiness assessments before credit is contracted;</li> <li>▪ economic assessment after group received credit to see impacts/improvements.</li> </ul>

<b>Group lending</b>	
<b>Risks for client</b>	<ul style="list-style-type: none"><li>▪ Weak group performance due to weak performance of some group members and hence, not being eligible for future credits;</li><li>▪ bad governance;</li><li>▪ late fees and damage to credit score when not paying on time.</li></ul>
<b>Source</b>	FBS notebook; Mr. Paul Banouga (CamCCUL)

## 3.1 Credit types (individual and group)

Working capital loan	
<b>Purpose</b>	Finance working capital needs to keep the business running. Bridging the gap between purchase of inputs and sale of produce.
<b>Description</b>	<ul style="list-style-type: none"> <li>▪ Loan to cover financial gap to sufficiently run the business at full capacity;</li> <li>▪ to finance a businesses' everyday operations;</li> <li>▪ used to buy short-term operational needs, assets, investments;</li> <li>▪ needs can include costs such as payroll, rent, and debt payments;</li> <li>▪ interest rates to pay.</li> </ul>
<b>Term</b>	Short-term (< 1 year)
<b>Timing</b>	Depends on <ul style="list-style-type: none"> <li>▪ agricultural calendar (depends on product, being producer or processor etc.);</li> <li>▪ provider's policy e.g. months of membership</li> </ul>
<b>Client</b>	Agripreneurs, APOs
<b>Advantage client</b>	<ul style="list-style-type: none"> <li>▪ Able to keep business running/cover expenses despite seasonal revenue;</li> <li>▪ able to engage in deferred selling to achieve higher prices (working capital to keep business running).</li> </ul>
<b>Provider</b>	Financial institution (with a focus on agricultural sector); agricultural banks
<b>Partner</b>	<ul style="list-style-type: none"> <li>▪ Potential partner: Service provider, processor etc. who are partners of the provider and the client --&gt; possibility of collateralizing payments:               <ul style="list-style-type: none"> <li>○ “triangular” arrangement in which formal companies (buyers or processors) get directly engaged in helping their suppliers obtain credit: e.g. cooperative applies for credit, brewery is contracted to buy maize produced by cooperative --&gt; ensures / kind of collateral to bank that cooperative can repay credit;</li> </ul> </li> <li>▪ might also be MNOs to facilitate communication and premium collection.</li> </ul>
<b>Advantage Provider / Partner</b>	<ul style="list-style-type: none"> <li>▪ Receiving interest rates;</li> <li>▪ increasing customer base.</li> </ul>
<b>Requirements (individual)</b>	<ul style="list-style-type: none"> <li>▪ Borrower is a formal enterprise conducting financial accounting;</li> <li>▪ enterprise has sufficient assets;</li> <li>▪ track record of business operations;</li> <li>▪ business plan;</li> <li>▪ etc. depending on provider.</li> </ul>

Working capital loan	
<b>Ex-ante analysis</b>	Specialist is contracted by provider to adapt the product to the speculations and develop requirements (e.g. conducting laboratory pretests to ensure the agric. product can be sold in the market & to ensure the borrower is able to pay back the credit). See explanation in introduction.
<b>Risks for client</b>	<ul style="list-style-type: none"> <li>▪ Bad governance;</li> <li>▪ late fees and damage to credit score when not paying on time</li> </ul>
<b>Source</b>	FBS notebook; ValueLinks Manual; <a href="https://www.investopedia.com/terms/w/workingcapitalloan.asp">https://www.investopedia.com/terms/w/workingcapitalloan.asp</a> ; Mr. Paul Banouga (CamCCUL)

Input & Service loan	
<b>Purpose</b>	Buy planting material, seeds, fertilizer, insecticides and herbicides and to maintain the field.
<b>Description</b>	Short-term loan (1 to 12 months) for the purchase of plants, seeds, fertilizer, insecticides, herbicides.
<b>Term</b>	Short-term
<b>Timing</b>	Depends on <ul style="list-style-type: none"> <li>▪ agricultural calendar (depends on product, being producer or processor etc.);</li> <li>▪ provider's policy e.g. months of membership</li> </ul>
<b>Client</b>	Agripreneurs, APOs
<b>Advantage client</b>	<ul style="list-style-type: none"> <li>▪ Able to afford quality inputs;</li> <li>▪ quality &amp; quantity increase of produce.</li> </ul>
<b>Provider</b>	Financial institution (with a focus on agricultural sector); agricultural banks
<b>Partner</b>	<ul style="list-style-type: none"> <li>▪ Potential partner: Service provider, processor etc. who are partners of the provider and the client --&gt; possibility of collateralizing payments:               <ul style="list-style-type: none"> <li>○ “triangular” arrangement in which formal companies (buyers or processors) get directly engaged in helping their suppliers obtain credit: e.g. cooperative applies for credit, brewery is contracted to buy maize produced by cooperative --&gt; ensures / kind of collateral to bank that cooperative can repay credit;</li> </ul> </li> <li>▪ might also be MNOs to facilitate communication and premium collection.</li> </ul>
<b>Advantage Provider / Partner</b>	<ul style="list-style-type: none"> <li>▪ Receiving interest rates;</li> <li>▪ increasing customer base.</li> </ul>
<b>Requirements (individual)</b>	<ul style="list-style-type: none"> <li>▪ Land possession document;</li> <li>▪ business plan;</li> <li>▪ track record of business operations;</li> <li>▪ credit and saving history;</li> <li>▪ etc. depending on provider.</li> </ul>
<b>Ex-ante analysis</b>	Specialist is contracted by provider to adapt the product to the speculations and develop requirements (e.g. conducting laboratory pretests to ensure the agric. product can be sold in the market & to ensure the borrower is able to pay back the credit). See explanation in introduction.
<b>Risks for client</b>	<ul style="list-style-type: none"> <li>▪ Bad governance;</li> <li>▪ late fees and damage to credit score when not paying on time</li> </ul>
<b>Source</b>	FBS notebook; Présentation Aperçu général sur l'agriculture_Plateaux Ouest.pptx; Mr. Paul Banouga (CamCCUL).

Investment loan	
<b>Purpose</b>	Finance changes, innovations and expansion of a business.
<b>Description</b>	<ul style="list-style-type: none"> <li>▪ Medium term: e.g. for stables, planting or replanting, other crops.</li> <li>▪ Longer-term: to expand production, innovate, new equipment, buildings, branding, product development.</li> </ul>
<b>Term</b>	Medium- to long-term
<b>Timing</b>	Depends on <ul style="list-style-type: none"> <li>▪ agricultural calendar (depends on product, being producer or processor etc.);</li> <li>▪ provider's policy e.g. months of membership</li> </ul>
<b>Client</b>	Agripreneurs, APOs
<b>Advantage client</b>	Able to finance innovations, expand business, enhance productivity although not having enough savings.
<b>Provider</b>	Financial institution (with a focus on agricultural sector); agricultural banks
<b>Partner</b>	<ul style="list-style-type: none"> <li>▪ Potential partner: Service provider, processor etc. who are partners of the provider and the client --&gt; possibility of collateralizing payments:               <ul style="list-style-type: none"> <li>○ “triangular” arrangement in which formal companies (buyers or processors) get directly engaged in helping their suppliers obtain credit: e.g. cooperative applies for credit, brewery is contracted to buy maize produced by cooperative --&gt; ensures / kind of collateral to bank that cooperative can repay credit;</li> </ul> </li> <li>▪ might also be MNOs to facilitate communication and premium collection.</li> </ul>
<b>Advantage Provider / Partner</b>	<ul style="list-style-type: none"> <li>▪ Receiving interest rates;</li> <li>▪ increasing customer base.</li> </ul>
<b>Requirements (individual)</b>	<ul style="list-style-type: none"> <li>▪ Borrower is formal enterprise;</li> <li>▪ land possession document;</li> <li>▪ business plan;</li> <li>▪ track record of business operations;</li> <li>▪ credit and saving history;</li> <li>▪ etc. depending on provider.</li> </ul>
<b>Ex-ante analysis</b>	Specialist is contracted by provider to adapt the product to the speculations and develop requirements (e.g. conducting laboratory pretests to ensure the agric. product can be sold in the market & to ensure the borrower is able to pay back the credit). See explanation in introduction.
<b>Risks for client</b>	<ul style="list-style-type: none"> <li>▪ Bad governance;</li> <li>▪ late fees and damage to credit score when not paying on time</li> </ul>
<b>Source</b>	Value Links Manual; Mr. Paul Banouga (CamCCUL); Dr. Annemarie Matthes.



## 4. Physical-asset collateralization

Warehouse receipt system / Inventory credit			
<b>Purpose</b>	Keeping produce safe in a warehouse and using receipt as collateral for short-term credit.		
<b>Description</b>	<ul style="list-style-type: none"> <li>▪ Financing triangle arrangement in agriculture;</li> <li>▪ agripreneurs deposit their products in a warehouse immediately after harvest;</li> <li>▪ warehouse operator issues a receipt certifying the safe storage of produce;</li> <li>▪ client uses receipt as collateral and requests a short-term loan from a financial institution;</li> <li>▪ loan is due when the produce is sold.</li> </ul>		
<b>Term</b>	Short-term		
<b>Timing</b>	Depends on <ul style="list-style-type: none"> <li>▪ agricultural calendar (depends on product, crop, being producer or processor etc.);</li> <li>▪ provider's and partner's policy e.g. months of membership</li> </ul>		
<b>Client</b>	Agripreneurs, APOs		
<b>Advantage client</b>	<ul style="list-style-type: none"> <li>▪ Able to finance inputs for next season before receiving money for produce of current season;</li> <li>▪ produce is stored safely (e.g. no weather risk);</li> <li>▪ reduced logistics time &amp; costs;</li> <li>▪ expands marketing options for agripreneur (directly sell to various buyers not middlemen --&gt; higher prices)</li> </ul>		
<b>Provider</b>	Financial institution with a focus on agricultural sector; agricultural banks		
<b>Partner</b>	Warehouse; Trader		
<b>Advantage Provider / Partner</b>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; vertical-align: top;"> <b>Provider:</b> <ul style="list-style-type: none"> <li>▪ Receives interest rate;</li> <li>▪ collateral that can be liquidated quickly;</li> <li>▪ increases customer base</li> </ul> </td> <td style="width: 50%; vertical-align: top;"> <b>Partner:</b> <ul style="list-style-type: none"> <li>▪ Increases customer base</li> </ul> </td> </tr> </table>	<b>Provider:</b> <ul style="list-style-type: none"> <li>▪ Receives interest rate;</li> <li>▪ collateral that can be liquidated quickly;</li> <li>▪ increases customer base</li> </ul>	<b>Partner:</b> <ul style="list-style-type: none"> <li>▪ Increases customer base</li> </ul>
<b>Provider:</b> <ul style="list-style-type: none"> <li>▪ Receives interest rate;</li> <li>▪ collateral that can be liquidated quickly;</li> <li>▪ increases customer base</li> </ul>	<b>Partner:</b> <ul style="list-style-type: none"> <li>▪ Increases customer base</li> </ul>		
<b>Requirements</b>	<ul style="list-style-type: none"> <li>▪ Warehousing services exist;</li> <li>▪ produce with longer storage life;</li> <li>▪ secured transaction law established;</li> <li>▪ requirements depending on provider.</li> </ul>		
<b>Ex-ante analysis</b>	Warehouse operator checks quality and quantity of produce in order to ensure it.		
<b>Risks for client</b>	Market prices unexpectedly crash when produce is to be sold.		
<b>Source</b>	ValueLinks Manual; <a href="#">pidsdps1645.pdf (econstor.eu)</a> ; Mr. Paul Banouga (CamCCUL)		

Leasing	
<b>Purpose</b>	Financing purchase of assets/equipments ready for use while avoiding guarantee problematic for new investors.
<b>Description</b>	<ul style="list-style-type: none"> <li>▪ Borrower (lessee) receives a loan of the productive asset itself;</li> <li>▪ Lessor (provider) hands over asset to lessee for usage but the ownership title remains with lessor;</li> <li>▪ lessee covers all maintenance and operational costs, makes regular payments for the lease;</li> <li>▪ at the end of the leasing period, the lessee has the option of buying the asset or returning it to the lessor;</li> <li>▪ used in agribusiness for equipment e.g. computer, machines, protective clothes</li> </ul>
<b>Term</b>	Medium-term
<b>Timing</b>	Depends on <ul style="list-style-type: none"> <li>▪ agricultural calendar (depends on product, being producer or processor etc.);</li> <li>▪ provider's and partner's policy.</li> </ul>
<b>Client</b>	APOs, medium and larger agripreneurs
<b>Advantage client</b>	<ul style="list-style-type: none"> <li>▪ avoidance of guarantee and depreciation problematic;</li> <li>▪ asset/equipment already available although not paying full price;</li> <li>▪ free to change equipment frequently to newer technologies.</li> </ul>
<b>Provider</b>	Financial institutions, equipment leasing companies
<b>Partner</b>	Supplier the lessor buys from and who provides information on the asset.
<b>Advantage Provider / Partner</b>	<ul style="list-style-type: none"> <li>▪ Regular income through installments;</li> <li>▪ increasing customer base.</li> </ul>
<b>Requirements</b>	<ul style="list-style-type: none"> <li>▪ Availability of the appropriate equipment;</li> <li>▪ repossession is legally possible and services available;</li> <li>▪ leasing law established;</li> <li>▪ business plan;</li> <li>▪ track record of business;</li> <li>▪ etc. depending on provider.</li> </ul>
<b>Risks for client</b>	In case of damage/breakdown of the asset during the leasing period, the lessor may refuse to bear the cost of repair or replacement, claiming the lessee had abused the asset.
<b>Source</b>	VL Manual p.157; <a href="http://www.fao.org/3/y5565e/y5565e07.htm#bm07.8">http://www.fao.org/3/y5565e/y5565e07.htm#bm07.8</a> ; Mr. Paul Banouga (CamCCUL)

## 5. Insurance

Insurances in general can be indemnity insurances (granted to individual persons) or index insurances. However, as already discussed in the introduction, agricultural insurance schemes are mostly not well developed in African countries. Therefore, hybrid options or bundling of different risk mitigating solutions came into existence but are not universally available and very different in each country. It might even be the case that it is best for agripreneurs to not invest in an insurance at all but instead improve their own risk management.

As social insurances are an important risk management tool, those are shortly introduced in bulk. Index insurances are described as a separate case. After that the most common insurance types for African agripreneurs are presented which can be either indemnity or index insurances.

Social insurances	
<b>Purpose</b>	Mitigating risks in personal life that also affect the business.
<b>Description</b>	Funeral insurance, life insurance, health insurance, accident insurance, education insurance (protects investment in education).
<b>Term</b>	Long-term
<b>Client</b>	Everyone including agripreneurs
<b>Advantage client</b>	<ul style="list-style-type: none"> <li>▪ Able to keep business running in case of unexpected event that requires to spend money;</li> <li>▪ improves livelihoods;</li> <li>▪ better risk management.</li> </ul>
<b>Provider</b>	Financial institution; insurance companies; NGOs; governments
<b>Partner</b>	Might be MNOs to facilitate communication and premium collection
<b>Advantage Provider / Partner</b>	<ul style="list-style-type: none"> <li>▪ Insurance premium;</li> <li>▪ increasing insurance portfolio;</li> <li>▪ increasing customer base</li> </ul>
<b>Requirements</b>	<ul style="list-style-type: none"> <li>▪ Enabling regulatory and legal environment;</li> <li>▪ Depending on provider's policy and insurance product e.g. history of health issues, savings, credits</li> </ul>
<b>Ex-ante analysis</b>	Viability analysis before (risk data assessment) and loss and damage analysis in case of damage
<b>Risks for client</b>	Insurance coverage does not fit the incident and hence, no payment
<b>Source</b>	Mr. Paul Banouga (CamCCUL); Dr. Annemarie Matthes; Mr. Waqas Malik

Index insurance	
<b>Purpose</b>	Protection against impacts of e.g. climate change, natural disasters, low yields diseases at affordable rates.
<b>Description</b>	<ul style="list-style-type: none"> <li>▪ Pays on the basis of pre-determined &amp; objective index for losses of assets &amp; investments caused by weather, catastrophic events (index: e.g. rainfall level, mortality rates of livestock, seismic activity);</li> <li>▪ covers a defined area - not at farm level;</li> <li>▪ does not assess individual claims/losses;</li> <li>▪ clients buy those policies with a specific index for a certain time period;</li> <li>▪ coverage depends on type of index insurance e.g. area yield (AYII), weather index (WII), disease index</li> </ul>
<b>Term</b>	Medium- to long-term
<b>Timing</b>	Depends on <ul style="list-style-type: none"> <li>▪ agricultural calendar (depends on product, being producer or processor etc.);</li> <li>▪ provider's policy e.g. months of membership</li> </ul>
<b>Client</b>	Everyone including agripreneurs, APOs
<b>Advantage client</b>	<ul style="list-style-type: none"> <li>▪ Stabilizes income for agripreneurs when affected by unexpected weather, events;</li> <li>▪ cheaper than an indemnity insurance that assesses individual claims;</li> <li>▪ improves livelihoods;</li> <li>▪ better risk management;</li> <li>▪ timely payout as individual losses are not assessed.</li> </ul>
<b>Provider</b>	<ul style="list-style-type: none"> <li>▪ Insurance companies;</li> <li>▪ technical service providers;</li> <li>▪ e.g. World Bank's Global Index Insurance Facility (GIIF) with local partners.</li> </ul>
<b>Partner</b>	Potentially: local insurance companies
<b>Advantage Provider / Partner</b>	<ul style="list-style-type: none"> <li>▪ Insurance premium;</li> <li>▪ increasing insurance portfolio;</li> <li>▪ increasing customer base;</li> <li>▪ no need to conduct technical standard analyses and loss assessments of individual agripreneur and his/her risk</li> </ul>

Index insurance	
<b>Requirements</b>	<ul style="list-style-type: none"> <li>▪ High-quality data (current and historic) e.g. weather and yield --&gt; maybe also SAR datasets (Synthetic Aperture Radar which reconstructs landscapes and can "see" at night even with cloud coverage);</li> <li>▪ requisite laws;</li> <li>▪ depending on provider;</li> <li>▪ enabling regulatory and legal environment.</li> </ul>
<b>Risks for client</b>	Loss might not match the index measurement, hence, no or less compensation than lost --> poor correlation of actual loss and triggered index: basis risk.
<b>Source</b>	<a href="https://www.indexinsuranceforum.org/overview;">https://www.indexinsuranceforum.org/overview;</a> <a href="https://www.gsma.com/mobilefordevelopment/wp-content/uploads/2020/05/Agricultural_Insurance_for_Smallholder_Farmers_Digital_Innovations_for_Scale.pdf;">https://www.gsma.com/mobilefordevelopment/wp-content/uploads/2020/05/Agricultural Insurance for Smallholder Farmers Digital Innovations for Scale.pdf;</a> Mr. Waqas Malik

## 5.1 Insurance types (indemnity and index-based)

Input insurance	
<b>Purpose</b>	Protection against loss of investment into inputs in case of poor or failed harvest.
<b>Description</b>	<ul style="list-style-type: none"> <li>▪ Insuring the client against the loss of investment into farming inputs in case of a poor or failed harvest;</li> <li>▪ enabling them to buy the inputs for the next season;</li> <li>▪ regular payment of insurance premiums.</li> </ul>
<b>Term</b>	Short- to medium-term
<b>Timing</b>	Depends on <ul style="list-style-type: none"> <li>▪ agricultural calendar (depends on product, being producer or processor etc.);</li> <li>▪ provider's policy e.g. months of membership.</li> </ul>
<b>Client</b>	Agripreneurs, APOs
<b>Advantage client</b>	<ul style="list-style-type: none"> <li>▪ Mitigating risks of lost investment in inputs due to failed harvest --&gt; stabilizes income;</li> <li>▪ able to invest in inputs of good quality which offer a higher output;</li> <li>▪ improves livelihoods;</li> <li>▪ better risk management.</li> </ul>
<b>Provider</b>	Insurance companies with a focus on agriculture; technical service providers.
<b>Partner</b>	Might be MNOs to facilitate communication and premium collection.
<b>Advantage Provider / Partner</b>	<ul style="list-style-type: none"> <li>▪ Insurance premium;</li> <li>▪ increasing insurance portfolio;</li> <li>▪ increasing customer base.</li> </ul>
<b>Requirements (individual)</b>	<ul style="list-style-type: none"> <li>▪ Enabling regulatory and legal environment;</li> <li>▪ yield / production history; history of purchased inputs and usage; production information e.g. crops, acreage, location; business plan;</li> <li>▪ etc. depending on provider.</li> </ul>
<b>Ex-ante analysis</b>	Indemnity insurance: viability analysis before (risk data assessment) and loss and damage analysis in case of damage.
<b>Risks for client</b>	<ul style="list-style-type: none"> <li>▪ Insurance coverage does not fit the incident and hence, no payment;</li> <li>▪ if index insurance, see risk for index insurances;</li> <li>▪ if indemnity insurance: delays in payouts (season might be lost then), claim disputes, high transaction costs.</li> </ul>
<b>Source</b>	<a href="http://www.impactinsurance.org/sites/default/files/MP47.pdf">http://www.impactinsurance.org/sites/default/files/MP47.pdf</a> ; Mr. Waqas Malik; Allendorf & GIZ, 2020.

Crop insurance	
<b>Purpose</b>	Protection against loss of harvest due to weather and natural disasters.
<b>Description</b>	<ul style="list-style-type: none"> <li>▪ Covering crop loss due to weather and natural disaster incidents and diseases (above control of client);</li> <li>▪ should cover period from sowing to the maturity of crop (after harvest);</li> <li>▪ sometimes getting a crop insurance is mandatory when wanting to receive an agricultural credit;</li> <li>▪ regular payment of insurance premiums.</li> </ul>
<b>Term</b>	Medium- to long-term
<b>Timing</b>	Depends on <ul style="list-style-type: none"> <li>▪ agricultural calendar (depends on product, being producer or processor etc.);</li> <li>▪ provider's policy e.g. months of membership.</li> </ul>
<b>Client</b>	Agripreneurs, APOs
<b>Advantage client</b>	<ul style="list-style-type: none"> <li>▪ Mitigating losses due to failing crop --&gt; stabilizes income;</li> <li>▪ improves livelihoods;</li> <li>▪ better risk management.</li> </ul>
<b>Provider</b>	Insurance companies with a focus on agriculture; technical service providers.
<b>Partner</b>	Might be MNOs to facilitate communication and premium collection.
<b>Advantage Provider / Partner</b>	<ul style="list-style-type: none"> <li>▪ Insurance premium;</li> <li>▪ increasing insurance portfolio;</li> <li>▪ increasing customer base.</li> </ul>
<b>Requirements (individual)</b>	<ul style="list-style-type: none"> <li>▪ Enabling regulatory and legal environment;</li> <li>▪ yield / production history; production information e.g. crops, acreage, location; business plan;</li> <li>▪ etc. depending on provider</li> </ul>
<b>Ex-ante analysis</b>	Indemnity insurance: viability analysis before (risk data assessment) and loss and damage analysis in case of damage.
<b>Risks for client</b>	<ul style="list-style-type: none"> <li>▪ Insurance coverage does not fit the incident and hence, no payment;</li> <li>▪ if index insurance, see risk for index insurances;</li> <li>▪ if indemnity insurance: delays in payouts (season might be lost then), claim disputes, high transaction costs.</li> </ul>
<b>Source</b>	<a href="#">Agricultural insurance for smallholder farmers, 2020</a> ; Mr. Waqas Malik; Allendorf & GIZ, 2020.

Livestock insurance	
<b>Purpose</b>	Protection against unexpected loss of animals e.g. breeding flock, draught animals.
<b>Description</b>	<ul style="list-style-type: none"> <li>▪ Insurance that covers loss of animals due to theft, diseases, injuries, death while on the client's farm;</li> <li>▪ regular payment of insurance premiums.</li> </ul>
<b>Term</b>	Medium- to long-term
<b>Timing</b>	Depends on <ul style="list-style-type: none"> <li>▪ agricultural calendar (depends on product, being producer or processor etc.);</li> <li>▪ provider's policy e.g. months of membership.</li> </ul>
<b>Client</b>	Agripreneurs, APOs
<b>Advantage client</b>	<ul style="list-style-type: none"> <li>▪ Protecting against sudden loss of income / property related to their animals --&gt; stabilizes income;</li> <li>▪ improves livelihoods;</li> <li>▪ better risk management.</li> </ul>
<b>Provider</b>	Insurance companies with a focus on agriculture; technical service providers.
<b>Partner</b>	Might be MNOs to facilitate communication and premium collection.
<b>Advantage Provider / Partner</b>	<ul style="list-style-type: none"> <li>▪ Insurance premium;</li> <li>▪ increasing insurance portfolio;</li> <li>▪ increasing customer base.</li> </ul>
<b>Requirements (individual)</b>	<ul style="list-style-type: none"> <li>▪ Enabling regulatory and legal environment;</li> <li>▪ production history; documentation of livestock, breeding flock etc.; production information e.g. acreage, location; business plan;</li> <li>▪ etc. depending on provider.</li> </ul>
<b>Ex-ante analysis</b>	Indemnity insurance: viability analysis before (risk data assessment) and loss and damage analysis in case of damage.
<b>Risks for client</b>	<ul style="list-style-type: none"> <li>▪ Insurance coverage does not fit the incident and hence, no payment;</li> <li>▪ if index insurance, see risk for index insurances;</li> <li>▪ if indemnity insurance: delays in payouts (season might be lost then), claim disputes, high transaction costs.</li> </ul>
<b>Source</b>	<a href="https://www.investopedia.com/best-livestock-insurance-5120525">https://www.investopedia.com/best-livestock-insurance-5120525</a> ; Mr. Waqas Malik; Allendorf & GIZ, 2020.



## 6. Islamic Banking

Like conventional credit products, Islamic banking products will either be handed out to individuals or groups after an ex-ante technological standard and creditworthiness assessment. Takaful, the Islamic banking insurance, can be provided either as indemnity or index-based. However, as with conventional insurances, indemnity insurances are rare due to the high costs involved. For an investment to be halal, the client cannot receive an interest or profit fixed in advance. Therefore, Islamic banking is profit-based and not interest-based.

## 6.1 Savings Islamic Banking

Savings account	
<b>Purpose</b>	Keeping money safe and saving money to invest it into the business to improve revenue, receiving remuneration according to Mudaraba.
<b>Description</b>	<ul style="list-style-type: none"> <li>▪ Open savings account and put money in it to keep it safe;</li> <li>▪ to take money out of the account, client has to be present at the bank;</li> <li>▪ client has the status of Rab-al-maal (capital holder), the bank acts as Mudarib: partnership;</li> <li>▪ client authorizes the bank to invest his/her money according to the Mudaraba technique: profitability of these investments allows remuneration of savings deposits;</li> <li>▪ client receives remuneration on the deposit e.g. every 3 or 6 months, depending on bank's policy;</li> <li>▪ Rab-al-maal's share of the profits is fixed when the account is opened e.g. the Rab-al-maal may receive 60% and the moudarib maintains 40%.</li> <li>▪ the bank contributes with work and know-how and the Rab-al-maal contributes with money;</li> <li>▪ money taken out or paid into account is recorded in savings booklet of client;</li> <li>▪ having a savings account can facilitate access to credit;</li> <li>▪ with savings an agriprenneur can invest in his/her business to improve revenue (e.g. certified inputs).</li> </ul>
<b>Term</b>	Medium to long-term
<b>Client</b>	Everyone including agripreneurs
<b>Advantage client</b>	<ul style="list-style-type: none"> <li>▪ Money is kept safe;</li> <li>▪ remuneration of savings: shared profits (fixed share);</li> <li>▪ benefits from bank's work and knowledge;</li> <li>▪ might be basis for obtaining a loan;</li> <li>▪ helps control spending.</li> </ul>
<b>Provider</b>	Islamic banks
<b>Partner</b>	Cooperatives / APOs (potentially as members of cooperatives also open savings accounts)
<b>Advantage Provider</b>	<ul style="list-style-type: none"> <li>▪ Liquidity;</li> <li>▪ shared profits: fixed share;</li> <li>▪ financing other products;</li> <li>▪ increasing customer base.</li> </ul>
<b>Requirements</b>	Being member of a cooperative or becoming client of the bank

Savings account	
<b>Risks for client</b>	<ul style="list-style-type: none"><li>▪ Insolvency of bank;</li><li>▪ bad governance.</li></ul>
<b>Source</b>	Jaiz bank; FBS notebook

## 6.2 Sales Islamic Banking

Murabaha <sup>1</sup>	
<b>Purpose</b>	To finance the purchase of equipment, raw materials etc. and working capital.
<b>Description</b>	<ul style="list-style-type: none"> <li>▪ Most common form of Islamic financing;</li> <li>▪ bank purchases an asset and sells it with an agreed mark-up to the client;</li> <li>▪ customer pays installments over certain period, asset is delivered immediately;</li> <li>▪ ownership and therefore, benefits and risks are directly transferred to the client;</li> <li>▪ tripartite transaction between a final buyer (client), a first seller (supplier), an intermediate seller (executor of purchase order);</li> <li>▪ example: Client approaches bank to finance the purchase of a machine. Bank contacts seller and asks for the price. The bank then tells the client the price and they agree on a mark-up. Client then pays the total in installments;</li> <li>▪ often the bank takes the asset as collateral and the client has to take a takaful to insure the asset (in case takaful is not available, conventional insurance can be taken);</li> <li>▪ used for consumer durables financing, working capital (e.g. inputs, machinery, equipment, raw material).</li> </ul>
<b>Term</b>	Short to medium-term
<b>Timing</b>	Depends on <ul style="list-style-type: none"> <li>▪ agricultural calendar (depends on product, being producer or processor etc.);</li> <li>▪ provider's policy</li> </ul>
<b>Client</b>	Everyone including agripreneurs, APOs
<b>Advantage client</b>	Able to finance machinery, equipment etc. when needed although not having enough savings
<b>Provider</b>	Islamic bank
<b>Partner</b>	Supplier of asset
<b>Advantage Provider / Partner</b>	<ul style="list-style-type: none"> <li>▪ Receives profit margin;</li> <li>▪ receives regular installments;</li> <li>▪ hedging own risks as bank buys from seller and sells to buyer at higher price.</li> </ul>
<b>Requirements</b>	<ul style="list-style-type: none"> <li>▪ Asset must exist at time of sale &amp; seller must own the asset to be sold and has to possess it;</li> <li>▪ "Promise to purchase" document;</li> </ul>

<sup>1</sup> „Cost-plus financing“

Murabaha <sup>1</sup>	
	<ul style="list-style-type: none"> <li>▪ be in business;</li> <li>▪ satisfactory credit report;</li> <li>▪ items to be purchased must relate to the core business of the customer;</li> <li>▪ existing credible and verifiable customer base;</li> <li>▪ depends on provider.</li> </ul>
<b>Ex-ante analysis</b>	Specialist is contracted by provider to adapt the product to the speculations and develop requirements (e.g. conducting laboratory pretests to ensure the agric. product can be sold in the market & to ensure the borrower is able to pay back the credit). See explanation in introduction.
<b>Risks for client</b>	Bad governance
<b>Source</b>	Jaiz bank; FBS notebook; <a href="https://www.investopedia.com/terms/m/murabaha.asp">https://www.investopedia.com/terms/m/murabaha.asp</a> ; <a href="https://ifnknowledge.com/why-is-a-murabahah-contract-termed-as-a-cost-plus-sale/">https://ifnknowledge.com/why-is-a-murabahah-contract-termed-as-a-cost-plus-sale/</a>

Salam <sup>2</sup>	
<b>Purpose</b>	Advance payment for deferred delivery of goods to finance working capital needs.
<b>Description</b>	<ul style="list-style-type: none"> <li>▪ Agric type of financing;</li> <li>▪ sales contract with deferred delivery of goods;</li> <li>▪ provider (acts as purchaser) pays the agreed amount of the financing to the client in advance in exchange for goods that are delivered to the bank at a specified future date and place;</li> <li>▪ before delivery of asset, risks lie with the seller, after delivery with the bank;</li> <li>▪ the Shari'a rules prohibit any commercial transaction whose purpose/asset does not exist at the time of its conclusion (bi'a al ma'adum) - but Salam was authorized by the Prophet in the Hadith;</li> <li>▪ client (seller) sends the bank a proforma invoice indicating the nature, quantities and prices of the goods ordered;</li> <li>▪ used to finance working capital needs, fulfill financial needs for whole crop cycle e.g. liquidity, pesticides, irrigation, market linkages.</li> </ul>
<b>Term</b>	Short-term
<b>Timing</b>	Depends on <ul style="list-style-type: none"> <li>▪ agricultural calendar (depends on product, being producer or processor etc.);</li> <li>▪ provider's policy.</li> </ul>
<b>Client</b>	Everyone including agripreneurs, APOs
<b>Advantage client</b>	<ul style="list-style-type: none"> <li>▪ Money immediately although goods are not yet delivered;</li> <li>▪ able to pay living and production costs --&gt; addresses liquidity shortage;</li> <li>▪ no need to search buyers/do marketing;</li> <li>▪ cost hedging.</li> </ul>
<b>Provider</b>	Islamic bank
<b>Advantage Provider / Partner</b>	<ul style="list-style-type: none"> <li>▪ Profit from difference in purchasing and selling price;</li> <li>▪ way of managing short term financing portfolios (parallel Salam: purchase and sale at different rates);</li> <li>▪ price hedging.</li> </ul>
<b>Requirements</b>	<ul style="list-style-type: none"> <li>▪ Asset becomes a debt at the point of contract;</li> <li>▪ asset must be fungible, and measurements specified;</li> <li>▪ values of the asset must be fixed;</li> </ul>

<sup>2</sup> „Advance payment sale“

Salam <sup>2</sup>	
	<ul style="list-style-type: none"> <li>▪ place and time of asset delivery must be specified;</li> <li>▪ be in business;</li> <li>▪ satisfactory credit report;</li> <li>▪ items to be purchased must relate to the core business of the customer;</li> <li>▪ existing credible and verifiable customer base;</li> <li>▪ depends on provider.</li> </ul>
<b>Ex-ante analysis</b>	Specialist is contracted by provider to adapt the product to the speculations and develop requirements (e.g. conducting laboratory pretests to ensure the agric. product can be sold in the market & to ensure the borrower is able to pay back the credit). See explanation in introduction.
<b>Risks for client</b>	Selling price would have been higher when goods are delivered than the paid price beforehand.
<b>Source</b>	Jaiz bank; FBS notebook; <a href="https://islamicmarkets.com/education/salam-contract-in-islamic-finance">https://islamicmarkets.com/education/salam-contract-in-islamic-finance</a> ; <a href="https://islamicmarkets.com/education/salam-mode-of-financing">https://islamicmarkets.com/education/salam-mode-of-financing</a> ; <a href="https://islamicbankers.me/islamic-banking-islamic-contracts/in-focus-bai-salam/">https://islamicbankers.me/islamic-banking-islamic-contracts/in-focus-bai-salam/</a> .

## 6.3 Physical-asset collateralization Islamic Banking

Ijarah <sup>3</sup>	
<b>Purpose</b>	Financing purchase of assets/equipment ready for use while sharing risks of damages of the asset.
<b>Description</b>	<ul style="list-style-type: none"> <li>▪ Contract for the rental of goods with a complete transfer of ownership to the client/lessee at the end of the contract period;</li> <li>▪ involves three parties:               <ol style="list-style-type: none"> <li>1. Supplier (manufacturer or seller) who makes the equipment available to the lessee;</li> <li>2. Client/Lessee: receives asset, pays installments and initial larger payment --&gt; difference to murabaha: gradually owning more (%) until becoming owner of the asset at the end of the leasing period</li> <li>3. Bank that pays the amount due in full to the supplier at the beginning and collects the leasing fees until the lessee becomes the owner according to the contract</li> </ol> </li> <li>▪ client pays certain percentage at beginning e.g. 20% and commits to purchasing remaining 80% in specific time period (leasing period);</li> <li>▪ bank pays remaining part e.g. 80%;</li> <li>▪ with installments, ownership is gradually transferred to client e.g. after 1 month client owns 24%, bank 76%;</li> <li>▪ bank usually involves insurance on the asset;</li> <li>▪ in case of damage during leasing period, insurance assesses whether it is an insurance issue or whether client has caused damage --&gt; in latter case: client has to pay, otherwise insurance pays;</li> <li>▪ used for farm equipment or property e.g. tractor, computer.</li> </ul>
<b>Term</b>	Medium-term
<b>Timing</b>	Depends on <ul style="list-style-type: none"> <li>▪ agricultural calendar (depends on product, being producer or processor etc.);</li> <li>▪ supplier's and bank's policy</li> </ul>
<b>Client</b>	Everyone including agripreneurs, APOs
<b>Advantage client</b>	<ul style="list-style-type: none"> <li>▪ Asset already available although not paying full price;</li> <li>▪ gradual ownership means not having to pay for damages except when having caused it: risk sharing</li> </ul>
<b>Provider</b>	Islamic financial institution / bank

<sup>3</sup> „Leasing“



Ijarah <sup>3</sup>			
<b>Partner</b>	Supplier the lessor buys from and who provides information on the asset (e.g. manufacturer, seller, equipment leasing companies)		
<b>Advantage Provider / Partner</b>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; vertical-align: top;"> <b>Provider:</b> <ul style="list-style-type: none"> <li>▪ remains partial owner until fully paid (collateral);</li> <li>▪ regular income through installments;</li> <li>▪ liquidity;</li> <li>▪ increasing customer base</li> </ul> </td> <td style="width: 50%; vertical-align: top;"> <b>Partner:</b> <ul style="list-style-type: none"> <li>▪ directly sells to bank: less risky</li> </ul> </td> </tr> </table>	<b>Provider:</b> <ul style="list-style-type: none"> <li>▪ remains partial owner until fully paid (collateral);</li> <li>▪ regular income through installments;</li> <li>▪ liquidity;</li> <li>▪ increasing customer base</li> </ul>	<b>Partner:</b> <ul style="list-style-type: none"> <li>▪ directly sells to bank: less risky</li> </ul>
<b>Provider:</b> <ul style="list-style-type: none"> <li>▪ remains partial owner until fully paid (collateral);</li> <li>▪ regular income through installments;</li> <li>▪ liquidity;</li> <li>▪ increasing customer base</li> </ul>	<b>Partner:</b> <ul style="list-style-type: none"> <li>▪ directly sells to bank: less risky</li> </ul>		
<b>Requirements</b>	<ul style="list-style-type: none"> <li>▪ Availability of the appropriate equipment;</li> <li>▪ leasing law established;</li> <li>▪ "Promise to lease" document;</li> <li>▪ be in business;</li> <li>▪ satisfactory credit report and business plan;</li> <li>▪ items must relate to the core business of the customer;</li> <li>▪ existing credible and verifiable customer base;</li> <li>▪ etc. depending on provider.</li> </ul>		
<b>Ex-ante analysis</b>	Specialist is contracted by provider to adapt the product to the speculations and develop requirements (e.g. conducting laboratory pretests to ensure the product can be sold in the market & to ensure the borrower is able to pay back the credit). See explanation in introduction.		
<b>Risks for client</b>	In case of damage/breakdown of the asset during the leasing period, the bank may refuse to bear the cost of repair or replacement, claiming the lessee had abused the asset and insurer might confirm this		
<b>Source</b>	Jaiz bank; FBS notebook Algeria; <a href="https://ifnknowledge.com/ijarah-or-leasing-in-islamic-banking-and-finance">https://ifnknowledge.com/ijarah-or-leasing-in-islamic-banking-and-finance</a>		

## 6.4 Insurance Islamic Banking

Takaful <sup>4</sup>	
<b>Purpose</b>	Provide insurance protection to policyholders against unforeseen losses in line with Shariah.
<b>Description</b>	<ul style="list-style-type: none"> <li>▪ All policyholders make contributions to a mutual fund based on type of cover &amp; personal circumstances: Guaranteeing members against loss or damage --&gt; mutual protection</li> <li>▪ no premiums are paid;</li> <li>▪ takaful contracts for different nature of risks and period to cover;</li> <li>▪ provider charges fee to cover costs (sales, marketing, management);</li> <li>▪ policyholders also share in deficits of the fund;</li> <li>▪ claims made by policyholders are paid out of fund;</li> <li>▪ if rest remains it is distributed to policyholders in form of dividends or reduction of future contributions.</li> </ul>
<b>Term</b>	Medium- to long-term
<b>Client</b>	Everyone including agripreneurs
<b>Advantage client</b>	<ul style="list-style-type: none"> <li>▪ Risk mitigation;</li> <li>▪ stabilizes income for agripreneurs when affected by unexpected events;</li> <li>▪ improves livelihoods;</li> <li>▪ might profit from dividends or reduction of future contributions.</li> </ul>
<b>Provider</b>	Islamic insurance company
<b>Advantage Provider</b>	<ul style="list-style-type: none"> <li>▪ Increasing customer base;</li> <li>▪ increasing insurance portfolio (agric. sector).</li> </ul>
<b>Requirements</b>	<ul style="list-style-type: none"> <li>▪ Provider must operate according to Islamic cooperative principles;</li> <li>▪ insurance company must maintain 2 separate funds for policyholders and shareholders;</li> <li>▪ depending on provider's policy and insurance product e.g. history of health issues, savings, credits.</li> </ul>
<b>Ex-ante analysis</b>	Viability analysis before (risk data assessment) and loss and damage analysis in case of damage.
<b>Risks for client</b>	<ul style="list-style-type: none"> <li>▪ Insurance coverage does not fit the incident and hence, no payment;</li> <li>▪ risk to share deficits (make loss) in case fund runs into deficit;</li> <li>▪ bad governance.</li> </ul>

<sup>4</sup> „Guaranteeing each other“

<b>Source</b>	Jaiz bank; <a href="https://www.islamic-banking.com/explore/islamic-finance/islamic-insurance-takaful#Status%20of%20Takaful">https://www.islamic-banking.com/explore/islamic-finance/islamic-insurance-takaful#Status%20of%20Takaful</a> ; <a href="https://ifnknowledge.com/takaful-the-truth-about-the-business-model-and-the-misconceptions/">https://ifnknowledge.com/takaful-the-truth-about-the-business-model-and-the-misconceptions/</a>
---------------	--

## Annex

<i>Types / sources of loan risks</i>	<i>Risk reducing approaches</i>
<b>Erratic weather and climate change</b> (long term)	<ul style="list-style-type: none"> <li>a. Weather / crop insurance</li> <li>b. Varieties and techniques adapted to climate change (ex. cycle court; cf. research results)</li> </ul>
<b>Markets and price volatility</b>	<ul style="list-style-type: none"> <li>a. A priori Information</li> <li>b. Include storage in loan package where relevant and viable</li> <li>c. Finance structure involved in organization of sales (bulk) and payment circuits</li> </ul>
<b>Loan packages without clear technical basis</b>	Design and launch of loans depending on
<b>Weak competitiveness of the target product to be financed not considered</b> → can lead to deviation of inputs to other crops → low productivity of target product → default risk	<ul style="list-style-type: none"> <li>a. Market opportunities (buyers, intra-annual (seasonal changes) and inter-annual (trends, cycles) price evolution prices oscillation)</li> <li>b. Profitability of GAP and GPHP</li> </ul> Required <ul style="list-style-type: none"> <li>c. Market information,</li> <li>d. Data on recommended techniques (GAP &amp; GPHP)</li> <li>e. Economic/financial analysis</li> <li>f. Approach and skills how to design a viable financial product on this basis</li> </ul>
<b>Clients use deficient production techniques</b>	<ul style="list-style-type: none"> <li>a. Finance institutions and clients to know and understand GAP &amp; GPHP (requirements, productivity, profitability, competitiveness)                → Design and launch loans on this basis (see above)</li> <li>b. Training on GAP = part of loan d</li> <li>c. Training on GPHP = part of the loan</li> </ul>

<i>Types / sources of loan risks</i>	<i>Risk reducing approaches</i>
<b>Delayed credit disbursement</b>	Timely availability of credit is based on a. Understanding of markets, cropping calendar and viable GAP and GPHP b. Planning on this basis (ANTICIPATION) c. Mobilization of sufficient bank savings for collateral (client) on time d. Group eligible demand according to product and ensure bulk procurement from licensed suppliers (e.g. tender) e. Efficient (Standard ?) procedures and skills to compile, examine, select eligible demands for loans using criteria! f. Non cash payment (cheques wirement)
<b>Delayed input supply</b>	
<b>Deficient input quality</b> if provided individually on loan basis (each loan taker buys the inputs he gets any where ...) → includes risk of fake inputs that are not effective	
<b>Inappropriate reimbursement periods</b> before full harvest, no storage included, sales during low price season	Adapt reimbursement periods based on a. proper understanding of markets and cropping calendar b. Economic and financial analysis farm level c. Economic and financial analysis institutional level (with / without refinancing) d. Include storage in loan package if viable
Weak business / financial mgt. skills of producers	a. Business skills training (FBS) of clients = mandatory part of loan b. Mobilization of bank savings
<b>Lacking certainty on existence and size of plots</b>	a. GPS measurement of plots = part of credit b. Land title c. Material guarantees (other assets)
<b>Weak or absent producer organization</b>	a. Business skills training (FBS) of members/clients = mandatory part of loan b. Advanced business skills training (group or formal FBO) c. Financial products for FBO (working capital investments)

<i>Types / sources of loan risks</i>	<i>Risk reducing approaches</i>
<p><b>Delayed payment of product</b> can lead to side selling</p>	<ul style="list-style-type: none"> <li>a. Anticipation of interesting sales opportunities (buyers, prices)</li> <li>b. Pre-negotiation</li> <li>c. Sales contract involving financial structure</li> <li>d. Warehouse receipt system</li> </ul>
<p><b>Weak irrigation management</b></p>	<ul style="list-style-type: none"> <li>a. Specific : improvement requires close collaboration with structures in charge irrigation infrastructure</li> </ul>
<p><b>Weak understanding of Financial Institutions of commercial agriculture</b></p>	<p>Follow the fundamental rule: <b>Know your client!</b></p> <p><b>Go back to Point 1</b> of this document</p> <p><b>Adapt financial services</b> to the context and requirements for success of commercial agriculture</p> <p><b>Develop the capacities</b> at required levels</p>

Table 1: „Thoughts about „The“ default risk of credits in agriculture - Dr. Annemarie Matthess (2013)

### **Sources without links**

Allendorf, H. & GIZ, 2020. Agricultural insurance for smallholders in Africa: Considerations under the practitioner's lens.

Rainforest Alliance & Citi Foundation, 2013. Farmer Bankability and Sustainable Finance: Farm-Level Metric that Matter.

USAID & Land O'Lakres, Inc., 2010. The Role of Financial Services in Agribusiness Development.