



# Access to financing for Ecookim agroforestry producers

Final report

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## EXECUTIVE SUMMARY

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The objective of this study is to evaluate the possibility of setting up a commercial financing project by Land Degradation Neutrality Fund (LDN) for the benefit of the Inter-regional Union of Kimbê Cooperative Societies (Ecookim Coop-Ca or Ecookim). LDN Fund will be in charge of the technical implementation and will be assisted through a technical assistance facility managed by the HDI. In addition, Ecookim will benefit directly from technical assistance to develop documentation to support access to funding from the LDN Fund. In addition, this technical support will contribute to an adequate structuring of this commercial financing to be put in place in order to meet the financing needs at the level of (i) Ecookim, (ii) cooperatives and (iii) associated producers. Such financing aims at strengthening cocoa production, increasing profitability on the farm and, ultimately, transforming existing cocoa production systems into well-adapted agro-forestry systems.

To this end, the Consultant first analyzed the financing currently available on the banking market in Côte d'Ivoire. Only 8% of the credits granted by the banks are for the benefit of the agricultural sectors, 69% of which are short term. The banks therefore do not for the moment accept any production or harvest risk. In the absence of alternatives, exporters directly pre-finance large producers or producer groups through their cooperatives. This financing is generally limited to commercial activities, often through the provision of inputs. Exporters are reimbursed in matter, i.e., through the delivery of cocoa. At present, local banks do not finance production costs at the farm level. Moreover, they are not equipped to analyze credit risk arising from agricultural production. An adapted financing for the benefit of cooperatives and/or producers seems urgent and therefore justifies an intervention by the LDN Fund.

The Consultant analyzed both the financing needs and the repayment capacity of the stakeholders involved at three levels: (i) Ecookim, (ii) member cooperatives and (iii) selected producers. Ecookim presents itself as a solid partner with a confirmed capacity to commit long-term loans to implement them for the benefit of the cooperatives while respecting the terms and conditions previously agreed upon with the donor. In this sense, Ecookim assumes a catalytic role and its commitment further reassures financial institutions. In this perspective, it is very likely that Ecookim and some member cooperatives should act as co-borrowers for the appropriate financial structuring.

At the level of cooperatives, the Consultant, assisted by Ecookim managers, identified five member cooperatives with potential to act as co-borrowers according to their technical and financial capacities: ECOJAD, CAPEDIG, ROCHER, KAPATCHIVA, COOPASID being the most promising for a possible financial cooperation. Within these five cooperatives, taking into account income from cocoa and income from other cash crops, only 33.33% of the producers seem to be able to provide financing without unbalancing their family budget and without recourse to external interventions (e.g. donations).

Thus, a possible financing plan should take these analyses and findings into account. As a first step, the aim is to ensure attractive financing that supports this third of cocoa producers deemed eligible for financing at the current stage while sustaining or improving their profitability. This should ensure coverage of their financing needs for quality inputs and working materials. As a second step, it is proposed to move towards longer term financing that allows for the

transformation of farming systems. This, once the producers demonstrate to achieve, in a continuous way, a profitability necessary to secure the service of a debt. Farmers who do not achieve adequate profitability at this stage need to receive types of non-commercial (i.e. non-repayable) financial support to improve their profitability, including technical support to strengthen their farming practices.



# 1 INTRODUCTION AND PURPOSE OF THE REPORT

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Agricultural production in Côte d'Ivoire is carried out over increasingly large areas and often in protected areas. This situation has a significant impact on the environment and biodiversity. In addition, cocoa orchards are aging and farmers are resorting to the creation of new agricultural areas and increased use of chemical inputs to increase production. These widely used techniques are a natural blow to the environment and biodiversity and are beginning to worry chocolate makers and affect relationships between customers and suppliers. In order to reduce these impacts, the chocolate makers are encouraging producer organizations to practice responsible and sustainable agriculture in order to continue to trust them through marketing contracts.

The Inter-regional Union of Kimbê Cooperative Societies (Ecookim Coop-Ca) was founded in 2004 with 4 cooperatives. In 2020, Ecookim Coop-Ca brings together 29 cooperatives including 26 coffee-cocoa cooperatives, 15 of which are certified (Fairtrade, UTZ, Rainforest Alliance and Organic) and 3 cashew cooperatives. The Union currently has 29,487 geo-referenced coffee-cocoa producers and 1,541 cashew producers. Ecookim is perfectly positioned to bring responsible and sustainable farming options to the attention of farmers.

In a deteriorated ecological context, it is appropriate for entities such as Ecookim to propose to its farmers as a new and more adopted approach to enable them to practice agriculture that takes into account available land and preserves biodiversity. This approach introduced to member producers for a number of years, should encourage the development of a new generation of Farmers and contribute to the fight against global warming and also to increase the income of Producers.

This report, commissioned by the Sustainable Trade Initiative (STI) and the Land Degradation Neutrality Fund (LDN Fund), is intended to support the establishment of such a program in collaboration with Ecookim. In the following, we present an overview of the current situation of the cocoa sector in Côte d'Ivoire (chapter 2) and access to finance for agricultural producers as a whole (chapter 3). We have structured our financial analysis in two parts and conducted it at the producer, cooperative and enterprise (Ecookim) level: assessment of financial needs (chapter 4); and the repayment capacity of a potential loan (chapter 5). We then present five different configurations for a potential financing plan based on our financial analysis (chapter 6) and conclude with recommendations for all partners involved (chapter 7).

The full analysis of capacity at the cooperative level, and a list of the cooperatives visited can be found in the appendix, along with the questionnaires used.

## 2 COCOA IN IVORY COAST TODAY

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Ivorian production exceeds 2 million tons of cocoa representing about 40% of world production in 2019 (FAOSTAT). The cocoa sector mobilizes nearly 1 million producers with a total of nearly 6 million people who are directly or indirectly employed in Côte d'Ivoire by this important sector representing more than a quarter of the Ivorian population. Thus, the sector plays an important role in Côte d'Ivoire's economy: it provides about 14% of GDP and a third of the country's export revenues, contributing about 10% to the state budget (World Bank 2019).

The cocoa industry has gone through several reorganizations. The Council for the Regulation, Stabilization and Development of the Coffee-Cocoa Sector ("*Conseil du Café-Cacao*" or "CCC") was created at the end of 2011 and is now in charge of establishing the rules relating to the marketing of coffee and cocoa. The Coffee-Cocoa Council is supervised by the Ministry of Agriculture at the technical level and by the Ministry of Economy and Finance at the financial level. As part of its mission, the CCC grants purchase and export contracts to national and international actors for each season.

Cocoa is sold by producers to approved buyers, including cooperatives, during the main season (October-March) and the intermediate season (April-June). Although national production has been increasing, yields have remained at a relatively low level estimated at 450-550 kg per hectare. According to a World Bank report (2019)<sup>1</sup>,

*"The increase in cocoa production has been the result of a massive expansion of cultivated areas rather than a general increase in yields with production methods that have changed little over the years.*

To date, it remains difficult to calculate actual yields due to a lack of knowledge of actual areas, density per hectare, age of cocoa trees and farms.

According to the World Bank report, "*Ivorian producers have been able to expand their plantations at very little cost, benefiting from the natural fertility of virgin forest land, and thus the possibility of keeping their production costs very low while optimizing their limiting factor (labor) and asserting their land rights on the developed land*". Thus, farmers have gradually increased their planted areas over decades at lower costs and with little technical mastery, resulting today in more than a million smallholdings. This development, combined with growing timber exploitation and a laissez-faire policy on the part of the Ivorian authorities, has contributed to a disastrous reduction in Ivorian forests, especially protected areas that safeguard biodiversity.

These small farms are becoming increasingly unprofitable. The land is increasingly depleted. The use of poorly controlled plant material combined with poor farming practices (including lack of shade) and insufficient maintenance of orchards contribute to this development. Producers have little or no access to financing to replace aging orchards or to purchase quality inputs. Without adequate phytosanitary treatment, the number of orchards under threat of diseases, particularly Swollen Shot, increases.

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<sup>1</sup>Link: <http://documents1.worldbank.org/curated/en/277191561741906355/pdf/Cote-dIvoire-Economic-Up-date.pdf>



To this already precarious situation is now added the threat of climate change. According to experts, the areas suitable for cocoa cultivation are expected to shrink considerably by 2050, and regions such as the Lagunes and Sud-Comoé are even threatened with extinction (e.g. Schrot et al 2016<sup>2</sup>).

Under these conditions, the proposed project is very important for Ecookim to continue and further strengthen its leadership role in the sector. With an annual export volume of about 45,000 tons of cocoa beans on average, Ecookim is among the Ivorian leaders, knowing that about 2/3 of the Ivorian production is exported or processed by multinationals, including the world leader Cargill. Ecookim, since its creation, supports its cooperatives and associated producers by ensuring the traceability of the production and marketing of exported beans. Today, all cocoa marketed in its network is certified, which allows producers to receive significant premiums. Thus, Ecookim has developed export relationships with several major international chocolate manufacturers, including Ferrero, Mars and Tony's Chocolonely. It is with these partners that Ecookim engages in important projects at the social, technical and financial level while strengthening the agricultural activity and also the well-being of producers. Any successful sustainable financing program with the participation of Ecookim will therefore have a multiplier effect throughout the sector.

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<sup>2</sup>Link : <https://www.sciencedirect.com/science/article/pii/S0048969716304508>

## 3 ACCESS TO FINANCING FOR AGRICULTURAL ACTORS

### 3.1 State of play

The banking sector in Côte d'Ivoire is growing strongly with currently 25 banks and 2 financial institutions. In addition, there are more than 50 microfinance organizations or decentralized financial structures (SFDs). Contrary to this strong development, the rate of bank ownership remains below 20%, i.e. less than 20% of the Ivorian population has a bank account. The proportion of agricultural actors in the bank penetration rate is still very marginal and confirms the low share of financing granted to the agricultural sector.

On the basis of the uses of credits declared by the banks to the central credit bureau at the end of December 2017, **approximately 8% of the credits granted by the banks are for the benefit of the agricultural sectors, 69% of which are short term**. Although farmers' profits have increased, this share is still too low compared to the importance of this sector in the national context.

The level of credit granted to producers or groups of producers by commercial banks remains low with less than 1% of the credit granted by banks: A first analysis is carried out on the basis of statistics published by the BCEAO in March 2020<sup>3</sup> (see table 1). Credits granted by commercial banks to cooperatives and village groups represent less than 1% of the credit supply. Among the credits granted to individuals, amounting to about 21%, could be found credits granted to large farmers.

**Table 1: Credit supply by type of debtor**

By nature of the debtor (in billions of XOF)	2016	2017	2018	2019	2019 (%)
State and related bodies	175,0	353,0	345,7	195,5	4,0
Individuals	687,2	503,1	792,0	1 104,2	20,9
Financial clients	50,4	10,7	14,7	7,3	0,1
Crown Corporations and EPICs	55,6	166,7	65,1	253,3	4,8
Insurance - Pension funds	4,0	30,2	22,1	26,2	0,5
Private companies (productive sector)	2 498,3	2 449,0	2 697,1	2 547,5	48,3
Sole proprietorships	763,8	948,9	1 243,7	965,2	18,3
Cooperatives and village groups	10,4	10,2	5,2	7,9	0,1
Miscellaneous	26,4	6,0	131,8	154,7	2,9
Persons of the banks	97,5	18,2	26,2	13,3	0,1
<b>Total</b>	<b>4 368,5</b>	<b>4 496,0</b>	<b>5 343,8</b>	<b>5 275,2</b>	<b>100,0</b>

Source: BCEAO 2019

<sup>3</sup>BCEAO (2019): Report on the Conditions of WAEMU Banks; <https://www.bceao.int/sites/default/files/2020-05/Rapport%20sur%20les%20conditions%20de%20banque%20dans%20l%27UEMOA%20-%202019.pdf>

Agriculture is not directly included as an object of financing (see Table 2). Rather, it is the export activities of certain commodity chains such as coffee-cocoa, cashew nuts, cotton, rubber, oil palm and fruits (pineapple, banana, mango) that are financed by banks.

**Table 2: Credit Supply by Credit Object**

By loan purpose (in billions of XOF)	2013	2014	2015	2016	2016 (%)
Housing	38,1	13,0	41,0	36,4	0,8
Export	7,6	140,7	11,6	12,4	0,3
Equipment	183,5	236,2	390,0	352,7	8,1
Consumption	380,4	337,2	860,6	1 185,5	27,1
Treasury	1 843,0	2 346,2	2 528,0	2 171,7	49,7
Others	287,9	305,2	454,9	609,7	14,0
<b>Total</b>	<b>2 740,5</b>	<b>3 378,7</b>	<b>4 286,2</b>	<b>4 368,5</b>	<b>100,0</b>

Source: BCEAO

An analysis of the durations of the credits granted (see Table 3) shows that the majority of the credits granted are of very short duration: Approximately 60% of the credits granted by the banks are for a duration of less than or equal to 3 months. **Only 22% of the credits granted in 2019 have a duration of more than 2 years, including 8.5% of the credits with a duration of more than 5 years.** Commercial banks seem to be rather reluctant to grant credit for investments.

**Table 3: Credit Supply by Credit Term**

By credit duration (in billions of XOF)	2013	2014	2015	2016	2016 (%)
≤ 1 month	1 012,3	1 011,7	1 138,2	1 442,4	33,0
> 1 month and ≤ 3 months	851,6	1 167,1	1 733,7	1 173,8	26,9
> 3 months and ≤ 6 months	152,7	233,0	219,1	310,3	7,1
> 6 months and ≤ 1 year	144,3	157,8	237,3	304,1	7,0
> 1 year and ≤ 2 years	87,9	119,4	148,8	161,8	3,7
> 2 years and ≤ 5 years	381,4	533,4	604,7	601,5	13,8
> 5 years and ≤ 10 years	101,6	141,9	166,2	286,2	6,5
> 10 years	8,7	14,3	38,1	88,2	2,0
<b>Total</b>	<b>2 740,5</b>	<b>3 378,7</b>	<b>4 286,2</b>	<b>4 368,5</b>	<b>100,0</b>

Source: BCEAO

## 3.2 Types of financing by local banks

In particular, cocoa bean exporters benefit from the campaign credits over several months. In the portfolios of the commercial banks, these campaign credit financings represent the majority compared to the credits granted to agricultural actors. These credits are secured by a pledge on cocoa beans stored in warehouses, often under the control of a third party holder. The banks also require a direct debit of sales receipts (foreign currency) and, depending on the quality of

the client, they require the supply of a DAT for part of the credit amount. Thus, it should be noted that **banks do not currently accept any production or harvest risk** and do not finance the input needs of agricultural producers. It is only after the harvest, once the product (cocoa stock) is available, that the banks are ready to finance exporters with a pledge of product stocks as collateral.

Few producer groups have access to bank financing. **Some banks, notably SIB and BACI, are working with exporters to develop short-term input financing schemes.** Discussions are also underway to develop medium-term financing schemes for improving cocoa plantations. After various communications from the CCC concerning the suspension of the provision of improved planting material, these activities have been discontinued.

The SIB, in cooperation with some exporters including Ecookim has set up a truck leasing system for the benefit of cooperatives. No investment scheme lasting more than 3 years has been tested.

Apart from the activities of commercial banks, it is in particular the microfinance ADVANS Ivory Coast which has been involved for several campaigns in the financing of cocoa cooperatives: **Together with their technical partner Callivoire, ADVANS has developed a credit product with the cooperatives acting as lender.** Through their cooperatives, ADVANS has been able to bank-roll about 30,000 cocoa farmers. The microfinance BAOBAB (formerly MICROCRED) also finances coffee-cocoa cooperatives reaching about 3,000 producers. The financing is granted in terms of (phytosanitary products, fertilizers) for one campaign (6-9 months).

Repayment of these credits is ensured through sales contracts between the cooperative and the exporter(s). It should be noted that it is the cooperative that can propose the counterpart. Normally, it is the exporters who introduce the schemes to the banks for the financing of the need for inputs for the benefit of the cooperatives. The scheme developed by ADVANS contributes to increasing the level of commercial autonomy for the benefit of the cooperatives. **With a recovery rate of almost 100% over the last 3 campaigns, the functioning of this approach seems to be confirmed.**

Subsequently, ADVANS introduced a 2-year credit that allows the cooperatives to purchase trucks with a schedule extended over 2 cocoa campaigns. For the 2018/2019 campaign, ADVANS has introduced a third product: a school credit to benefit cocoa farmers on an individual basis. As an eligibility criterion, ADVANS requires, among other things, a satisfactory participation of the producer in the input credit scheme carried out during previous campaigns. This is a first, providing the farmer with direct access to cash to pay for his children's schooling before the start of the cocoa season. Repayment will be ensured through the sales contracts entered into by his cooperative.

## **Abstract**

In the absence of alternatives, exporters pre-finance large producers or groups of producers directly through their cooperatives. Their financing is usually limited to commercial activities, often through the provision of inputs. Exporters are reimbursed in material terms, notably through the delivery of cocoa.

Currently, local banks do not finance production costs at the farm level. Moreover, they are not equipped to analyze credit risk arising from agricultural production.

When producers do not have collateral acceptable to the banks, this impasse is difficult to break. The risk and transaction costs to process one file per producer are too high.

Microfinance institutions have begun to engage in recent years through cooperatives. Ecookim has cooperated with ADVANS for the financing of cooperatives during the last campaigns. However, this cooperation ended because the financing conditions were considered unfavourable.

### 3.3 Relevant financial regulations for agroforestry financing

#### **Duration of the loan**

In the context of medium- and long-term financing, regulations impose standards for covering medium- and long-term jobs with stable resources as follows:

- For Commercial Banks the standard to be met is set at a minimum of 50%;
- For Microfinance Institutions the standard to be respected is set at 100% .

In sum, for a financing of 10 million Euros in the medium and long term, the Bank must have resources over the same period up to 5 million Euros. Under the same conditions, the Microfinance Institution must have EUR 10 million at its disposal.

## 4 FUNDING NEEDS

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### 4.1 Overview

The financial and commercial flows practiced by Ecookim, its cooperatives and producers are as follows:



**Figure 1: The scheme of financial flows between producers, cooperatives and Ecookim.**

#### Producer-Cooperative

The purchase of cocoa is done on the field side by the cooperatives, through their various delegates, who have a certain amount of money at their disposal. This liquidity allows them to pay the cocoa in cash to the producers. This practice concerns almost all purchasing operations (more than 95%).

#### Cooperative-Ecookim

Cocoa delivered to Ecookim by the Cooperative is paid by check upon delivery, in order to provide the Cooperative with the cash needed to ensure the continuity of purchasing operations from producers, at the risk of favoring deliveries to competitors.

In its process of support to its member cooperatives, Ecookim has set up the following forms of accompaniment:

- **Revolving:** it consists in allowing the Member Cooperative to have the working capital necessary for the conduct of its campaign, in the form of working capital that must be fully repaid at the end of the campaign. The working capital is a function of the capacity of the Member Cooperative. It serves as a retention mechanism for member cooperatives and - as a side effect - for their members, who often cannot wait for payment after delivery of their cocoa.
- **Input credit:** for the maintenance of orchards, in order to satisfy the needs of producers and to ensure the quality of the harvest, through the use of inputs compatible with the requirements of the partners in the framework of certification and marketing. Ecookim negotiates price conditions with reference suppliers, who make inputs available to producers through their Cooperative when necessary. This cash advance must be fully repaid at the end of the season.
- **Mandate:** it exists for Ecookim in the form of an investment agreement that allows its member cooperatives to have significant logistical means for the collection and storage of harvested and purchased products. Within this framework, Ecookim negotiates financing with its Financial Institution for the acquisition, and makes it available to its member cooperatives on terms and conditions. Each beneficiary Cooperative must reimburse the value of the investments received in each campaign over a maximum period of 5 years.



In addition to the financial aspects, Ecookim plays an important role in the organization and implementation of training for the benefit of producers through cooperatives.

## 4.2 Need for financing at the producer level

### **Financing related to cocoa activity - Working capital**

The agricultural needs of producers in order to buy inputs (fertilizers or phytosanitary products) or small agricultural equipment, rent machinery or pay for labor are generally covered by them themselves with the means on board. Very often, the income generated by the activity is not sufficient or is not available at the time of need and, in the absence of recourse to the banking system, the farmers resort to private indebtedness, often at very exorbitant rates (50%, 100%), or even to putting the plantation as a total guarantee.

Under Ecookim, more than 70% of operating needs are covered by the delivery of inputs to producers via cooperatives, with reimbursement at the end of the campaign. This pre-financing covers a large part of the working capital requirements (approximately 67% of production expenses: see Appendix 3) and thus reduces the financial pressure on associate farmers.

This type of financing is a very important part of the production process because the yield of the producer and the quality of the beans depends on it. For this reason, it is necessary to analyze the possibility of covering this need 100%, in order to take the producer out of the hands of usurers and trackers. As mentioned above, producers have difficulty accessing bank financing and it therefore becomes difficult to fill the need not covered by the pre-financing set up by Ecookim each campaign through the organization of associated cooperatives.

A working capital credit structure should take into account all of the producer's needs:

- inputs
- small materials and tools
- labor force

Also, an implementation in line with the agricultural calendar becomes crucial. In order to minimize the risks related to pre-financing for Ecookim and also to avoid any over-indebtedness of producers, the term of the working capital credit should not exceed one year and should be settled by the drawdowns that Ecookim will make on the sale before transferring the funds to the producers.

### **Financing related to cocoa activity - Investment**

Investment credits are not generally observed among producers. Light investments could be made by producers to accompany them in the production process. The Consultant suggests analyzing the possibility of mechanizing certain activities such as pruning, weeding, denting. These activities mobilize labor and consume hours of work. The mechanization of pruning, weeding and denting activities will make it possible to achieve economies of scale and to cope with the lack of manpower during the periods concerned by the associated work. It will also increase productivity and reduce the time between harvesting and marketing of cocoa.

It is this set of needs that could be financed by an investment credit at the level of producers in order to improve their productivity. Taking into account the lifespan of the equipment to be

financed, the term of this type of credit will go beyond one season and will be repaid by the withdrawals that will be made by Ecookim.

### **Related funding related to the producer's need**

The analysis of the situation of the producers shows that the income from cocoa does not allow the majority of them to lead a decent life. For this reason, the vast majority find themselves between two campaigns heavily indebted and at the mercy of their creditors. Family emergencies (illnesses, funerals, etc.) often force farmers into debt.

The corollary of this state of affairs is the fragility of the producer and the resulting situation of dependence. The farmer is obliged to pay back his creditor first and will therefore sell his production to the trackers in order to recover the cash that enables him to settle with his creditor. Often it is the trackers themselves who pre-finance the farmers to recover their production at unfavorable conditions for the farmer. In this case, the farmer delivers only a portion of his production to the cooperative after paying off his creditor. Thus, during campaigns, a large part of the producers' production is not delivered to the Cooperative and subsequently to Ecookim.

It should be noted that the needs of farmers are as follows:

- Schooling ;
- Social events (marriage-baptism-death etc.).

The coverage of these credits could be done in two ways:

- Diversification of the producer's income through either individual or joint income-generating activities;
- Financing by a Microfinance Institution and Income Diversification ;
- Financing by a Microfinance Institution of all or part of this need.

To stabilize the farmers and ensure the flow of products to the cooperatives and subsequently to Ecookim, the question arose as to how to cover this additional need. Repayment of any financing could be made on the basis of levies on the income generated by the financed activity, or by levies to be made by Ecookim in the case of direct financing of needs.

Also, the possibility of setting up communities of consumers formed by the producers on specific needs - especially school credits - or food, could allow, because of the large number, to benefit from payment conditions and preferential prices. Within the framework of this scheme, rebates could be negotiated and used as additional income.

### **Limitations of the analysis and capacity gaps**

- Areas not yet in production: No information is available from the cooperatives on areas in production but not yet in production. Only the areas in production have been geo-located.
- Land conflict: Land conflicts are currently marginal, but there is no indication that in the very short term they could have dimensions that could jeopardize agricultural activities. It would therefore be necessary for each producer to have his land certificate.
- Management of activities: Producers organize themselves into self-help groups to carry out the work (farm maintenance, harvesting, denting, etc.). They have very little recourse to service providers.

- Inputs : The utilization rate for types of inputs by nature is 35% for compost and 65% for chemical respectively. Those who are in certification programs and with chocolatiers switch to organic by producing their own compost (a process that is not yet mastered by producers).
- Projections: At present, it is difficult to make reliable projections of farmers' production per season. Thus, any production projection is based first on the volumes of products purchased and marketed in previous campaigns.

### 4.3 Cooperative level

The cooperatives are in charge of supervising the producers and buying back their cocoa bean production. Thus, the cooperatives organize means of transport to collect the beans from the fields to the collection stores and then load large trucks to transport the product to Ecookim's export stores. Finally, any pre-financing set up by Ecookim passes through the cooperatives.

All the Cooperatives have their complete administrative documents according to the OHADA regulations. Each cooperative is a legal entity that can legally enter into contracts and carry out commercial activities with full responsibility towards public and private third parties. The Cooperatives are run by producers who are of good will but who are not in a position to carry out actions to improve the success of the Cooperatives. This also applies to Directors, Accountants, etc.

#### **Training and coaching of producers**

80% of the cooperatives have relay trainers trained by the technical support structures and Ecookim. Producers according to the agreed program, on agricultural techniques and good practices. These trainers also monitor agricultural activities. Cooperatives that do not have them, use Ecookim's trainers.

#### **Logistics**

- 85% of the Co-operatives rent trucks for delivery and 45% rent vans for pre-collection.
- 100% of the cooperatives have a central store and branch stores in the sections. 65% of the central stores are owned by the Cooperatives and 35% are leased. Ecookim has built and made brand new central stores available to 3 out of 11 Cooperatives.
- 10 % have a 35-ton truck for transporting products to Abidjan or San-Pedro.
- 100% of the cooperatives have vans of 3.5 to 5 tons for cocoa collection.
- 65% of the cooperatives use their tricycles for pre-collection of cocoa.

#### **Delivery level**

The finding is that only 71.59% of the estimated production is marketed. The reasons put forward to explain this state of affairs are multiple: commitments with third parties, in particular, which force producers to deliver part of their production elsewhere. Other factors could also be involved.

**A detailed analysis of capacity at the cooperative level can be found in table form in the appendix, including suggested areas for improvement.**

### **Financing needs related to the cocoa activity - working capital**

As part of their activity, the Cooperatives need working capital to purchase cocoa from producers and organize logistics (transporting beans from the field to the collection store and loading trucks for evacuation to Ecookim's export stores). This activity requires a minimum of funds to cover at least three (03) cocoa shipments to ensure a good supply and marketing rotation.

The financing of this component is currently provided by Ecookim, which supports the cooperatives through pre-financing called "Revolving". At the beginning of the campaign, and based on statistics from previous campaigns, each Cooperative receives funds that can cover up to 5 loads according to its capacity. Once the Cooperative has provided the equivalent of the revolving financing to Ecookim, it can benefit from a new implementation of the financing. For the time being, only Ecookim commits its revolving credits.

### **Cocoa-related financing needs - investments**

#### **Logistics**

The recovery of cocoa beans produced by farmers, often on a small scale, is the responsibility of cooperatives. Access to the plantations often remains difficult with poorly maintained or almost non-existent tracks or roads. The recovery of the product and generally all post-harvest activity for the cooperatives relies essentially on the availability of pre-harvest and collection vehicles. Although all of the cooperatives have vehicles, much remains to be done, especially in transporting cocoa to Ecookim's export stores in Abidjan and San Pedro.

The investments concerned are:

- Light (3.5 t to 5 t) and heavy (30 t to 35 t) transport equipment
- Standard and high-capacity warehouses

#### **Drying of beans**

This activity is crucial for the quality of the cocoa beans. In order to achieve this in the best possible conditions, the possibility of using improved techniques to meet the requirements of chocolate partners and others should be analysed . It would therefore be necessary to invest in new drying practices and encourage producers to adhere to them through sensitization, technical support and support for the necessary investments.

Investment financing must take into account the lifespan of the equipment to be financed and also the costs related to its maintenance. A repayment schedule, including a deferral period, must take into account the period during which sales of the product are made with a financing period over several campaigns.

## **4.4 Ecookim Level**

Ecookim's need for financing is firstly related to its business activity, including the purchase of cocoa beans from its cooperatives and other suppliers, and secondly, to the costs of transport,

storage and export of cocoa. Given the growing volume of cocoa processed, Ecookim requires considerable working capital. This need is covered as follows:

- (i) **Pre-financing by cocoa buyers under export contracts for cocoa beans:** These are resources that are made available, often at the beginning of the cocoa season, by international buyers of cocoa beans and are reimbursed in (cocoa) materials when cocoa is delivered under export contracts signed between Ecookim and these international buyers; the resources are earmarked for the purchase of the beans and are available on a short-term basis.
- (ii) **Campaign credits committed with local banks:** These are resources that are made available at the beginning of the campaign by Ecookim's local banks on the basis of a campaign credit agreement. These financings are guaranteed on the basis of export contracts with assignment of receivables and a domiciliation of sales receipts (foreign currency) in the banks' books. In many cases, the cocoa is pledged to the banks. These resources enable Ecookim to purchase, store and export cocoa beans during the campaign. They are therefore also short term resources.
- (iii) **International pre-financing:** This is the main source of funding for Ecookim's activities. These resources are made available by international lenders on the basis of a credit agreement secured by an assignment of Ecookim's receivables committed with international buyers who are domiciled on the books of the international lenders. Depending on each lender, the pledge of cocoa inventory may also represent additional collateral. These pre-financings may cover several campaigns and enable Ecookim to finance working capital as well as the financing of certain medium-term investments.

Ecookim takes advantage of international financing to finance certain investments in order to increase its logistics capacity (transport and storage).

Ecookim pre-finances an important number of producers through its associated cooperatives. These pre-financings are generally in matter, in particular inputs are reimbursed by the cooperatives in matter (cocoa). It is mainly the income from the cocoa produced that secures the repayment of these pre-financings. To ensure its liquidity, Ecookim takes advantage of the lines of credit with international financiers mentioned above.

Also, Ecookim finances certain investments at the cooperative level, notably transport equipment through leasing arrangements with its main local bank, the SIB. This is medium-term financing that is also secured by cocoa revenues and, where applicable, certification premiums.

## 4.5 Specific financing needs in agro-forestry

Ecookim is increasingly involved in agro-forestry projects to improve the quality of cocoa plantations for its associate producers. These include projects to rehabilitate existing cocoa farms and also replanting projects with improved planting material. In addition, Ecookim also encourages the planting of complementary trees to increase shade for the cocoa trees and also to allow secondary crop farmers to increase their income in the long run (15,000 tree seedlings have been distributed to producers by Ecookim). For the realization of these projects, Ecookim is looking for long-term financing sources, ideally over 10 years or more. So far, Ecookim has been able

to obtain financing for a 3-year period through international donors for a project of orchard renewal initiated during the 2016/2017 cocoa season with 3 cooperatives for the benefit of about 330 producers.

**Specific funding is needed to target on-farm agroforestry activities. For the rehabilitation of existing plantations or the creation of new plantations, financing should take into account the production periods needed to generate disposable income with which the financing service can be provided. It takes between 4 and 7 years for the ripening of fruits and between 15 and 35 years for the marketing of trunks. We recommend long-term financing that covers these time horizons.**

### **Rehabilitation of plantations - calculation logic**

With regard to the plantations to be rehabilitated, the Consultant assumes that there is a part of the production and harvesting activities that is covered by the income generated by the operation. This will make it possible to anticipate a level of production per year/harvest/cash-flow. This should make it possible to estimate a minimum level of cash flow that must be generated by the sale of the production each year in order to cover the producer's needs and ensure repayment of the financing, without burdening the family budget.

Taking into account the disbursement schedule, the amount to be financed is calculated with a disbursement schedule per interval to be developed. The future revenues to be realized on the basis of production yield assumptions per year and market prices per season are to be developed. Once these gross annual cash flows are developed, the production costs per season are to be deducted in order to determine the capacity of the producer to meet the family budget and the financing service.

The loss of income for a producer during and after rehabilitation must be considered and financed, at least to the extent that it meets the needs of the family and the continuity of the business.

### **Creation of new plantations - calculation logic**

For the development of new plantations, it is a question of financing :

- the preparation of the plots,
- purchase of plants and/or financing the development of nurseries,
- the purchase of inputs (agrochemicals and fertilizers),
- the purchase or rental of the equipment necessary to carry out the work, and,
- payment of labour costs.

Disbursements of funding to the farmer should be made in accordance with the agricultural cycle and related labor and technology needs. Funding should cover the full costs of implementation (renewal or rehabilitation).

For new plantations, the period up to the first harvest should be taken into account, including the expected (lower) yields for new plantations, in the different estimates. During this start-up



period, the plantation does not generate enough income to service a loan. It is therefore advisable to allow a grace period for both interest and principal.

## 5 REPAYMENT CAPACITY AND LIMITING FACTORS

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### 5.1 Repayment capacity - warnings

It should be noted here that for this project, the possibility of financing, in a commercial way, the costs related to production activities (field side), transport, storage and marketing / export of cocoa beans at the level of producers, cooperatives and also at the level of Ecookim should be analyzed. In addition, it becomes important to determine the entity capable of acting as a lender responsible for repaying, within the agreed timeframe, the financing including the payment of interest and ancillary costs related to the financing.

It is also worth mentioning a fairly low rate of bankization of agricultural actors and a low level of financial education. Farmers often do not know what financing is and are not aware of the debt service commitments they have made. In addition, a culture of donations, developed in several agricultural areas as part of NGO projects, contributes to farmers' confusion.

This draws attention to the determination of the financing capacity of the actors. This depends directly on their ability to generate net income from their activities that is available for funding. Before committing, the lender should be aware of the commitments made and the financier should ensure that the lender can honor them. In addition to traditional financial analysis, this requires the financier to have a good knowledge of the agricultural cycle, the yield achieved and the scale of production costs and, more generally, an understanding of the value chain and the risks associated with the production and marketing of the product and how its risks are controlled.

Finally, it should be noted that agricultural actors rarely have the guarantees systematically requested by commercial banks, such as mortgages or deposits (DAT).

### 5.2 Producer level

Borrowing capacity, rather the ability to repay on the level of a producer depends heavily on his agricultural yield. More concretely, it is important to analyze the capacity of the producer to produce (in quantity and quality) while taking into account the costs of production. For this purpose, the Consultant has developed a simplified calculation method taking into account the different factors of production (Table 4).

On the basis of this scale of costs taking into account the agricultural yield, a net result of the agricultural activity can be calculated. From this net result, the producer must first pay the family need (rent, food) and the remaining balance must be used to service a debt, i.e. pay possible commissions and interest and then repay the financing according to the maturity schedule agreed with the lender.

It is important to note the importance of respecting the agricultural calendar and in particular :

- periods of expenditure,

- harvesting periods,
- the periods of cash flow realization through the marketing of the harvested products and,
- the collection of revenues.

The schedule must take this into account.

The social needs of the producer must be taken into account before the financing is repaid. Taking this component into account will enable the producer to meet his needs and will protect him from abusive indebtedness with third parties at the risk of mortgaging his field for repayment, and therefore his crop cannot be delivered to the Cooperative. Indeed, when the producer is indebted with third parties, his crop is used first to reimburse the third parties before his commitments with the Cooperative.

Therefore, the Consultant considers as net income of the producer, the income available after the sale of the cocoa minus the costs of production and the family budget. This net income, as defined, will be used to meet the financing service. It will be used as the basis for determining the duration of the credit and associated maturities.

These calculations will have to take into account the costs of financing, i.e. provisions and interest to be paid at intervals. In this way, a financing period can be calculated while taking into account the need for a deferral period. The life span of the investments, in particular the development of production yields, should be taken into account.

It is also worth mentioning the limits in relation to the guarantees available to secure such financing. The producer does not have title to his parcel of land that can be used as a mortgage. Few producers have the assets (house, store, equipment) to allow a mortgage or pledge. Very often, the only way to secure a financing is through agricultural activity: that is to say, its know-how to produce in quantity and quality ensures the continuity of its production and subsequently the generation of sales revenue available for financing.

**Table 4: Determining the Producer's Repayment Capacity**

Headings	Amount
Revenues (Sales of cocoa) (A)	
Total production cost (B)	
Net margin (C) = (A) - (B)	
Total premiums (D)	
Family budget (E)	
Net Income (Repayment Capacity) (F) = (C) + (D) - (E)	

### **Analysis of actual data at producer level**

As part of the formulation of the financing offer and in order to identify the possibility of integrating the Cooperatives as beneficiaries, it was recommended that a survey of producers be carried out to collect data for analysis and interpretation.

This survey involved 14 cooperatives and 436 producers who farm 2,764.9 hectares. In order to refine its analyses, the Consultant narrowed the sample based on the proposed list of 5 Cooperatives with respectively 135 producers and 641.75 hectares farmed, in relation to their capacity to contract credits. Consequently, our analysis was limited to these 5 Cooperatives (ECOJAD, CAPEDIG, ROCHER, KAPATCHIVA, COOPASID, see next chapter).

The results presented below should allow us to confirm the potential of the 5 Cooperatives and recommend them as potential funding recipients for the establishment of the LDN Fund.

Also, our analysis will identify the financing scheme and the associated conditions in order to set the associated eligibility criteria.

In order to verify the consistency of the data collected, we will compare them to a study conducted by the French Development Agency and Barry Callebaut in 2016 :

**Table 5: Comparison of Literature and Actual Agricultural Data**

Headings	Study AFD & Barry Callebaut	Ecookim study
Age of the producer	43	48,76
Like	96% male	94.07% male
Level of education	10% secondary and above	14.07% secondary and higher
Size of household	8 people	9 people
Gross annual income from cocoa	1.7 million FCFA (EUR 2,591.5)	1.2 million FCFA (EUR 1,829.3)
Size of the farm	5 hectares	4.8 hectares
Age of operation	50% aged 24 years old	45,93%
Operating Performance	471 kg/ha	<b>303,5 kg/ha</b>

Source: UNIQUE 2021

### Borrowing and repayment capacity

The analysis shows that the data collected is not far removed from the baseline study as a whole. The big difference is in the yield per hectare (ha) and therefore in the income from cocoa. The average yield per hectare is 303.5 kg, representing an average annual gross income of 1.2 million, FCFA (4.8\*303.5\*825), or EUR 1,829.3 (4.8\*303.5\*1.3). 825 FCFA (1.3 EUR) is the field price of cocoa for the 2019-2020 season. The theoretical national average yield per hectare is between 450 and 550 kg (World Bank report of July 2019). The finding is that the yield per hectare of our sample is well below the national average.

Only 18.52% of producers have a net income of more than 1.7 million (reference AFD study Barry Callebaut 2016) or 2,591.5 EUR, therefore more than 80% of producers earn less than 1.7 million (less than 2,591.5 EUR).

35.56% of the producers have recourse to third parties through credits to meet certain charges and costs. This shows the extent to which income from cocoa is not sufficient to enable producers to meet their needs.

For a detailed analysis of the agricultural data including a detailed characterization of farmers, risk profiles, justification of productivity and improvement measures, please refer to the separate report "Data analysis report following the survey of producers of Ecookim member cooperatives".

### **Other cash crop income**

48.56% of producers have income from cash crops that could certainly compensate for the budget variances.

38.52% of producers have an average annual gross income of 514,724 FCFA (784.6 EUR) from cashew nuts and 33.33% have an average annual gross income of 318,360 FCFA (485.3 EUR) from coffee. Cross-referencing the two data, we have 45.93% of producers who receive an average gross annual income of 662,772 FCFA (1,010.3 EUR) from cashew nuts and coffee. It should be noted that these incomes are complementary to those received by producers from cocoa.

However, to take these revenues into account without taking into account the related expenses would be to overestimate the revenues of the producers concerned. Therefore, the Consultant recommends to be cautious on this subject in order not to bias the analyses and interpretations. If this data should be taken into account, the Consultant recommends the application of a deflator between 30 and 40%, with a view to taking into account production costs and other expenses.

Studies have shown that 74% of a cocoa farmer's income comes from the sale of beans. Consequently, just over 25% comes from other activities (agricultural production-others). Based on this principle, income from cashew nuts and coffee could be taken into account provided that the deflator is applied in the capacity analyses.

**Analysis and interpretation of the data indicate that, taking into account cocoa income and income from other cash crops, only 33.33% of producers achieve a total annual income of 1.7 million FCFA or more (reference AFD study Barry Callebaut, 2016) or 2,5191.46 EUR.** Continuing our analysis we can say that :

- 33.33% of the producers could face payments for services without unbalancing their family budget and without other interventions.
- 20.74% of producers with a good capacity building program would be able to meet service payments after 18 months without unbalancing their family budget.
- 45.93% of producers need to benefit from a strengthening program over 30 to 36 months before they can begin to cope with financing services without unbalancing their family budget.

In total, depending on his level of income, the producer must be included in a capacity building scheme in line with his current and future income.

## **5.3 Cooperative level**

To finance their purchases from producers, the cooperatives use Ecookim's "Revolving" financing at each campaign. These amounts are validated and granted according to the capacity of the cooperative. Although they are all domiciled in the books of the Société Ivoirienne de Banque

(SIB), a subsidiary of the Moroccan Group Attijariwafa, they do not currently benefit from any financing.

Ecookim's financial support also takes into account the input component to allow producers to treat their fields in order to maintain or improve their production in quality and quantity.

**The problem of the Cooperatives' borrowing capacity arises in terms of risk coverage by guarantees. On this point, the Consultant notes that the situation is improving and that a number of Cooperatives can offer solid guarantees up to a certain amount to cover the credit risk.**

**This state of affairs shows how necessary it is to structure the Cooperatives in order to make them eligible for financing conditions.**

Better still, the Consultant suggests that Ecookim could, on the basis of its notoriety and its counterpart, establish with one or more Institutions in the place of the Cooperatives progressive support schemes so that in the medium term they are all eligible for financing. The achievement of this objective could enable the Cooperatives to fully assume their main function: to purchase and market the cocoa of its members with negotiated means, thanks to its performance and its counterpart, which are considered reassuring by the Financial Institutions.

**Table 6: Determining the Repayment Capacity of a Cooperative**

<i>Headings</i>	<i>Amount</i>
Sales realized (80 F / kg of cocoa sold) (A)	
Purchase cost and marketing cost of cocoa (B)	
Net margin (C) = (A) - (B)	
Overheads (D)	
net income (E) = (C) - (D)	
Total premiums (F)	
Net Income (Repayment Capacity) (G) = (D) + (F)	

### **Identification of the best Cooperatives according to commercial and financial data**

At the request of the LDN Fund, we stratified the 15 co-ops visited and ranked them according to key criteria that are important when considering financial collaboration. We considered only those cooperatives having marketed at least 1,250,000.00 kg of cocoa in 2019/2020.

Three criteria were used:

- Volume of cocoa traded over the last three years ;
- The financial result of the last three years ;
- The amount of premiums over the last three years.

#### **a. Classification by volume of cocoa traded**

Following this analysis, the table below presents the following results (volume per cooperative in kg) :

**Table 7: Volume of cocoa traded**

Rank	Cooperative	Campaign 2017-2018 (kg)	Campaign 2018-2019 (kg)	Campaign 2019-2020 (kg)	Average (kg)
1	CAPEDIG	2 343 998,58	3 203 379,72	3 416 855,75	2 988 078,02
2	ECOJAD	1 612 769,99	3 077 025,85	3 294 036,01	2 661 277,28
3	KAPATCHIVA	2 428 508,00	2 675 453,14	2 215 071,00	2 439 677,38
4	ROCK	2 029 345,52	2 018 890,40	1 920 718,09	1 989 651,34
5	COOPASID	823 278,66	1 162 722,00	1 383 258,80	1 123 086,49

**b. Classification according to accounting result (income statement)**

Following the first criterion, we analyzed in more detail the five selected cooperatives according to their income statements for the last three years (result per cooperative in FCFA) :

**Table 8: Income Statement**

Rank	Cooperative	Result 2017 (FCFA)	Result 2018 (FCFA)	Result 2019 (FCFA)	Average (FCFA)
1	ECOJAD	14 944 807,00	21 083 316,00	31 602 617,00	22 543 580,00
2	ROCK	5 690 455,00	13 845 694,00	15 260 715,00	11 598 954,67
3	COOPASID	7 509 970,00	7 589 030,00	9 326 499,00	8 141 833,00
4	CAPEDIG	110 300,00	11 678 604,00	9 434 695,00	7 074 533,00
5	KAPATCHIVA	4 510 000,00	6 867 000,00	8 842 263,00	6 739 754,33

**c. Premium Rankings**

Applying the criterion premium received, the analysis gives the results below (result per cooperative in FCFA) :

**Table 9: Premiums collected**

Rank	Cooperative	Campaign 2017-2018 (FCFA)	Campaign 2018-2019 (FCFA)	Campaign 2019-2020 (FCFA)	Average (FCFA)
1	CAPEDIG	46 879 972	64 067 594	68 337 115	59 761 560
2	ECOJAD	32 255 400	61 540 517	65 880 720	53 225 546
3	KAPATCHIVA	48 570 160	53 509 063	44 301 420	48 793 548
4	ROCK	40 586 910	40 377 808	38 414 362	39 793 027
5	COOPASID	16 465 573	23 254 440	27 665 176	22 461 730

The cooperatives ECOJAD, CAPEDIG, ROCHER, KAPATCHIVA, COOPASID (in that order) are the most promising for possible financial cooperation according to our analysis. They present a good profile and should be followed to maintain them in this dynamic of continuous improvement in terms of performance. The other Cooperatives should be encouraged to make every effort to reach the performance level of the five Cooperatives mentioned above.



### **Additional specification of the best cooperatives according to certification, partnerships with chocolate producers and management criteria**

In addition, we analyzed whether the five selected cooperatives are certified. Certification to a sustainability standard gives a strong indication of a Co-operative's income level and stability. A certified Cooperative receives a minimum premium of 20 F per kg of cocoa sold. For information, the turnover is determined by applying 80 F per kg sold by the Cooperative. Hence the importance of this criterion in the choice of the five (5) best Cooperatives. All five cooperatives are UTZ and Fairtrade certified, and all but Kapatchiva are also Rainforest Alliance certified. Capedig is also certified organic, the others are in the process of being certified, with a final exam still in progress.

Partnerships with chocolate manufacturers are important to ensure market share and thus the sustainability of cooperative operations. The five cooperatives have partnerships with Ferrero (Rock, Coopasid), Tony Chocolonely (Ecojad, Kapatchiva) or Valrhona (Capedig).

All cooperatives are housed under the same roof. They are all legally constituted, meet all the requirements of the OHADA law and are all formalized as Cooperative societies with a Board of Directors. On the management side, the various Boards of Directors and Supervisory Boards are based on the quality of the people who make them up. However, we cannot objectively evaluate this component in the absence of an organizational and operational audit of each cooperative.

## **5.4 Ecookim Level**

Ecookim must mobilize significant working capital to finance the purchase of cocoa from cooperatives and other suppliers and the costs related to transport, packaging, storage and export. Given the large quantities of cocoa processed, Ecookim commits significant financial resources. These financings are first secured by the value of the product purchased and, more generally, by a profitable activity controlled by Ecookim. Then, the quality of the international counterparties reassures the banks. On the level of its balance sheet, Ecookim has a good level of equity to support its commitments to its donors.

The Consultant would like to pay attention to the issue of the absorption capacity of Ecookim's financing, especially in relation to the relatively high cost of the financing involved. It becomes important to take into account the level of this financial cost and to avoid that these costs cause a loss of its profitability. Ecookim plays a fundamental role both for producers and its cooperatives and for its purchasing partners with whom Ecookim has developed important supply chains.

## **6 POTENTIAL FUNDING SCHEME**

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LDN Fund has the ambitious objective to develop a financing program for producers via Ecookim. Based on our analyses, the Consultant assumes that, given the current state of free cash flow, a majority of producers will be able to obtain financing (to be confirmed / refined with field data). By the way, the Consultant observes a potential with producers. Above all, he considers necessary the gradual development of a direct access to financing for producers. On the other hand,

the sustainability of such a development will strongly depend on the financing capacity of producers and requires actions to make this capacity stronger and more stable.

At this stage, and given the realities found on the ground, focusing on cooperatives while supporting the efforts already undertaken by Ecookim seems more responsible, as our analysis below shows.

## 6.1 Hypothesis 1: Cooperative as the Primary Borrower

In such a scheme, the lender accepts the cooperative as a risk, i.e. the cooperative commits to the lender to repay the financing granted. Thus, Ecookim, which knows its cooperatives best, must select the most performing cooperatives and solvency in order to make them eligible for bank loans according to the following criteria :

- Financial strength (financial balance sheet, cash flow, etc.).
- Possible guarantees

In such a scheme, the Cooperatives will be confronted with the problem of the guarantee, Ecookim will be able to bring its guarantee in order to reassure the Financial Institutions.

This structuring requires the upgrading of cooperatives in terms of capacity building. This approach has the advantage of making the Cooperatives more responsible, so that in the medium term, they are totally autonomous, in terms of credibility vis-à-vis the Institutions for all types of financing. Thus, Ecookim will be able in the medium term to take over what it is responsible for as an apex.

The basis of determination for the coverage of financing services at the Cooperative level will be as follows :

- 20 F from the 80 F/kg collected from the sale of cocoa
- 20 F perceived as a certification premium.

On the basis of this revenue structure agreed between the Cooperative and Ecookim, the Cooperative then has a gross margin of 40 F/kg available to cover its administrative expenses and serve as a possible source of financing. We will be able to analyze the percentage that could be destined to the financing services, without compromising the operation of the Cooperative in order to allow it to carry out other projects.

It should be noted that the quality of governance of the Cooperatives could impact the financing and its structuring. Indeed, if governance is not satisfactory, they will not be able to carry part of the credit, as the donor will not be reassured. In such a case, Ecookim will carry the credit alone.

## 6.2 Hypothesis 2: Cooperative as Co-Borrower with Ecookim

In this second scheme, part of the credit will be carried by the most efficient and solvent Cooperatives, the other part will be carried by Ecookim directly. This is a financing in which the Cooperative and Ecookim act as joint lenders . The entire risk will be covered by Ecookim's guarantee.

This financing structure engages a cooperative directly although the financing risk is shared between the cooperative and Ecookim. The lender is backed by the signature of Ecookim while directly committing the co-borrowing cooperative. Ideally, after having developed a financing history, this should allow Ecookim to exit its commitment with the cooperative and become the sole lender.

**Any funding provided either by the LDN Fund or a local financial intermediary should be subject to pre-determined conditions. A detailed analysis of the capacities of the cooperatives met is available in the appendix. The following table summarizes the main observations on the financing capacity of the Cooperatives and makes proposals on how it could be strengthened in order to directly finance the Cooperatives (assumptions 1 and 2).**

**Table 10: Key points and preconditions for funding**

Key points		Analysis	Prerequisites for funding
Cooperative Governance	Administrative	Legal personality = possibility of contractualization / commitment	These aspects are part of the due diligence to be carried out by the Institutions (KYC). Without satisfactory KYC, no funding is available. In order to upgrade the information, Technical Assistance could be welcome to reassure the financier on the management capacity and reliable accounting.
	Management body	Management through producers; lack of experience	
	Accounting	Existing, but basic	
Spirit of belonging	Product delivery rate	65-70% - due to approximate projections. Need for more realistic projections (actual area, productivity, age and health of trees,...)	Without reliable planning, not reliable projections, which has an impact on financial modulation; as a reminder, the banks are very fixed on the production risk and without reliable statistics it seems difficult to convince them to consider financing with repayment by an agricultural activity.
Production activity	Average age of the plantations	According to a study conducted by FIRCA-ANADER-CNRA-STCP-PROSTAB, regeneration must take place after 30 years.	Within the framework of the project, we will use the age limit of max. 30 years as a rehabilitation criterion and as a criterion for eligibility for funding. (all orchards older than 30 years will be rehabilitated).
	Use of inputs	Ecookim does pre-financing and encourages producers to use less chemical inputs. Through organic certification programs, more and more producers are using organic compost.	Production according to customer requirements will increase the volume marketed and ensure a substantial income for the producer. The use of organic compost will make cocoa more competitive and open the way to other customers and better negotiation will be possible by making it part of a sustainable process. A support
	Plot maintenance		

			program of this type could reassure the financier.
<b>Surface area used</b>	Geo-localized / planted / productive area	To have reliable data that can be used to make MT and LT projections.	Measure all the exploited areas (in production or not) with the age of the plants and the density. Carrying out an analysis model of future production on the basis of the analyzed and qualified historical data could convince the bank to set up financing.
<b>Estimated production</b>	Average production per hectare (estimated/realized)		
<b>Marketed production</b>	Projected/marketed production		

### 6.3 Hypothesis 3: Ecookim as a single borrower

All the financing will be carried by Ecookim on behalf of the Cooperatives.

In this scheme, Ecookim commits the financing and assumes full repayment risk. These are funds dedicated to disbursements according to investment plans agreed with selected producers through their respective cooperatives. In such a scheme, Ecookim signs a loan contract with the lead financier ("*Main Agreement*"). This Main Agreement refers to the individual financing contracts to be signed between Ecookim and the selected Cooperatives.

This scheme is structured on the basis of the commercial agreements for cocoa purchasing operations: It is based on the assumption that the main source of reimbursement under the scheme is the income earned from the supply of cocoa beans to Ecookim. For this purpose, the producer transfers his harvested cocoa beans to the cooperative and the cooperative organizes the delivery of the cocoa to Ecookim, based on a committed purchase contract between the cooperative and Ecookim. Ecookim makes payments for the purchased cocoa directly to each cooperative, which in turn redistributes the funds among the producers according to the quantity delivered. The same applies to the payment of certification premiums, which are paid at the end of each campaign. There are therefore established commercial and financial practices between Ecookim and the Cooperatives on the one hand, and between the Cooperatives and the associated producers on the other. Ecookim has taken up this concept in the framework of pre-financing granted during the cocoa campaign: Advances, in the form of material (inputs) or equipment financing, are granted to the cooperatives and are redistributed to the producers according to predetermined criteria. These advances are also repaid in material (cocoa), i.e. the Cooperative provides cocoa to Ecookim, and instead of paying the Cooperative, Ecookim provides these funds to repay the respective Cooperative's advance according to an agreed repayment schedule.

As mentioned above, the scheme is based on a long-term funding period. It is therefore imperative that the commercial and financial relationship between the producer and the cooperative be solid and unflinching. The same goes for the commercial and financial relationship between this cooperative and Ecookim. As Ecookim mainly buys cocoa with the cooperatives (apart from the cashew nut activities limited to the cooperatives in the ODIENNÉ region), the scheme is initially based exclusively on cocoa production and therefore structured on the basis of the cash flow generated by the production and sale of cocoa. The Consultant proposes that the calculation of the cash flow available for repayment does not take into account the other fruits of sale which may, during the course of the project, be realized by the production and sale of tree fruits or

other food speculations that are part of the agro-forestry scheme to be implemented. This additional income can contribute to lowering the subsistence costs of the producer by reducing his expenses for the food of his family for example, or can contribute to the family income.

It is imperative that the net income to be realized from the sale of cocoa beans including certification premiums available for repayment of financing cover the payment of commissions and in particular the payment schedules calculated and agreed with the Cooperative. This schedule is included in the stipulations agreed between the financier and Ecookim within the framework of the Main Convention.

Ecookim is best positioned to know the production and delivery capacity of each cooperative, including the state of the orchards and their profitability. It is also Ecookim that knows the state of training of producers in relation to good agricultural practices, including plot maintenance practices. It is also Ecookim that can determine how to support the cooperatives in terms of access to inputs. Finally, it is Ecookim that ensures the outlet for the cocoa produced, notably by ensuring certification and thus significant additional income through its relationships with its purchasing partners. In addition, important technical assistance projects have been launched with the help of these partners.

Under the scheme, disbursements are mainly made by direct payment to suppliers. For certain costs, such as labor costs or payments to participating producers, disbursements are made through the Cooperative with supporting documents to be signed between the Cooperative and the producers. Ecookim is able to group the different positions (inputs, equipment, etc.) and can therefore negotiate preferential conditions (costs and payment terms) with the different suppliers.

This scheme with Ecookim acting as a lender could enable the development of a prototype scheme, to set up a pilot project to give incentives to local financial institutions to participate in future schemes in order to finance the Cooperatives directly in the long run.

On the other hand, the Consultant would like to mention some concerns: It is Ecookim that absorbs all the risks related to financing. It might be necessary to consider a solution to share some of these risks with Ecookim. It should also be considered that it is Ecookim that already commits campaign financing that is significant enough to ensure the continuity of commercial activities. Any financing scheme in the agro-forestry sector increases the level of indebtedness and impacts the risk parameters for Ecookim and could lead to opportunity costs in terms of future financing (financing conditions, guarantees requested, etc.). Finally, the capacity to absorb the financial costs, which are already quite high, must be taken into account. Including the question of passing on these expenses to the beneficiaries of the scheme.

## 6.4 Hypothesis 4: Involvement of a local financial institution

### **Option A: Local financial institution as a borrower from the LDN Fund**

In this scheme, an Ivorian financial institution provides financing directly to the cooperative or producer. LDN Fund refinances this Ivorian financial institution and therefore accepts a risk on it. It is the financial institution that absorbs the financing risk from the cooperative and/or the producer.

A potential scheme could be based on framework commercial contracts to be established between Ecookim and a cooperative in relation to the supply of cocoa during the financing period. Of course, the purchase price should be updated for each campaign (main and intermediate) according to current market conditions. Ecookim could commit to purchase a minimum of cocoa per year from this cooperative in order to confirm an identifiable outlet that secures the cash-flow principle of the business activities. These sales revenues could be domiciled in the book of the financial institution to secure debt servicing. However, the risk of cocoa production (quantity and quality) still exists and additional guarantees will probably be required to secure financing. The cooperative may not have assets acceptable to the financial institution.

**At this stage, the Consultant considers that it is unlikely that direct financing for the benefit of a cooperative or even less for the benefit of a producer is possible.** This opinion is mainly the result of the analysis elaborated in chapter 3: The banks in the region do not commit themselves on the field and mainly finance export activities for the benefit of exporters. In addition to this fact, they lack long-term resources and should first have access to long-term refinancing lines. The provision of a long-term refinancing line would be a starting condition. In addition to the question of available resources, these banks would need technical support to refine their analytical and structuring capacities in setting up and monitoring such a financing scheme.

In order to structure such a scheme, the Consultant approached Banks to gather their interest in participating in such a scheme. At first glance, they are interested and wish to fully play this role in order to allow the liquidity of the scheme on the direct aspects in line with the fund, but also on certain aspects (consumer credit: school-social events) that could be identified and be part of a financing agreement in order to contribute to the overall performance of the scheme.

In order to be able to structure the financing for the benefit of Ecookim and/or the Cooperatives, the fund should be analyzed as a refinancing window for one or more Financial Institutions under conditions. This scheme could allow to mobilize certain Financial Institutions to approach this type of financing with much more interest.

This scheme will be accompanied by conditions for both Financial Institutions and Ecookim and/or Cooperatives.

In order to arouse the interest of financial institutions in this scheme, the Consultant approached two institutions that have expressed interest in the case of a solicitation. They have communicated their agreement in principle, and one of them (BOA: Banque Ouest Africaine, a subsidiary of the Moroccan Group (BMCE)) has exchanged with the Project Manager and the Financial Manager of Ecookim.

It should be noted that any scheme involving a Financial Institution would need a KYC on Ecookim and the Cooperatives. Therefore, due diligence would be conducted on the financial statements of the above mentioned entities.

In this context, Ecookim should take all steps to upgrade the information related to KYC and due diligence, and especially prepare its teams to make them operational for this type of information to be transmitted.

The Consultant, given the experience of his team could contribute to the preparation of these points (KYC and due diligence) and to the structuring of the financing file.



### **Option B: A risk-sharing scheme Ecookim - financial institution (the two borrowers of the LDN fund)**

In this schema, it is a mixed solution. The financial institution directly finances a cooperative acting as a borrower. The financial institution accepts the risk on the cooperative and asks Ecookim to share a certain percentage of the risk. In case of default, the amount not repaid by the cooperative is recorded and Ecookim is committed to repay according to the agreed percentage of risk. This solution could further reassure the financial institution that Ecookim is comfortable with the risk of the cooperative and is willing to share this risk.

The Consultant proposes this solution as a model to be developed with a local financial institution. As mentioned above, it would be appropriate to develop a pilot project with Ecookim as a lender at the beginning. As soon as the scheme is set up, a local bank should be used for the movements (disbursement and collection to be made) in order to better understand the commercial transactions and associated cash flows. In the long term, the commitment of Ecookim as "champion" of this value chain is essential and the fact that Ecookim shares the risk with the local bank helps to reassure the latter.

## **6.5 Summary**

Ecookim's member cooperatives are legally constituted, but are administered with very few resources and a management that still needs to be improved at several levels:

- Collection of contributions and shares;
- Control of costs related to pre-collection and collection activities;
- Business planning and financial projections;
- Management of the various premiums collected.

The performance of cooperatives is not yet optimal. To make it optimal, Ecookim must put in place a set of necessary support measures with the ultimate goal of transforming Cooperatives into real businesses with the required governance, administrative, accounting and financial documents compatible with standards. This would provide comfort to financial institutions when analyzing the financing of cooperatives.

**Ecookim assumes a catalytic role and its commitment further reassures financial institutions. In this perspective, hypothesis 2 (Cooperative and Ecookim acting as co-borrower) could be the appropriate financial structuring. Hypothesis 4-B including a risk participation by Ecookim is also an option.**

**Finally, attention should be drawn to the issue of cash flow: In the event that LDN Fund gives preference to the options of cooperating with an Ivorian financial institution, the latter could express a need for resources in the long term. As a reminder, any financial scheme in the agro-forestry sector includes long terms. As detailed in Section 3, financing terms in Côte d'Ivoire rarely exceed 5 years. Among other explanations, this is mainly due to the availability of bank funds versus banking regulations that limit financing periods. In this case, LDN Fund should consider making refinancing lines available.**

## 7 IDENTIFICATION OF THE HOLDER OF THE CREDIT

Regardless of the financing scheme chosen, there are three groups of potential borrowers (credit carriers): producers, cooperatives and Ecookim.

### Producers

If LDN Fund and Ecookim choose to implement a funding system that includes direct bénéficiaires at the farm level, certain eligibility criteria must be applied in order to achieve the funding objectives. They should be used to select the beneficiaries of this funding program. These are:

- the surface area exploited
- Age of operation
- Impact of diseases (Plant mortality rate - Swollen Shoot)
- Return on Net Income
- Sustainability (Agroforestry Certification Program)

On the basis of these criteria, we structure producers according to their net income (the main criterion for choosing the financing scheme) and other characteristics as follows, and recommend targeted financing for the use of revenues in the following table. The table indicates the destination of the funding that will be received by producers (column: Capacity Building). The grace period or deferral column indicates whether the producer should be given a period of time before starting to repay the financing. Because not having enough resources (net income > 1.7 million or EUR 2,591.5 (reference income)), the producer will not be able to repay the financing.

**Table 11: Structuring into 8 categories of producers**

Area	Age	Diseases with mortality rates	Performance	Net Income	Use of proceeds	Grace Period (Deferred)
< 5 ha	< 25 years old	Yes	Strong	>= 1.7 million	Replanting-Maintenance-Material and tools-Agroforestry	not necessary
< 5 ha	> 25 years old	Yes	Strong	>= 1.7 million		
>= 5 ha	< 25 years old	Yes	Strong	>= 1.7 million		
>= 5 ha	> 25 years old	Yes	Strong	>= 1.7 million		
< 5 ha	< 25 years old	Yes	Low	< 1.7 million	Creation of a new field-Replanting-Material and tools-Agroforestry	necessary
< 5 ha	> 25 years old	Yes	Low	< 1.7 million		

> = 5 ha	< 25 years old	Yes	Low	< 1.7 million	Replanting-Maintenance-Material and tools-Agroforestry	necessary
> = 5 ha	> 25 years old	Yes	Low	< 1.7 million		

Source: UNIQUE 2021

## Cooperatives

As far as the Cooperatives are concerned, they have never benefited from credit but present profiles that could be of interest to Financial Institutions, provided that a real due diligence is carried out. It should make it possible to analyze the situation of individual Cooperatives in order to strengthen their capacity and make them eligible for credit.

We note that the Cooperatives could be potential borrowers with a definite repayment capacity. The risks having been identified, it would be appropriate to mitigate them through the recommendations indicated at the producer level.

The table below shows possible financing schemes to address the needs of producers and cooperatives. It should be noted that Cooperatives could be positioned as potential direct and indirect beneficiaries of the financing as shown in the table below.

**Table 12: Possible Financing Schemes for Cooperatives and its Producers**

Types of Credits		Objects of credit	Usefulness of credit
For the Cooperative	Working capital	Purchase of farm inputs	To have quality inputs at lower cost by pooling purchases - Strengthen the production capacity of producers
	Investment	Acquisition of transport equipment-Storage warehouse construction-Mechanization	Have a supply chain for pre-collection, collection and delivery to Abidjan or San-Pedro-Stock the beans in the recommended conditions-Reduce the drudgery of work
On behalf of producers	Operation	Farm maintenance-small equipment and tools-Pre-production maintenance costs new farm and trees	Support current and future production costs - Ensure the treatment of cocoa orchards and trees
	Investment	Cocoa plants-Tree plants-The establishment of Rural Service Centers (RSCs)	To have selected and high-yield plant material at your disposal - To carry out the services and monitoring of the activities

Source: UNIQUE 2021

## Ecookim

Holders will be selected on the basis of their repayment and borrowing capacity in terms of amount and term. On this basis, the Consultant, basing himself on the history of each potential holder, notes that Ecookim presents the best profile. Indeed, every year, and for more than 5 years, Ecookim receives financial support from its local bank (SIB: Société Ivoirienne de Banque du Groupe Marocain Atijari Wafa), its commercial partners and its international financial partners (Donors and Funds).

Overall, the Consultant notes that it would be counterproductive to envisage direct financing of Cooperatives and producers without involving Ecookim. For the Consultant, such a scheme would not be viable. For an analytical model for selecting beneficiaries and a model for calibrating loan amounts, please refer to Annexes 4 and 5.

## 8 EVENTUAL LOAN AMOUNT

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In view of the data and analyses carried out, it becomes difficult for the Consultant to decide on a possible loan amount for a possible funding program to be launched by the LDN Fund. As indicated previously, the partners involved will have to make decisions on the basis of the findings and recommendations presented in this report :

- At the farm level, only 33% of the farmers in the sample reach a level of annual net income that allows them to benefit from external financing (equivalent threshold of about EUR 2,500). It should be noted that the calculations made take into account additional income from cash crops.
- We cannot assume that 33% of all Ecookim farmers reach this level of net income.
- ReNature's consultants have calculated the cost schedule for rejuvenation or re-establishment of existing plantations within the framework of agroforestry programs (see their report). It should be noted that this scale takes into account plant matter. The costs related to labor for the preparation and maintenance of the plots and harvesting, as well as the costs to pay for work tools and agricultural inputs have not been taken into account.
- Of the 15 cooperatives analyzed, five appear promising as direct or joint borrowers, if they benefit from capacity building in financial management.
- Financing needs at the cooperative level are detailed in chapter 4.3 without being specifically quantified.
- In order to be able to put in place a commercially viable loan amount for the lender while ensuring the viability and sustainability of the eventual financing scheme, the Consultant strongly recommends that a second tranche be arranged with Ecookim as the direct borrower. This tranche should cover financing needs for the benefit of Ecookim.

## 9 RECOMMENDATIONS

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### 9.1 For Ecookim

The analysis of the available information brings out the points of improvement for which the Consultant formulates the following solutions:

- **Land management:** Make every effort to use the mechanisms put in place by the Ivorian State to find a financing scheme to cover the costs of obtaining land certificates for producers.

- **Inputs:** Establish a synergy with a leading partner in the production of organic compost using cocoa by-products (pods, etc.) in order to improve the rate of compost utilization in production while reducing this load item in the production cost.
- **Measurement of areas under exploitation and in production**
  - Further develop accurate measurements of producer plots in order to obtain reliable data in relation to their production capacity and the yields actually achieved.
  - It is also necessary to measure areas planted but not yet in production in order to enable yield and income projections for producers and cooperatives, and especially agroforestry projections.
- **Density, age of the plants and quality of the plants:** Ecookim, will have to update the data on the density of the farms and the age of the seedlings, in order to quantify the real needs in inputs, manpower etc. This update will also allow to plan the regeneration of orchards and planting complements to respect the density allowed per hectare (1,380 plants).
- **Logistics**
  - Ecookim, will have to organize the logistics chain if possible in synergy with a service provider for the Cooperatives that do not have sufficient transport equipment for pre-collection, collection and transport to the port.
  - Ecookim may, in agreement with Financial Institutions, organize the construction of quality storage warehouses in order to improve the storage conditions of cocoa in the sections and at the headquarters of the Cooperatives.
- **Income diversification:** Ecookim should implement programs to improve the income of producers through high potential activities. The realization of such a program will allow producers to have income to meet the family budget and various social needs. In the long term, producers will be able to generate savings and take charge of themselves by ensuring their independence from loan sharks. In this context, they will be able to deliver more cocoa to the Cooperative.
- **Financial education and responsible finance:** Ecookim, in order to prepare producers for banking and financing, will have to set up financial education and responsible finance programs. These programs will allow to give a management culture towards the different needs and to prioritize them, and especially to adopt the appropriate behavior in case of credit obtained.

## 9.2 For IDH (LDN TAF)

In a financing process, it is necessary that all stakeholders share the same understanding and that commitments are jointly respected. In order to enable the proper conduct of activities, the Consultant suggests the identification and implementation of technical partnerships in various areas as follows:

- Technical support to strengthen producers' understanding of economic and financial calculations in order to be able to manage income and repay credit (financial education and responsible finance);
- Technical support for the valorization of pods and other cocoa by-products ;
- Technical support for structuring the diversification of other income generating activities ;

- Technical support for the counting of cocoa plants, for the analysis of productivity according to the age of the orchards in the short, medium and long term ;
- Technical support for the organizational and financial diagnosis of cooperatives with a business plan over 3 or 5 years;
- Technical support for the establishment of rural service centers;
- Analyze the possibility of finding support for rural land tenure.

### 9.3 For LDN Fund

The challenge for Ecookim is to have access to financing at reasonable and bearable costs, and also to free itself from client financing in order to fully use its negotiating power vis-à-vis its clients.

To this end, the Consultant suggests :

- To make available refinancing lines at negotiated rates and with long maturities to commercial banks, in order to enable these Institutions to set up lines at subsidized rates to Ecookim and/or its member Cooperatives. These lines will make it possible to cover the needs of Ecookim and/or the Cooperatives.
- Analyze the possibility of setting up a guarantee mechanism in order to reduce the risks to which Ecookim and/or the Cooperatives are exposed in a direct lending scheme by LDN Fund and/or a Commercial Bank.
- As a first step, ensure attractive financing of the status quo so that more than a third of cocoa farmers can operate profitably. This can be achieved through affordable short-term financing at the farm level for the use of products such as inputs and tools.
- Second, once farmers have realistically achieved profitability, move towards longer-term financing that enables the transformation of farming systems. Farmers who are not currently profitable need to receive non-credit, non-commercial types of financial support to achieve profitability and eventually improve their farming practices.

## 10 APPENDICES

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### Appendix 1 - Documents Consulted and Cooperatives Visited

#### List of documents

**BCEAO**, Directory of WAEMU Banks and Financial Institutions, 2018

**BCEAO**, BCEAO Statistical Yearbook, 2018

**BCEAO**, UEOMA Monetary and Financial Statistics Bulletin, February 2018

**BCEAO**, Report on Banking Conditions in the WAEMU, 2019

#### List of cooperatives

<i>Cooperatives</i>		<i>Location</i>	<i>Cooperatives</i>		<i>Location</i>
<b>1</b>	<b>CAUD</b>	<b>Divo</b>	<b>8</b>	<b>THE ROCK</b>	<b>Sinfra</b>
<b>2</b>	<b>FG</b>	<b>Gagnoa</b>	<b>9</b>	<b>SCOPRAZA</b>	<b>Issia</b>
<b>3</b>	<b>ECOJAD</b>	<b>Daloa</b>	<b>10</b>	<b>DAPEDI</b>	<b>Meagui</b>
<b>4</b>	<b>KAPATCHIVA</b>	<b>Daloa</b>	<b>11</b>	<b>CNIBO</b>	<b>Soubré</b>
<b>5</b>	<b>CAPEDIG</b>	<b>Dibobli</b>	<b>12</b>	<b>SOCAPED</b>	<b>Odiene</b>
<b>6</b>	<b>COOPAPIG</b>	<b>Bangolo</b>	<b>13</b>	<b>SOCACIB</b>	<b>Soubré</b>
<b>7</b>	<b>COOPASID</b>	<b>Duekoué</b>	<b>14</b>	<b>CAVA</b>	<b>Vavoua</b>
			<b>15</b>	<b>NBCC</b>	<b>Bolequin</b>

## Annex 2 - Cooperative-level capacity analysis

Key points	Collected information	Deciphering / Interpretation / Findings	Suggestions for improvement
Governance	<p><b>Administrative:</b> All the Co-operatives have their complete administrative documents according to the OHADA regulations.</p>	<p>Each Cooperative is a legal entity that can validly contract and carry out commercial acts with full responsibility towards public and private third parties.</p>	
	<p><b>Management bodies:</b> All the bodies are constituted and function as follows</p>	<p>60% of the Cooperatives are run by producers who are willing but cannot carry out the actions whose purpose should enable the Cooperatives to be more efficient. This is also the case of Directors, Accountants, etc..</p> <p>The Supervisory Boards are for the most part of form. They are not operational.</p>	<p>Ecookim, must profile the different organs and set up a capacity building program.</p> <p>For Co-operatives of a certain size, put into practice the principle of independent directors who are in control of management and control.</p> <p>Ecookim, like any umbrella company, must set up a Human Resources Support Department for the technical staff: Director, Accountant. This department will be in charge of capacity building, recruitment and provision of technical staff to the cooperatives.</p>
	<p><b>Management of accounting and financial data:</b>  <b>For</b> 30%, the accounts are kept by an accounting firm. The 70%, keep their own accounts by the Co-operative's accountant. They use the SARI accounting software.</p>	<p>The accounting of the Cooperatives does not always comply with all accounting principles. Capital assets are not properly treated, as are certain operating expenses. Expenses related to provisions and depreciation are not treated according to accepted rules.</p>	<p>Ecookim, must set up a charter of accounts and strengthen the capacity of Accountants. Like any other umbrella organization, Ecookim must set up a support service in order to carry out controls at least once a year, just after the campaign in order to regularize certain accounting entries and integrate all operations into the accounting system, so as not to be confronted with a fait accompli when drawing up the balance sheets to meet the condition of organizing the General Assemblies.</p>



Key points	Collected information	Deciphering / Interpretation / Findings	Suggestions for improvement
Spirit of belonging	<b>Payment Membership Fee:</b> The payment rate is 60%.	Between 30 and 35% of producers are not up to date with their payments.	Ecookim, in agreement with the Cooperatives and producers, must set a deadline for updating payments, and analyze the measures that could be taken for those who are not up to date. Normally, the producer who is not up to date cannot benefit from the services of the Cooperatives.  For new members require full payment of the membership fee at the end of the first campaign following their membership.
	<b>Payment of shares:</b> The payment rate is 65%.		
	The delivery rate is between 65% and 70% of producers (analyze further).	At least 30% of producers do not deliver their entire production. And between 5 and 15% do not deliver their production to the Cooperative.	Ecookim, must profile the producers concerned and analyze their profile in order to understand the underlying reasons that could justify this state of affairs, and put in place schemes that could help encourage the producers concerned to deliver their production.
Production activities	The average age of the plantations is over 15 years. Orchards are more than 30 years old (to be confirmed during surveys with producers).	Financing impact and duration. Selection criteria on the age of the plantations. Highlights impact/funding	
	<b>Inputs :</b> The rate is 35% for compost and 65% for chemicals. Those who are in certification programs and with chocolatiers are migrating to organic by producing their own compost. Ecookim centralizes purchases and deliveries of chemical inputs.	Chemical inputs still dominate in terms of percentage use. Compost has a certain level of use, but the manufacturing constraint is a limiting factor.	Considering the availability of raw material for the manufacture of compost, Ecookim must approach a specialized structure that will be in charge of the production under conditions and make it available to producers at very negotiated prices.
	<b>Farm maintenance:</b> producers organize themselves into mutual aid groups to carry out the work. They have very little recourse to service providers.	Very good practice that minimizes costs.	Ecookim, will have to analyze the possibility of improving this practice in order to optimize it for a better realization of the work.
	<b>Relay trainers:</b> 80% of the cooperatives have relay trainers who are trained by the technical support structures and Ecookim. Producers according to the agreed program, on agricultural techniques and good practices. They also monitor agricultural activities. The cooperatives that do not have them, use Ecookim trainers.	Very good presence of the relay trainers. Their interventions are very much appreciated by the producers.	Ecookim, will have to analyze the possibility of extending their interventions in order to collect in the form of a database a set of key information necessary for the follow-up and monitoring of agricultural activities.

Key points	Collected information	Deciphering / Interpretation / Findings	Suggestions for improvement
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<i>Harvesting and post-harvest activities</i>	<b>Picking:</b> It is ensured in 95% of the cases by the self-help groups composed by the producers themselves.	Very good practice that minimizes costs.	Ecookim, will have to analyze the possibility of improving this practice in order to optimize it for a better realization of the work.
	<b>Denting:</b> It is ensured in 95% of the cases by the mutual aid groups composed by the producers themselves.		
	<b>Drying:</b> It is carried out by the producer under conditions that do not comply in all respects with the requirements in this area. Some dry on tarpaulins, on surfaces not recommended (slabs, etc.).	Drying conditions often deteriorate the quality of cocoa. This leads to losses for some producers and consequently reduces their income.	Ecookim, must analyze the impact of drying quality on revenues and improve drying conditions.
	<b>Pre-collection:</b> It is provided by the Cooperative through small vehicles (tricycle, etc.) owned by the Cooperative (90% of the cases), and through occasional rentals.	The available logistic means allow the pre-collection and collection activities to be carried out. However, an improvement could be made to optimize these activities through economies of scale and efficiency.	Ecookim, must set up an organization to ensure better management of these activities which are most often sources of visible and hidden costs. This could be done through capacity building of the Cooperatives and the punctual intervention of a technical partner for this purpose.
	<b>Collection:</b> It is ensured by the Cooperative by the medium-caliber vehicles (vans from 3.5 to 5 tons) belonging to it (90% of the cases), and by punctual rentals.		
<i>Cocoa marketing</i>	<b>Conveyance to Abidjan or San-Pedro:</b> It is provided by the Cooperative using large-caliber vehicles (30-ton trucks) belonging to it (5% of cases), and by occasional rentals.	This aspect is currently not under control by the Cooperatives, which remain 95% dependent on service providers who often lack regularity, respect for deadlines, etc.	Ecookim should use its umbrella position to contact providers under conditions. This contractualization will enable economies of scale and could reduce the associated costs, while ensuring the performance of the transport chain.

Key points	Collected information	Deciphering / Interpretation / Findings	Suggestions for improvement
Surface area used	<p><b>Total area under cultivation: 60,250 ha</b></p> <p><b>Geo-localized area: 60,250 ha</b></p> <p><b>Area planted and non-productive: not available</b></p>	<p>No information is available from the Cooperatives on the areas harvested but not productive. Only areas in production have been geo-located.</p>	<p>Ecookim, will have to make a point of honor on the geolocation of non-productive farms and draw up their profiles in order to allow the elaboration of short, medium and long term projections, and to plan accompanying measures.</p>
Estimated production	<p><b>Average production per hectare: 500 (estimated productivity 550 tons/ha)</b></p> <p><b>Potential production: 30,125 tons</b></p> <p><b>Marketed production: 21,567 tons</b></p>	<p>A gap of 8,558 tons, or 39.68% of the marketed production. The 8,558 tons correspond to a shortfall of :</p> <ul style="list-style-type: none"> <li>• 7,745 billion in sales for Ecookim (8,558*905 F)</li> <li>• 685 million in revenues for Cooperatives (8,558*80 F)</li> <li>• 45.1 million on average per Cooperative (685/15 Cooperatives)</li> </ul>	<p>Ecookim, must analyze this situation and identify the real causes in order to take the necessary measures of containment, to demonstrate to producers that their well-being lies in the loyalty they will show to the Cooperatives.</p>
Average production marketed by each Cooperative	<p><b>Average sold production of the 11 Cooperatives: 1,420 tons</b></p> <p><b>Higher production sold: 3,412 tons</b></p> <p><b>Lower production sold: 351 tons</b></p>	<p>The finding is that only 71.59% of the estimated production is marketed. The reasons put forward to explain this state of affairs are multiple: commitment with third parties, in particular, which forces producers to deliver part of their production elsewhere. Other factors could also be involved.</p>	
Cooperative Income	<p><b>80 FCFA/kg:</b> It allows the Cooperatives to meet all the expenses associated with their activities as follows :</p> <ul style="list-style-type: none"> <li>▪ Collection (40 F/kg)</li> <li>▪ Overheads (20 F/kg)</li> <li>▪ Cooperative margin (20 F/kg)</li> </ul> <p>NB: the 80 F/kg do not take into account the 20 F of premium.</p>	<p>Based on our analysis of the data available to us, 100% of the Cooperatives do not comply with the proportions determined according to the expense items and the margin to be generated. This shows that expenses are not yet under control and/or the financial statements are not reliable.</p>	<p>Ecookim, will have to audit all the financial statements in order to analyze in a general way, and especially an analysis of the performance of member cooperatives. Also, it will have to set up a set of relevant indicators in order to monitor their evolution and anticipate by taking measures in case of achievement below the accepted standard.</p>
Key points	Collected information	Deciphering / Interpretation / Findings	Suggestions for improvement

<i>Certification Program</i>	<b>Certifications:</b> 100% of the Cooperatives interviewed are in certification programs. 100% have 1 certification, 85% have 2 certifications, 60% have 3 certifications, 15% have 4 certifications. In addition to the certifications acquired, 25% are awaiting organic certification. (Certification: FAIRTRADE-UTZ-RAINFOREST ALLIANCE-CONVERSION ORGANIC)	While the Co-operatives are certified as a whole, certain practices could compromise them if left unchecked. Some producers do not follow good agricultural practices and others deliver only part of their cocoa.	Ecookim must organize the follow-up and monitoring of activities related to certification and evaluate them at each campaign in order to make the necessary improvements. Also, it will have to set targets for the delivery rate of producers according to production estimates and evaluate the Cooperatives on this criterion.
	<b>Cooperative Premium:</b> Cooperatives receive a certification premium of 20F/kg paid after the campaign.	The premiums collected are of an interesting level, but could be a higher volume in view of the areas exploited and the associated production volumes.	Ecookim will have to identify the schemes that could improve the level of premiums. This objective could be achieved through the implementation of incentives for producers: supply of inputs as needed, taking care of certain social needs, etc.  Indeed, if volumes increase direct revenues, the level of premiums will improve significantly for producers and cooperatives. This could strongly contribute to their empowerment
	<b>Producer premium:</b> Producers receive a certification premium of 20F/kg paid after the campaign.		
<i>Program with chocolate makers</i>	<b>Chocolatiers :</b> FERRERO-MARS-TONNYS CHOCOLONELY-VALRHONA	Very good partnership that substantially improves the income of producers. However, Ecookim could negotiate more with chocolate makers for highly social actions.  Very good practice (premium) to encourage quality production and improve the rate of delivery of cocoa from producers to cooperatives. In spite of this fact, every year producers face the same difficulties in terms of covering their social needs and the family budget.	Ecookim could analyze with the chocolate makers the possibility of further improving the social conditions of producers through financial inclusion programs (micro-insurance, financial education, etc.). This kind of support should eventually enable a very large number of producers to develop a savings culture, thanks to the savings that could be made in such a scheme, and have an impact on bankization.  Ecookim, should analyze how on the basis of these premiums, value could be created at the level of cooperatives and producers. This analysis should be done taking into account the needs of producers and the risks associated with these value creation levers. Ecookim could have recourse to financiers specialized in this type of operation.
	<b>Cooperative Premium:</b> Cooperatives receive a premium of 20F/kg paid after the campaign.		
	<b>Producer premium:</b> Producers receive a premium of 20F/kg paid after the campaign.		
<b>Key points</b>	<b>Collected information</b>	<b>Deciphering / Interpretation / Findings</b>	<b>Suggestions for improvement</b>

<b>Agroforestry Program</b>	<p><b>Type of wood :</b> Acacia-Akpi-Tek-Djemelina-Assamela-Néré</p> <p><b>Number of producers involved :</b></p> <p><b>Area concerned :</b></p>	<p>Good agricultural technique that allows for the improvement of production through soil inputs and plant cover that allows the cocoa tree to develop well and give better quality beans. Ecookim has distributed 180,000 seedlings, there are still 930,000 seedlings left, based on 12 plants per hectare (Ecookim is 93,000 hectares in operation).</p>	<p>We believe that with the funding program that is the subject of this mission, the gap will be covered in quality and quantity over a reasonable period of time to allow for a timely return on investment. It should be noted the strong interest shown by producers in agroforestry in view of its impact on the environment and cocoa production.</p>
	<p><b>Number of plants: 180,000 plants distributed</b></p>		
<b>Production cost</b>	<p><b>1 hectare in creation: between 300,000 and 650,000 F CFA</b></p>	<p>The amounts vary from one zone to another, and from one producer to another the actual costs are not the same. This disparity could be explained by the inputs used, labour management, etc.</p>	<p>Ecookim with the support of the Cooperatives must harmonize the production cost on the basis of a harmonized technical itinerary according to the specificities of each zone. Also, Ecookim should set up a data collection tool related to the activities contained in the technical itinerary in order to track and monitor costs and improve them in order to achieve economies of scale.</p>
	<p><b>1 hectare in pre-production maintenance: 125,000 and 150,000 F CFA</b></p>		
	<p><b>1 ha in production: between 85 000 and 125 000 FCFA</b></p>		
<b>Logistics</b>	<p><b>Warehouse:</b> 100% of the Cooperatives have a central warehouse and branch stores in the sections. 65% of the central stores are owned by the Cooperatives and 35% are leased. Ecookim has built and made available to 3 Cooperatives out of the 11 brand new central stores.</p>	<p>85% of the Co-operatives rent trucks for delivery and 45% rent pick-up trucks for pre-collection.</p>	<p>Ecookim, must analyze the activities related to logistics and identify the points of improvement that need to be structured and acquired through financing or contractualization with partners capable of assuming this responsibility towards Ecookim, Cooperatives and producers.</p> <p>Recommendations :</p> <ul style="list-style-type: none"> <li>-A partnership with a logistics specialist with vehicles adapted to the state of the roads and tracks ;</li> <li>-Financing of this component by a credit with a Financial Institution under conditions.</li> </ul>
	<p><b>Truck:</b> 10% have 35-ton trucks to transport products to Abidjan or San-Pedro.</p>		
	<p><b>Truck:</b> 100% of the cooperatives have vans of 3.5 to 5 tons for the cocoa collation.</p>		
	<p><b>Tricycle:</b> 65% of cooperatives use their tricycles for pre-collection of cocoa.</p>		
	<p><b>Rental:</b> 85% of cooperatives rent trucks for delivery and 45% rent pick-up trucks for pre-collection.</p>		
<b>Key points</b>	<b>Collected information</b>	<b>Deciphering / Interpretation / Findings</b>	<b>Suggestions for improvement</b>

<b>Land conflict</b>	<p><b>Proportion:</b> The proportion of financial conflicts is currently marginal. Indeed, many of the producers operate either on their own land or on family land. Others are renting and so far everything is going well.</p>	<p>Land conflicts are marginal for the moment, but nothing says that in a very short time, they could reach proportions that could compromise agricultural activities. Therefore, it would be necessary for each producer to be in possession of his land certificate.</p>	<p>Ecookim, must set up a monitoring unit on land conflicts. Also, it should set up a project team to effectively support producers in their efforts to obtain their land certificates. The possibility of being accompanied by the different partners could also be analyzed.</p> <p>Each producer must provide proof of the right to use the land for the duration of the credit until full repayment. The following proofs may be requested:</p> <ul style="list-style-type: none"> <li>• land title according to modern land law ;</li> <li>• certificates issued by the landowner according to traditional land law or minutes of discussions with traditional authorities ;</li> <li>• operating contract signed by the owner, the tenant and the administrative authority.</li> </ul> <p>Awareness-raising must be conducted during the financing cycle in order to support producers in the process of obtaining land title.</p>
	<p><b>Rural land program:</b> Awareness campaigns and censuses were organized with the Ministry, CCC and Ecookim. The cost is considered too high by producers, reflecting the lack of land certificate application files.</p>		
<b>Social Needs</b>	<p><b>School:</b> Cooperatives provide financial support to producers within the limits of their possibilities. Needs are met unless .....</p>	<p>Producers are using more third parties to cover these expenses and are giving their fields as security. This situation makes the producer more vulnerable and forces him to deliver only part of his production.</p>	<p>Ecookim, could analyze the possibility of a partnership with a Financial Institution to meet these needs and thus limit the number of producers who are forced to resort to third parties while compromising their production in terms of delivery to the Cooperative.</p>
	<p><b>Other:</b> At this level the needs are multiple: weddings, baptism, equipment, food and non-food items, etc. the Cooperative cannot adequately support the producers.</p>		
<b>Key points</b>	<b>Collected information</b>	<b>Deciphering / Interpretation / Findings</b>	<b>Suggestions for improvement</b>
<b>Financial inclusion</b>	<p><b>Banking:</b> All cooperatives are banked in the books of the SIB.</p>	<p>Almost all producers are not banked and never benefit from credit. If necessary, they resort to third parties for credit and use their fields as collateral.</p>	<p>Ecookim, will have to analyze the possibility of having a partnership with a financial institution to take care of its producers.</p>
	<p><b>Credit history:</b> No Cooperative has received financing from any Institution.</p>		

	<p><b>Insurance:</b> Apart from the Universal Health Coverage to which most producers have subscribed, less than 1% have other insurance.</p>	<p>Producers are left to their own devices in terms of insurance coverage. They use private individuals to meet their health expenses and other social problems: schooling, loss of a family member, etc. and as a guarantee, the producer gives his field for reimbursement.</p>	<p>Ecookim must analyze the possibility of setting up a partnership with an insurance company in order to negotiate the best conditions for producers. The coverage of at least 70% of the costs by the companion, will allow the producers to be too exposed to the recourse to third parties to meet its needs. In such a case, they will be able to deliver more cocoa to the Cooperative.</p>
<p><i>Ecookim support</i></p>	<p><b>Revolving:</b> All member cooperatives receive working capital support, which is used in revolving for the campaign. The revolving is calibrated according to the capacity of the Cooperative. It is between 2 and 5 loads (60 to 150 million FCFA).</p>	<p>This mechanism allows the Cooperatives to benefit from working capital. It relieves the Cooperatives to the extent of Ecookim's capacities. Still, a Cooperative can only benefit from what is available.</p>	<p>Ecookim must analyze the situation of certain Cooperatives with regard to their resources and support them in obtaining financing from Financial Institutions.</p> <p>Also, it could encourage the Cooperatives to better manage their premiums in order to set up a fund that could serve as a guarantee for obtaining credit.</p> <p>In such a scheme, Ecookim negotiates the necessary complement for the Campaign for each Cooperative.</p>
	<p><b>Mandate:</b> This financing mechanism allows Ecookim to finance the investments of its member cooperatives who reimburse them during each campaign over the agreed duration.</p>	<p>This financing mechanism shows that the Cooperatives at the moment cannot obtain financing from Financial Institutions. It is a choice made by Ecookim in order to allow all its member cooperatives to benefit from financing. It is Ecookim which makes available to the Cooperatives the assets concerned thanks to the financing obtained.</p>	<p>Ecookim, in agreement with the Financial Institutions, must set up a funding schedule by level of its member cooperatives in order to make them all eligible and beneficiaries of funding after a given period.</p> <p>This new mechanism could be progressively realized with the guarantee of Ecookim. This guarantee will be gradually replaced by that of the Cooperative and in full after a given period.</p>

### Appendix 3: Proportion of Input Items and Labor by Level of Coverage of Expenditure Items

#### Prise en compte totale des postes de dépenses par le producteur

Rubriques	Dépenses				%
	Unité	Quantité	PU	Montant	
<b>Intrants</b>					
Achat pesticides	Forfait	1	80 000	80 000	51,28%
Engrais	Forfait	1	20 000	20 000	
<b>Main d'œuvre</b>					
Traitement	Forfait	1	20 000	20 000	48,72%
Entretien des cultures	m <sup>2</sup>	10 000	4	40 000	
Récolte	H/J	15	1 000	15 000	
écabossage et traitement	H/J	20	1 000	20 000	
<b>Total</b>				<b>195 000</b>	

#### Prise en compte partielle des postes de dépenses par le producteur

Rubriques	Dépenses				%
	Unité	Quantité	PU	Montant	
<b>Intrants</b>					
Achat pesticides	Forfait	1	80 000	80 000	67,80%
Engrais	Forfait	1	20 000	20 000	
<b>Main d'œuvre</b>					
Traitement	Forfait	1	20 000	20 000	32,20%
Entretien des cultures	Forfait	1	15 000	15 000	
Récolte	Forfait	1	5 000	5 000	
écabossage et traitement	Forfait	1	7 500	7 500	
<b>Total</b>				<b>147 500</b>	

#### Investment

Equipements/Investissements	Quantité	P.U(FCFA)	Montant(FCFA)	Nombre d'années d'usage	Amortissement/an
Machettes					
limes					
Haches					
Pioches					
Cordeau(100m)					
Pulvérisateur					
<b>Total investissement</b>					



**Operating expenses**

<b>Exploitation</b>	<b>Dépenses</b>			
	<b>Unité</b>	<b>Quantité</b>	<b>PU</b>	<b>Montant</b>
Achat 1 Hectare				
Défrichage				
Andainage				
Achat 1 380 sachets				
Achat de cabosses cacao				
Mise en place des butes				
Frais arrosage 08 Mois				
Piquetage				
Trouaison				
Transport Pépinières				
Planting				
Nettoyage de la plantation/ an				
Achat engrais				
Achat produits phytos				
Entretien par Produits Phytos (Ration Applicateur)/an				
<b>Total</b>				

**Harvest and post-harvest expenses**

<b>Exploitation</b>	<b>Dépenses</b>			
	<b>Unité</b>	<b>Quantité</b>	<b>PU</b>	<b>Montant</b>
Cueillette/jour/personne				
Ramassage/jour/personne				
Cabossage(restauration/autres charges)				
Défourage(Voyage/Tricycle)/ 700 Kg				
Frais de séchage/jour				
Ramassage & ensachage (lui-meme) ou				
Communication pour informer le Délégué pour la collecte				
<b>Total</b>				

## Appendix 4: Sample Analysis Template for Recipient Selection

The scheme capable of comforting Financial Institutions would be to outsource financing as follows :

- Ecookim carries x % of the financing ;
- Some Cooperative with Ecookim as Co-Borrower carry y %.

The Consultant, considers as expected result of the calibration of the amounts to be allocated the following impacts :

- Productivity Improvement ;
- Improved revenues ;
- Improvement of storage conditions and capacity ;
- Improvement of the delivery volume ;
- The impact of the swollen shoot on operations ;

### Selection Criteria

The following grid of criteria could be applied to select the beneficiaries of the credits: producers.

<i>Criteria for Rehabilitation/Replanting</i>	<i>Criteria for the investment</i>	<i>Criteria for maintenance</i>	<i>Agroforestry</i>
<i>Impact swollen shoot</i>	<i>Surface area used</i>		
<i>Age of the plantation</i>	<i>Volume sold</i>		
<i>Productivity</i>			
<i>Density</i>			

**Analysis table of credit objects, holders and beneficiaries**

<i>Credit items</i>	<i>Investments</i>	<i>Rehabilitation</i>	<i>Interview</i>	<i>Agroforestry</i>
<i>Eccokim</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>
<i>Cooperatives/Ecookim</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>
<i>Producers</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>

## Appendix 5: Calibration of Amounts

Once the holders have been selected, the needs should be analyzed and costed as follows:

- Rehabilitation and replanting :
- Investments
- Additional need for Ecookim

**Analysis table of the distribution of the portfolio that will be carried by Ecookim according to the objects :**

<i>Credit items</i>		<i>Direct finance Ecookim</i>		
		<i>Ecookim envelope</i>	<i>Cooperative Envelope</i>	<i>Prod</i>
<i>Investments</i>	<i>Amount</i>			
	<i>%</i>			
<i>Rehabilitation</i>	<i>Amount</i>			
	<i>%</i>			
<i>Interview</i>	<i>Amount</i>			
	<i>%</i>			
<i>Agroforestry</i>	<i>Amount</i>			
	<i>%</i>			

**Analysis table of the distribution of the portfolio to be carried by Cooperative/Ecookim according to the objects**

<i>Credit items</i>		<i>Cooperative/Ecookim financing</i>	
		<i>Cooperative Envelope</i>	<i>Producer envelope</i>
<i>Investments</i>	<i>Amount</i>		
	<i>%</i>		
<i>Rehabilitation</i>	<i>Amount</i>		
	<i>%</i>		
<i>Intervent</i>	<i>Amount</i>		
	<i>%</i>		
<i>Agroforestry</i>	<i>Amount</i>		
	<i>%</i>		



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