13 BUSINESS MODELS
FOR COCOA FARMER COOPERATIVES

Certification Holding | Cocoa Bean Trade | Land Registration Support | Fertilizer Retail Business | Savings | Provision of Training | Other Retail Business | Loans | Nursery | Compost Production | Provision of Post-Harvest Services | Demonstration Farm Management | Membership Fees/Shares
Introduction

Building sustainable cocoa farmer cooperatives requires (a) viable business model(s). On the one hand the organizations have to earn money to cover operational costs and capitalize themselves, on the other hand they have to create benefits for their members, since this is the function of a cooperative.

If financially successful, the farmer cooperative can afford a professional, paid management, taking full time care of the organization. It can take advantage of opportunities, control risk and ensure during daily operations the benefits for its members. Till then the cooperative will be highly dependent on the motivation of their board and their members, their skills and especially their ability to implement appropriate business models. In one of the most promising models, the cooperative acts as certification holder for certified cocoa, but also other models don’t require too much time and money and give a huge benefit for the farmers, such as the support in registering the member’s land, what might allow the farmers easier access to commercial loans, since (hard) collateral can be provided.

This short paper summarizes feasible business models for cocoa farmer cooperatives.

The first seven models have a good potential on both, generating income for the cooperative as well as having benefits for the farmers. The last six models are in principle possible as a business model, but should be not implemented as first priority. Especially for the provision of loans the loss potential could be very high, while other models bear high potential for conflicts within a cooperative. Before implementing those last ones, all consequences have to be considered carefully.

Most of the business models can be used after adjustments for other agricultural cooperatives as well.

Income-Benefit-Risk Matrix

<table>
<thead>
<tr>
<th>Business Model</th>
<th>Income Potential</th>
<th>Farmer Benefit</th>
<th>Capital Need</th>
<th>Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certification Holding</td>
<td>+++</td>
<td>++</td>
<td>Low</td>
<td>Medium</td>
</tr>
<tr>
<td>Cocoa Bean Trade</td>
<td>++</td>
<td>+</td>
<td>Very High</td>
<td>High</td>
</tr>
<tr>
<td>Land Registration Support</td>
<td>-</td>
<td>+++</td>
<td>Very Low / Low</td>
<td>Very Low</td>
</tr>
<tr>
<td>Fertilizer Retail Business</td>
<td>+</td>
<td>++</td>
<td>High</td>
<td>Medium</td>
</tr>
<tr>
<td>Savings</td>
<td>+</td>
<td>+</td>
<td>Low</td>
<td>Medium</td>
</tr>
<tr>
<td>Provision of Training, Consultancy</td>
<td>+</td>
<td>+</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Other Retail Business</td>
<td>+</td>
<td>+</td>
<td>Medium</td>
<td>Medium</td>
</tr>
<tr>
<td>Loans</td>
<td>+</td>
<td>+</td>
<td>Very High</td>
<td>High</td>
</tr>
<tr>
<td>Nursery / Clonal Garden</td>
<td>+</td>
<td>+</td>
<td>Medium</td>
<td>Low</td>
</tr>
<tr>
<td>Compost Production</td>
<td>+</td>
<td>+</td>
<td>Medium</td>
<td>Low</td>
</tr>
<tr>
<td>Provision of Post-Harvest Services</td>
<td>+</td>
<td>+</td>
<td>Medium/Very High</td>
<td>Low</td>
</tr>
<tr>
<td>Demonstration Farm Management</td>
<td>++</td>
<td>+</td>
<td>Medium</td>
<td>High</td>
</tr>
<tr>
<td>Membership Fees / Shares</td>
<td>+</td>
<td>-</td>
<td>Very Low</td>
<td>Low</td>
</tr>
</tbody>
</table>
Certification Holding

Certification Holding with a sufficient large number of certified farmer/pro-duction should be first priority for a newly established cooperative.

For certification and traceability private sector off-takers/processors/exporters might pay premiums on the cocoa price, based on the contractual agreements. Their clients request more and more to prove the origin of ingredients and so there is a need to buy certified cocoa and/or to trace cocoa back to the farm.

Farmers can be certified for sustainable production or for traceability. Through this they receive a predefined premium as additional income, when following certain processing and production requirements, set from the certifier. A farmer organization could act as certification holder, which comes with some benefits, like additional income, but also some responsibilities, like having an internal control system.

Requirements for certification include GAP, farmer group internal control system, human rights, banning child labor, addressing environmental issues, smallholder income, and training. Environmental issues may include addressing pest management and limits on which pesticides are allowable, maintaining soil fertility, and protecting biodiversity, water management and buffer zones by bodies of water, and practices to reduce greenhouse gas (GHG) emissions and increase carbon sequestration. Compliance is determined by independent audits at the outset of certification and on regular time intervals.

The purchaser of certified cocoa beans must be able to trace the product back to the producer by keeping records (name, date, volume, and price) showing the flow of cocoa beans from the smallholder to a processing factory. Auditors would evaluate if an organization sells more certified product than its purchase records indicate. While it may add transparency and sustainability to the supply chain, it burdens smallholders with additional costs.

Opportunities:
- A stable organization as certification holder could increase the benefits of certified farmers, without the risk of drop outs
- Premium share is a source of income for the cooperative to strengthen the equity, cover operational cost and function as working capital
- Certification holding is independent from the age of the cooperative, thus it could lead within few months to significant income for the cooperative
- There is no need for heavy investments before becoming certificate holder

Risks:
- Amounts, which are a multiple of an average annual income of an average farmer have to be handled by the board/management of the cooperative. Access to that money could lead to a temptation to commit a fraud or embezzle money.
- Unnecessary use of money/investments could happen
- Low number of members share profits out of premiums as dividends

Benefits for Farmers:
- Additional income (but also more work to comply with regulation)
- Premium distributed as lump sum
- Continuous assistance, since yearly audits are conducted

Requirements/Preconditions:
- Buyer is willing to pay price premium for certified beans
- Traceability system in place to record and analyze sales, including technical devices
- Internal Control System has to be in place

Potential Income:
- Income highly depends on the quantity of certified beans sold over a certain period, the amount of premium per metric ton (MT) and the premium share to the cooperative. The premium paid by the buyer (exporter, processor, etc.) could be up to 200 USD per MT and has to be shared between the farmers who sold the beans and the certificate holder. All related administration costs (traceability system, internal control system, staff, operational costs, etc.) have to be paid out of it. A share of up to 30% might be distributed to the farmer organization. Good examples show that income (before costs) of up to 50,000 USD/year could be realized, giving the cooperative sufficient options for organizational development.

Training Needs:
- Internal Control System
- Use of technical devices
- Traceability training

Implementation Time & Workload:
- About 8 months for the entire certification process

Other:
- Farmer need bank account to get the premium paid to
2 Cocoa Bean Trade

Bean trade is the activity of buying cocoa beans from the cocoa farmers and selling it (possibly after some post-harvest processing like fermenting, drying or sorting) with a positive margin. In this business, the cooperative has to compete with collectors and traders and needs the particular knowledge/capacity to do it. Working capital and labor is needed.

Cocoa bean trade with sufficient turnover and a positive margin could lead to a significant income for the cooperative, as long as sufficient working capital is available. Net margins are calculated to be about 500 IDR per kg cocoa or 1.0% to 1.5%. Some traders reach 800 – 1,500 IDR margin, but this happens mostly in regions with not so tough competition.
3 Land Registration Support

Lack of collateral to access loans is one of the bottlenecks for farmers, especially if they have the financial capacity to absorb such a loan. If the number of farmers with land titles as hard collateral could be increased, a larger number of farmers could provide collateral to financial institutions and have access to loans. While a single farmer might have such a process only seldom, a structured process, through which the cooperative leads the registration, could save time and money.

Opportunities:
- The structured process, led by the farmer cooperative is a clear benefit for the farmers

Risks:
- A risk for the cooperative is practically non-existent.

There are two major risks which might occur for farmers:
- Existence of collateral might lead to “easier” borrowing, not only for productive, but also non-productive purposes. If a loan is given based only on collateral (Asset-Based Lending) and the borrower has insufficient repayment capacity, there might be the risk that the borrower loses his asset/collateral. Since productive land is the base of the farmer’s income generation/life, this might be an undesirable outcome.
- Possessing a land title might lead to a higher turnover of land. Due to the land title, farmers might be tempted to sell their land. Of course, there is always a buyer needed, but it is questionable, if the buyer would be a cocoa farmer too (what would be important for cocoa farmer cooperatives).

Benefits for Farmers:
- Farmers with land titles have better access to loans because they can provide better collateral
- Support through cooperative makes the entire process less challenging (and most likely faster)

Requirements/Preconditions:
- 1 staff/farmer, who knows/learns the process
- Desirable Agreement/MoU with Land Registration Authority (and other necessary entities)

Potential Income:
- Land Registration Support is a supporting activity without income potential. It is done to the benefit of the member with the intention that more farmers have (hard) collateral, what would allow them to access commercial loans.

Training Needs:
- Land Registration Process
Fertilizer Retail Business

Retail activities could be undertaken to facilitate the distribution of agro-inputs and make them available to the members and other farmers in the region. This could include fertilizer, but also pruning shears, knives and other inputs.

Margins depend heavily on the pricing structure. A business model would be using bulk discounts for unsubsidized fertilizer, while selling the items at commercial retail prices. Another option would be to pass through possible bulk discounts to the farmers, making the unsubsidized fertilizer more affordable. Hindering is that farmers often wait for governmental subsidized fertilizer and do not apply fertilizer at all, if it is not subsidized.

In addition, farmer cooperatives might play a role to access subsidized fertilizer, which is distributed by the government.

Opportunities:
- Bulk discounts
- Maybe in combination with loans (to pre-finance the fertilizer) or savings (to pay the fertilizer)
- Pre-financing through fertilizer companies
- Fertilizer stock could be used as collateral, if that stock is financed with a working capital loan from a financial institution.

Risks:
- Lack of demand amongst the farmers
- Physical risk, fertilizer gets stolen

Benefits for Farmers:
- Availability of fertilizer, eventually together with training on appropriate use (quantity, timing, etc.)
- Possibly increasing production through application of fertilizer

Requirements/Preconditions:
- Building storage for fertilizer, depending on the volume
- Sufficient working capital to pre-finance or an agreement with the fertilizer company for later payment
- Authorization by PT PUSRI (handling agency) needed
- (For subsidized fertilizer): Detailed needs planning to be submitted to extension officer and approved, proposal to be sent to BAPPEDA, who also acts as controller, Distributor has to be cooperative, CV or PT.
- Identification of input supplier

Potential Income:
- Income as difference between selling price and buying price

Training Needs:
- Calculation on quantity and proper application of fertilizer
- Stock management & proper storage of fertilizer
- Price calculation
5 Savings

A farmer can accumulate own funds in a cooperative to save for future productive and non-productive objectives, such as fertilizer, school fees, a new motorbike, weddings, emergencies or health expenses.

Saving services can be offered to cooperative members only.

Opportunities:
- Saved funds could be used as working capital, if combined with cocoa bean trade, loans, fertilizer distribution or others

Risks:
- Money storage (security)
- Possible transport risk, if money is stored somewhere else
- Liquidity constraints, if not properly managed

There is one major risk which might occur for farmers:
- Deposits/savings are not protected by the Deposit Insurance Scheme (LPS). If the funds get stolen or embezzled, there is no guarantee that the farmer gets his money back

Benefits for Farmers:
- Money not stored at home and out of reach for the moment
- Less reluctance to save in a cooperative than entering a bank
- Lower or no fees can be offered for cash transactions (but also no interest offered)

Requirements/Preconditions:
- Cooperative has to follow the Microfinance Law no 1, 2013, which comes with additional administrative burdens
- Saver must be member of the farmer cooperative
- Secure place, e.g. vault must be existent
- Processes and forms/documents must be in place, e.g. account opening forms, saving book, technical process on how to record savings, etc.

Potential Income:
- If saved funds are deposited in a financial institution, interest might be earned on savings and/or time deposits

Training Needs:
- Saving Administration
- Cash Management
Provision of Training, Consultancy and other Services

Training services should be offered by a cooperative, either for a fee or for free as benefit for the members. Possible trainings are related to the application of good agriculture practices, application of fertilizer or post-harvest processing, but also related to loans. Services could be support in loan application or soil testing.

Services could include:
- Training in basic and advanced Good Agriculture Practice, Financial Literacy, Nutrition and others
- Fertilizer advisory on use and quantity needed
- Grafting (Top and side grafting in nurseries and at the farm)
- Rental of equipment, e.g. chainsaws (with or without trained laborer to use it)
- Soil testing
- Support in development of Business Plans for bank loans
- Certification Training
- Service/distributor of government programs

Opportunities:
- New members could be attracted, if training services are offered
- Positive image/reputation for cooperative, if high quality services are offered

Risks:
- Limited risk for the cooperative
- Inconsistent standard of trainings/service delivery

Benefits for Farmers:
- Better knowledge on specific topics
- Relatively easy access to trainings
- Additional income opportunity for experienced farmers who provide the services

Requirements/Preconditions:
- Experienced trainer or farmers available
- Internal and external training of trainers
- Maybe equipment for the provision of certain service, e.g. for soil testing
- System for quality control of trainings in place

Potential Income:
- The income potential is limited and should be seen rather as benefit for the members at cost or subsidized/paid by the cooperative.

Training Needs:
- Training of Trainers for all provided trainings
Other Retail Business

Retail activities could be undertaken to facilitate the distribution of agro-inputs and tools and make them available to the members and other farmers in the region. This could include pruning shears, knives and other inputs.

Opportunities:
- Cooperative could position itself as high-quality input supplier

Risks:
- Lack of demand amongst the farmers
- Physical risk, items get stolen
- Expired products, e.g. pesticides

Benefits for Farmers:
- Access to high quality inputs and tools
- Maybe better price

Requirements/Preconditions:
- Some little working capital needed to purchase a first stock
- Identification of farmer needs
- Identification of input supplier

Potential Income:
- Income as difference between selling price and buying price

Training Needs:
- Stock management
- Price calculation
Opportunities:
- Members have access to loans for productive purposes, e.g. to buy agri-inputs or new land
- Unusual collateral, such as cocoa beans, could be agreed
- Partnering with commercial banks, because cooperative knows members better, either for refinancing or to act as agent
- If agent model is chosen, risk could be limited
- In combination with certification holding and cocoa bean trade, higher sales might be realized

Risks:
- Members don’t repay as agreed
- Significant loss potential for the cooperative
- Loans are used for non-productive purposes
- Operations of limited size might not lead to high profits from interest
- Only friends/family of board members receive loans (due to the limited availability of funds)
- Liquidity might be squeezed, if too much funds are lent out or refinancing mismatches
- Lack of capacity to analyze and decide on loans

Benefits for Farmers:
- Access to loans to purchase agro-inputs
- Possibly flexible repayment in case of problems
- Soft collateral, such as cocoa beans, would be available and could be used

Requirements/Preconditions:
- Cooperative has to follow the Microfinance Law no 1, 2013, which comes with additional administrative burdens
- Borrower must be member of the farmer cooperative
- Sufficient Working Capital, refinanced from financial institutions, membership fees or savings
- Efficient Process for especially loan analysis, credit committee and repayment

Potential Income:
- If properly done, income can be generated from interest or margins
- In an agent model, agent fees could be realized

Training Needs:
- Loan Analysis on Cash Flow Based Lending
- Credit Committees
- Loan Administration
- Loan Collection
- Legal processes on contracts and enforcement of repayments
- Internal Control / Audit
9 Nursery / Clonal Garden

Cooperatives can manage a professional nursery or a clonal garden, serving as a sustainable source of high quality planting material (not only cacao but also shade trees) and proper and approved clonal material to their members or other farmers. Quality seedlings and bud woods are necessary, since at least 5% of the cacao trees should be replanted every year to keep the farm productive in the future. Seedlings can be distributed for free to the members who contributed to the nursery management or sold. The sale of top-grafted seedlings generate additional income.

Opportunities:
- Additional income could be generated
- Source of high quality planting material for farmers, farmer organizations, other stakeholders
- Certification of the seedlings can increase the price and make seedlings more attractive

Risks:
- Potential for conflicts within the cooperative, on who has to do the (voluntary) work in the nursery or how to distribute profits
- Seedlings might be taken by the workers
- Voluntary working provision through farmers might lack motivation in the future, resulting in less maintenance
- Pest and disease attack or excessive drought may affect the number of seedlings produced

Benefits for Farmers:
- Farmers could have access to high quality seedling (cacao and shade trees)
- No own nursery at the farmers place needed

Requirements/Preconditions:
- Some investments (time and money) to build the nursery
- Availability of work force has to be ensured
- Space and specific knowledge and skills needed
- Needs to be built close to a water source and quality soil source

Potential Income:
- Income as difference between selling price and producing costs

Training Needs:
- Nursery Management
- Grafting techniques
- Record keeping
Compost Production

Produced compost serves as a source of organic fertilizer to the members or other farmers. Organic fertilizers are necessary to keep and enhance the soil characteristics to produce higher yields. Compost can be distributed for free to the members who contributed to the compost making or sold. The sale of compost generate additional income.

Opportunities:
- Additional income could be generated

Risks:
- Potential for conflicts within the cooperative, on who has to do the (voluntary) work for compost production or how to distribute profits
- Inputs might not be available for free or not available at all
- Compost might be taken by the workers
- Voluntary working provision through farmers might lack motivation in the future, resulting in less production

Benefits for Farmers:
- Farmers could have access to high quality compost
- No own compost at the farmers place needed

Requirements/Preconditions:
- Some investments (time and money) to build the compost place and some equipment
- Availability of work force has to be ensured
- Some space and specific knowledge/skills needed
- Sufficient inputs needed to produce compost at the place of production (transport might be needed)

Potential Income:
- Income as difference between selling price and producing costs
- Training Needs
- Compost Production

Note:
Organic material like cocoa pods or cut branches should not be removed from the farm. It should be stored in the farm. Thus, compost production would be only an option, if other inputs would be available.
** Provision of Post-Harvest Services **

Post-harvest services include fermenting, drying and sorting. The farmers, who usually sell wet beans, sell their production quickly after harvesting to the farmer cooperative and that cooperative (resp. their employees) perform the processing of the harvest.

**Opportunities:**
- Additional income could be generated

**Risks:**
- Quality of fermented and dried beans not sufficient to be sold (e.g. to small)
- Physical risk, beans gets stolen
- Potential for conflicts within the cooperative, on who has to do the (voluntary) post-harvest work or how to distribute profits
- Beans might be taken by the workers
- Voluntary working provision through farmers might lack motivation in the future, resulting in less or no care

**Benefits for Farmers:**
- None

**Requirements/Preconditions:**
- Investments would be limited (e.g. fermentation boxes or a proper storage space).
- Working capital needed to buy the wet beans from the farmers
- Transport might be needed to get the beans to the processing place
- Availability of work force has to be ensured
- Space and specific knowledge and skills needed

**Potential Income:**
- Income as difference between selling price after processing and buying price before processing

**Training Needs:**
- Post-Harvest Management
Demonstration Farm Management

Some of the farmer’s organizations possess demonstration farms on which farmers get trained in practice on good agriculture practice and the effects of such a good agriculture practice can be shown. Those demonstration farms could be used for income generation for the farmer cooperative too, but bear some major conflict potential. Buying new land on a cooperative’s account should be avoided, since there are better uses of money possible.

Opportunities:
- Additional income could be generated

Risks:
- Potential for conflicts within the cooperative, on who has to do the (voluntary) work in the demonstration farm or how to distribute profits
- Produce might be taken by the workers
- Voluntary working provision through farmers might lack motivation in the future, resulting in less maintenance and/or making the demonstration farm more vulnerable for pest/diseases
- If the demonstration farm was bought, too much liquidity might be tied up in the farm
- Lack of working capital might lead to insufficient maintenance

Benefits for Farmers:
- None

Requirements/Preconditions:
- Leasing/contract/property needs to be in place
- Availability of work force has to be ensured
- Availability of proper inputs has to be ensured

Potential Income:
- If properly done, more than 1,000 kg/ha could be produced

Training Needs:
- Good Agriculture Practices, basic and advanced
13 Membership Fees/Shares

Being a member of a farmer cooperative, could come with single or repeating financial obligations/contributions, such as a registration fees, periodic fees, periodic mandatory savings or single or periodic share purchases. Too high obligations might frighten away potential members. Forced savings, only available after leaving the cooperative, sets wrong incentives. To function as business model, it has to be distinguished between repayable and non-repayable farmer contribution.

Repayable farmer contribution, like shares or mandatory savings might work as refinancing option to capitalize the farmer cooperative and might be used for income generation, if otherwise not possible. Voluntary savings should be preferred, because the give the farmer more flexibility. Non-repayable farmer contribution like monthly fees, could function as business model, but a clear benefit for the farmer has to be pointed out and transparent use of funds must be ensured.

Opportunities:
• Low fee/share value could lead to significant number of members, giving the cooperative sufficient power towards negotiations with local or regional authorities and other stakeholders

Risks:
• Membership fees/share value too high and too few farmer become member
• Repayment of funds, after farmers leave the cooperative. This could lead to liquidity constraints, if too many farmers leave in too short time.
• Farmer do not comply with their payment obligation

Benefits for Farmers:
• Dividend might be paid, if the cooperative makes profit
• If shares are used, farmer gets the money back, after leaving the cooperative

Requirements/Preconditions:
• Processes must be in place
• Money should be used wise, plan on money use should be in place

Potential Income:
• Direct single and/or repeating income, if fees are chosen
• Depositing the fees/share value in a saving account or a time deposit could generate interest income

Training Needs:
• Basic training for new members