INTERNATIONAL COFFEE ORGANIZATION
ORGANIZACIÓN INTERNACIONAL DEL CAFÉ
ORGANIZAÇÃO INTERNACIONAL DO CAFÉ
ORGANISATION INTERNATIONALE DU CAFÉ

ED **2146/12**

17 décembre 2012
Original : anglais

F

Études Banque mondiale/OIC sur les risques et le financement dans le secteur du café : Note conceptuelle

1. Le Directeur exécutif présente ses compliments et, comme convenu lors de la réunion du Groupe restreint de septembre 2012 (voir le document CG-5/12), il a l'honneur de joindre un document contenant une note conceptuelle, élaborée par la Banque mondiale en collaboration avec l'OIC, portant sur trois études relatives aux risques et au financement dans le secteur du café. Les trois études viseront trois publics différents : les producteurs de café, les entreprises de négoce de café et les décideurs. Les études seront présentées lors du troisième Forum consultatif sur le financement dans le secteur du café, qui se tiendra pendant la semaine du 9 au 13 septembre 2013.

2. Pour réaliser les études, la Banque mondiale nommera des consultants qui contacteront les Membres de l'OIC pour obtenir des données qui seront utilisées pour établir les rapports. Les Membres sont invités à prêter assistance aux consultants et à fournir des informations le plus tôt possible afin que la Banque mondiale dispose des éléments nécessaires à la réussite de cette initiative.

COFFEE RISK AND FINANCING STUDIES
CONCEPT NOTE

I. Background

Experiences across multiple commodities and countries have demonstrated that an inability to adequately manage risks in an ex-ante manner, have at times rendered agricultural supply chains uncompetitive (unsustainable), resulting in economic hardship for rural populations. Similarly the inability of agricultural stakeholders to adequately manage risks is often one of the primary reasons for financial institutions being unwilling to provide sufficient lending to agricultural actors, the other being lack of security for such lending. It is often taken-for-granted that these effects are mutually reinforcing - with unmanaged risks resulting in an ever greater reluctance of lenders to lend, and with a lack of financing reducing the opportunities of stakeholders for implementing risk management measures.

A great deal has been written about some of the problems faced by the coffee sector, especially during the period known as the "Coffee Crisis" when coffee prices dropped to low levels and remained there for a number of years. However to date coffee sector risks, across a variety of producing countries, have not been considered in a comprehensive manner, despite the importance of coffee to over twenty million farmers across the world. So far research and analysis on coffee market risks has generally involved the consideration of individual risks rather than a holistic examination and assessment of the full range of risks which impact the sector and which are often interlinked.

Despite significant ongoing discussion and debate relating to insufficient financing for coffee sectors across the world, there is very little substantive published data about the "financing gap" and similarly little analysis of the causation of such a gap, or the wider, more holistic means of addressing such gaps. To date investigation into improving the provision of finance to the coffee sector has often focused on specific financing mechanisms (e.g. guarantees, warehouse receipts, financing against contracts, etc), with little real understanding of the fundamental reasons for banks being unwilling to provide adequate levels of financing. Likewise very little consideration appears to have been made about how improved risk management across the coffee sector might result in better access to finance.

Between 2005 and 2009 the Commodity Risk Management Group[1] of the World Bank conducted in-depth work into examining coffee sector price risk and testing the application of market based risk management instruments (hedging for coffee sector producers and

[1] *The Commodity Risk Management Group (CRMG) became the Agricultural Risk Management Team (ARMT) in 2010.*

enterprises). While this work did determine that improved price risk management was possible at the enterprise level (although not at the smallholder level), it also clearly illustrated that improved price risk management on its own was insufficient to address the financing gap of coffee sector enterprises. A focus on price risk alone didn't automatically increase access to finance as it left many other risks unaddressed (including for example production risks, management risks and counterparty risks). This learning demonstrated that a more comprehensive understanding of coffee sector risks, alongside an understanding of how such risks might be more effectively managed, or at least mitigated, is likely to be required if bank lending to the sector is going to rise.

The failure to consider the full picture of inter-related risks, and the wider causes of insufficient finance for supply chain actors, may result in coffee sector actors and governments failing to address inter-related risks on an ex-ante, holistic basis, as well as failing to fully understand the barriers to improved access to finance for the coffee sector. While looking at individual risks can be both useful and beneficial, such an approach risks failing to consider the inter-relatedness of multiple coffee sector risks and prevents the creation, and adoption, of holistic risk management mitigation plans. Similarly, considering only individual causes for insufficient finance, risks failing to address the wider barriers to finance, and fails to identify more comprehensive remedial actions.

II. Concept

a. Overview

Identification of the major interrelated coffee sector risks and the major barriers to sufficient financing, while also detailing practical solutions for mitigating both, aims to assist in improving the sector's resilience to risk and improve access to finance.

Working in partnership with the ICO this work will be used to provide actors within the coffee sector with both a holistic picture of the major risks facing the different levels of the supply chain, and an examination of the existing barriers to financing facing such actors, before considering the opportunities for improving risk management and access to finance. Consideration will be made of the steps that different actors may take to improve risk management and finance, as well as of the opportunities available to government and regulatory institutions to support improved risk management and access to finance.

The work detailed in this concept note has arisen following the ICO's Consultative Forum held on 25 September 2012. At that forum discussion centered on the challenges faced by smallholder producers and the linkages that exist between risk and inadequate access to finance. It was noted that consideration of finance needed to be considered from a supply

chain perspective, to understand the challenges facing different actors and understand the inter-relatedness of issues. To facilitate the improvement in risk management and access to finance the ICO has identified that it could work to facilitate knowledge sharing, acting as a conduit of information by providing a forum to identify challenges and solutions; and continue to develop knowledge. As such the work detailed in this concept note will seek to share best practice in risk management and improving financial access at different levels across coffee supply chains, targeting this information to a variety of audiences including government, commercial interests and producers.

Specifically this work shall consider the prioritization of coffee sector risks and the opportunities for designing and implementing improved and effective risk management measures (considering measures for risk transfer, risk mitigation and risk coping). Similarly by assessing the barriers to finance for different levels of the coffee supply chain, consideration will be made as to the mechanisms for overcoming such barriers and thereby improving access to finance. This work will look at the variety of financing needs of supply chain actors including at requirements for facilities with a range uses and a range of tenors, this will include seasonal finance (pre-harvest and post-harvest), longer term finance for capital investment, working capital finance, etc. As such these outputs will assist coffee producers and traders in understanding their opportunities for improving access to finance, while similarly identifying opportunities for policy makers to support this. These outputs will be designed to be as practical as possible, so that users will easily be able to access and utilize the content.

This work will involve the production of three studies, each looking at risk and financing in the coffee sector but from the perspective of different audiences. The first will be directed at coffee producers and focus on not just detailing risks and financing issues but also on very practical steps that producers can undertake to manage risks and access finance. The second document will be for use by coffee trading enterprises (domestic traders, processors and exporters) and will consider risks from their perspectives and the potential means for managing these risks, alongside the challenges of securing financing and the opportunities for improving their access to finance. The third document will be for policy makers looking at improving risk management and access to finance for their respective coffee sectors. It shall consider the range of risks affecting the entire coffee supply chain (from production through to export) and assess the range of risk management solutions that might be available. It shall also consider what options can assist policy makers in improving access to finance for supply chain stakeholders.

For all three documents the materials will draw upon global experiences and case studies to illustrate both problems (risk occurrences and insufficient access to finance) and solutions

(risk management opportunities and increased financial access methodologies). The documents, while targeted at different readerships (producers; traders/exporters; policy makers), will have significant commonality (for example a program of improved extension services for coffee producers may improve risk management at producer and trader levels and would also be an example of a government level policy option for improving risk management in the coffee sector). Materials for inclusion in all three documents will be sourced from a variety of sources including research, existing materials (published documentation, reports and news articles), and also secured through the staff and membership of the ICO.

Case studies will be utilized to illustrate the risks and lack of financing facing global coffee sectors, and also to illustrate the opportunities for such issues to be effectively managed and improved. Often successful interventions in one country can act as a model for a successful intervention in other coffee producing countries, and case studies will demonstrate how risks have been successfully managed, and how financial access in certain cases has been improved. Case studies will be identified and utilized depending on their ability to provide potential replication to other coffee producing regions and nations. Due attention will be given to the fact that the bulk of global coffee production emanates from the smallholder sector.

b. Risks Facing Coffee Sectors

Individual agricultural supply chain actors are typically inter-dependent and need to manage several different types of risk. However, traditional risk management has focused its attention on addressing one type of risk faced by particular stakeholders (e.g. weather risk facing farmers; price risk facing traders). This is equally true for the national and global coffee supply chains, where a great deal of examination has been conducted on specific high-profile risks, including weather and price risk. While a attention has been paid to the issue of insufficient access to finance (pre/post-harvest, trade finance and longer term lending) very limited work has been undertaken to assess the inter-relation between risk management and sector access to finance generally.

Recognizing the need for an explicit focus on multiple risks within key agricultural sectors ARMT has developed an agricultural supply chain risk assessment methodology that was successfully used in a number of countries including the coffee sectors of Haiti, Cameroun, Vietnam and Uganda. This work has clearly shown how coffee sectors in all countries are impacted by a number of major risks, many of which are ineffectively managed or left completely unmanaged. Supply chain risk assessments have illustrated that while many risks are known by stakeholders, rarely are they effectively understood, weighted or prioritized for management and mitigation purposes. This applies to both sector participants and policy makers.

To address the lack of a comprehensive documentation and understanding of coffee supply chain risks, this concept note lays out the creation of the three documents which will detail the range of risks facing coffee production and trade, detail the impact of these risks and detail their inter-relatedness. The studies will also detail the potential risk management opportunities for dealing with such risks. It shall do this by producing and utilizing a series of illustrative case studies

c. Financing Shortfall

Coffee supply chain risk assessments conducted to date have illustrated clearly how domestic agricultural supply chain actors face shortages of capital and financing. Such shortages lead to less efficient practices being adopted as actors are forced to "work around" the problems posed by such insufficient finance. These assessments have also identified that banks continue to remain reluctant to lend in larger volumes to the sector, not just because of the existence of specific risks (price, weather, etc), but also due to the range of other specific and non-specific un-quantified risks and the lack of effective management of such risks. Even when banks are lending to the sector, often they will only lend for short periods of time, and will require significant amounts of security against such lending. However, it must be noted that unsatisfactory past experiences of banks lending to the sector have played a role in creating this situation.

Despite widespread acknowledgement regarding the barriers to finance facing coffee sector actors, there exists a lack of detail about the scale of the issue, and the opportunities for dealing with the issue at different levels of the supply chain. However, a number of examples of positive interventions exist, where access to finance has been improved at both producer and enterprise levels, often through government programs and schemes. A review and understanding of these initiatives can provide both supply chain actors and policy makers with examples of opportunities for improving financial access.

d. Partnership between World Bank and ICO

This work will be produced in partnership by the World Bank's Agricultural Finance and Risk Management Team (AFRMT) and the International Coffee Organization (ICO). The World Bank will lead the development of the documents working closely with ICO. ICO will provide access to information as well as input and support that will assist the production of these reports. The ICO's network and membership will be utilized to provide data and identify appropriate case studies on which to draw lessons and learning. Once finalized the outputs will be used by the ICO and AFRMT to raise awareness of risks and raise understanding of potential risk management for the global coffee sector. This work will support the ongoing

work of the ICO and its Consultative Forum on Coffee Sector Finance which is actively considering the issues of improved risk management in the coffee sector as a mechanism for tackling the insufficient availability of financing. Distribution of the reports will be facilitated by the ICO which shall utilize its global platform to both distribute the document and utilize the content for progressing risk management and improved financing of the sector.

The ultimate objective of this work will be to raise awareness of the complexity of risks facing national coffee supply chains and to illustrate the requirement for tackling risks in a systematic and prioritized manner. It will factor in the issue of bank reluctance to lend to the sector due to the existence of unmanaged sector risk by setting out and analysing in a structured and systematic manner how better risk management can improve access to finance.

III. Objectives:

a. Document the main risks facing coffee sector supply chains, and supply chain actors, in coffee producing countries. Taking care to consider the inter-relatedness of major risks and the adverse impact they have on the efficiency of coffee supply chains.
b. Assess the current level of risk management undertaken in different coffee supply chains; the appropriateness and efficiency of currently utilized risk mitigation strategies and techniques; and identify improved opportunities for effective risk management.
c. Prioritize the full range of risks facing coffee sectors and suggest an appropriate framework for subsequent risk management, always recognizing that not all risk can be managed or can only be managed partly, i.e. some types of risk can be mitigated but cannot be eliminated.
d. Examine the current availability of financing to stakeholders within coffee supply chains and consider how it varies by stakeholder type. Attempt to assess (at a high level) the scale of “financing gaps” and determine the negative impacts that such gaps create to coffee supply chains.
e. Raise awareness of coffee sector risks with financiers and raise their awareness of how risks can be managed and measured, so as to ultimately improve access to finance for the sector.
f. Utilize case studies to identify examples of good practice in risk management and in improving access to finance at all levels of the coffee supply chain.
g. Create a framework for improving understanding of the range of risks facing the coffee sector, the means for implementing risk management based on a prioritization of risks and the means for expanding access to credit through improved risk management measures.

IV. Scope, Methods, and Modalities of Work

The activity will primarily be a desk-based exercise involving background research and remote contact with coffee sector organizations and individuals (government, regulatory, NGO, private sector) in both coffee producing and consuming countries. The development and utilization of case studies will require significant support from the ICO and its membership to identify and secure information from a wide variety of coffee sector stakeholders. The ICO will be vital in facilitating access to information, in utilizing their networks for conducting surveys, reviewing summaries, procuring additional information, and gaining traction with industry parties. The work will be structured in a methodical manner to examine the risks facing coffee sector industries in producing countries and the management of identified risks; the (lack of) financing availability to the sector: and then consider opportunities for improving supply chain robustness by tackling risks in a prioritized manner, thereby improving access to finance for supply chain actors.

For work on this scale it is not possible to review every country, every supply chain or to conduct fully comprehensive research to gather comprehensive data on all risks and all levels of financing. As such case studies shall be used of individual countries, and situations, to distil general learning which can apply across different types of coffee supply chains. This work will utilize case studies to identify risks and issues and to identify proven risk management opportunities and the means for raising the availability of financing. To date AFRMT has completed four supply chain risk assessments on national coffee sectors and these assessments will be utilized as the starting point for identifying and prioritizing key risks. Additionally case studies from other coffee producing countries will be produced and utilized as part of this work.

The broad categories of risks to be investigated will include: a) Production risk (e.g. weather, pest & disease, price etc); b) Market risks (e.g. price risk, exchange rate, counterparty risk, etc); and c) Enabling environment risks (e.g. logistics, infrastructure, policy, regulatory environment etc). Prioritization of identified risks will be undertaken using the criteria of probability, impact, severity and vulnerability, tested against already available experience. Additionally existing risk management measures will be considered in relation to efficiency and effectiveness and compared with alternative means for managing risk. This material will enable recommendations for improved risk management in the coffee sector to be produced.

Financing data shall be requested from stakeholders in collaboration with the ICO (through its membership and global network). An assessment of requirements will be made and compared to actual provision of financing to identify gaps. Different supply chains will be

compared and contrasted to identify similarities and differences. Case studies examining improvements in lending to coffee sector stakeholders based on risk management implementations will be considered as will the relationship between unmanaged risk and insufficient financing.

The work will be led by AFRMT who will contract consultants to conduct the background research and draft the initial reports. AFRMT will collaborate with the ICO to facilitate the collection of relevant data required by the report. The consultants hired will work with experts on specific areas of risk, coffee production, financing and/or country to produce background papers on their areas of expertise and case studies that support the objectives of this paper. The case studies and research produced will then be used to build the content of the documents along with material from the consultants hired.

V. Expected Outcomes

Three reports will be produced that will be shared by the World Bank and the ICO with coffee sector stakeholders and World Bank staff with an interest in the subject. The ICO will promote the documents and factor them into the on-going work and planning of the Consultative Forum on Coffee Sector Finance. The reports shall be circulated to stakeholders in coffee producing nations who will be able to benefit by identifying risk management approaches and improvements to financing that may be of use to their industries.

The three reports to be produced will be:

Report for Producers

This report will be tailored to the needs of coffee producers. It shall detail the main production and market risks facing producers and detail best practice solutions and options for improving the management or mitigation of risks. The report will similarly consider the financing requirements of producers, the current availability of finance and then consider the practical steps that producers might take to increase their access to finance. This report is intended to be a practical guide for use by coffee farmers and will be targeted to be a useful and usable toolkit.

Report for Traders/Exporters
(domestic trading companies, processors and companies exporting coffee)

It shall consider primarily market and enabling environment risks and how these can adversely affect these actors, before considering the opportunities for risk management in these areas. The financing requirements of such actors shall also be considered, followed by

investigation into the means of improving financing access through various mechanisms and programs (both inspired by the actors themselves and by third parties). This report should act as a resource to traders who wish to better understand their options for improving their management of existing risks and in so doing improve their access to finance.

Report for Policy Makers / Governments

This study will look at the macro level impact of unmanaged risks with regards to the coffee sector, and consider the damage to coffee supply chain efficiency that insufficient finance causes. The report will then consider what programs policy makers and governments can implement to assist in improving the resilience of supply chains by improving risk management across the sector (and at different levels of the supply chain), and consider the opportunities for national programs to improve access to finance. The report shall also examine both constraints and best practices in terms of the legislative and regulatory environment that governs coffee supply chains and impacts on the availability of finance in different producing countries.

In addition to the three reports detailed above a brief executive summary shall be produced summarizing, at a high level, the work contained within the three reports and laying out the challenges that risks and insufficient finance cause to coffee supply chains and supply chain actors across the globe.

In short all three reports will aim to raise awareness of the full range of risks facing national coffee supply chains and coffee sector enterprises and will highlight the issues around insufficient access to finance. They will assist policy makers in understanding how they may direct their attentions and activities to improve risk management within their relevant coffee sectors.

VI. Resources and budget

Funding for this work will be provided by the Multi Donor Trust Fund (MDTF) supported by the Netherlands Ministry of Foreign Affairs and the Swiss Secretariat for Economic Cooperation (SECO).

VII. Timetable and Responsibilities

An intuitive timeline is provided below detailing the main worksteps for production of these materials and relevant responsibilities. As a collaborative effort there will need to be a team in place comprising of World Bank and ICO to determine specific steps, activities and coordinate production and delivery.

Activity	Start Date	End Date	Responsibility
Agreement to CN / TOR	Nov ‘12	Nov ‘12	WB/ICO
Determination of Data Research Required	Nov ‘12	Nov ‘12	WB/ICO
Data Collection Undertaken	Dec ‘12	Jan ‘12	WB/ICO
Production of Risk Sections in Reports – Identification and Descriptions including identification of Case Studies Detailing Risks and Risk Management Interventions faced at different levels of the supply chain from multiple national and regional coffee locations.	Jan ‘12	Jun ‘12	WB
Review and guidance offered on the reports as they are being assessed and structured regarding content and direction.	Jan ‘12	Mar ‘12	ICO
Production of Financing Sections in Reports – Identification of Barriers to Finance and Identification of Potential Interventions. Attempts made to find illustrative case studies and also specific data on financing – including collection of data from coffee producing countries relating to financing “gap” / “shortfall”.	Jan ‘12	Jun ‘12	WB
Review of sections relating to finance and direction and guidance on content and approach being taken.	Jan ‘12	Mar ‘12	ICO
Case studies on Improving Financial Access	Jan ‘ 12	Mar ‘12	WB
First Draft of Three Studies Produced for Review and Feedback	Jun ‘12	Jul ‘12	WB
Revisions, Updating and Finalization of Materials and Studies	Aug ‘12	Sep ‘12	WB/ICO
Production of Final Three Studies on Risk and Finance for Producers; Traders; and Policy Makers	Sep ‘12	Oct ‘12	WB/ICO

KEY LINES OF INQUIRY FOR THE PRODUCTION OF THESE REPORTS

- **Risk Exposure**:
  - What risks are different coffee supply chain participants exposed to?
  - What is the frequency and (potential) severity of these events?
  - How do they impact current income, productivity, etc.?
  - What are expected future financial losses?
  - How does exposure vary across different coffee producing geographical regions?
- **Risk Management Approaches**:
  - What are current approaches to reduce, mitigate, share or cope with the identified risks?
  - How effective are these measures? How sustainable are they? Where are these risk management approaches currently being best utilized, where are these risk management approaches being least used?
  - Why is there variability between producing nations in risk management approaches and how can this variability be reduced i.e. how can countries not currently using appropriate risk management approaches be facilitated to adopt suitable and appropriate risk management approaches?
- **Vulnerability and Impact**:
  - What are the resultant areas of 'high vulnerability' to loss, disruption, etc?
  - How are such vulnerabilities impacting investment, the competitiveness of the coffee supply chains, the sustainability of coffee enterprises and relationships, and the achievement of broader public policy objectives?
- **Access to Finance**
  - What is the current provision of finance to coffee sectors in key regions?
  - How does pricing of lending vary across sectors and across region and what impact does it have? Additionally how do loan mechanisms and products vary?
  - What shortfalls in financing are there and why do these exist?
  - What mechanisms have been utilized that have improved provision of finance to the sector, how were these done and what were their effects?
- **Future Agenda**:
  - What measures can be taken to improve the effectiveness and sustainability of current approaches?
  - What alternative or additional approaches could be used?
  - What are priorities for capacity-building, investment, policy/regulatory reform for the coffee sector, etc?

ANNEX 2

COFFEE SECTOR RISKS AND FINANCING ISSUES

INITIAL DRAFT MATRIX OF COFFEE SECTOR PRODUCTION RISKS AND RELATED ISSUES

Sector	Probability	Impact	Potential Mitigation	Support Environment	Links	Value Impact
Production – field						
Climate Change Impact	Probable	Variable to Considerable	GAP and adequate information	Good farmer organization and education	Sustainability Programs	Higher costs Lower incomes
Severe weather events	Probable	Considerable to Catastrophic	GAP and Early Warning Systems	Weather stations and insurance	State supportive	Severe sudden losses
Erratic Rainfall	Probable	Moderate	GAP and Early Warning Systems	Weather stations and insurance	State supportive	Lower yield and quality
Pests/Disease	Probable	Moderate	GAP, Research and Extension Services. Early Warning Systems	Adequate funding of Research and Extension	State supportive Sustainability Programs	Lower yield and quality, at times severe
Ageing Tree Park	Probable	Variable	GAP Adequate Research and Extension Services	Access to appropriate seed and seedlings. Renewal finance	Good Sector Organization Sustainability Programs Informed banking system.	Lower yield and quality
Unseasonal Rainfall flowering	Occasional	Variable				Lower yield
Theft	Occasional	Variable	Trade controls	Good Sector organization	State intervention	Direct loss
Lack of or Poor Quality Inputs	Occasional	Variable to considerable	Farmer organization Trade Controls	Sector organization	State supportive	Lower yield and quality
Input Price Volatility	Probable	Variable	Farmer organization	Sector organization. Bulk buying	State supportive,	Inability to plan. Variable production costs.
Inadequate Yields	Probable	Variable	GAP and adequate Research and Extension Services	Adequate funding of Research and Extension. Farmer education.	State supportive. Sustainability Programs.	Low farmer incomes

Poor on-farm harvesting/storage	Probable	Variable	GAP Training	Good Farmer organization. Extension	Good Sector organization. Sustainability Programs	Risk of mould, contamination. Lowers quality/value.
Cost of Labour	Probable	Variable	GAP and Tree Management. Mechanization	Extension and Farmer education Investment Finance	Sustainability Programs	Reducing farmer incomes
Lack of Finance	Probable	Variable	Access to Micro Finance, Savings and Loans, etc	Good Farmer organizations	Good Sector organization. State and Banking Sector supportive	Excessively high costs or, unable to invest. Often unable apply inputs when required = lower yields and quality
Lack of Formal Land Ownership	Probable	Variable	Formalised ownership structures, not only title deeds	Good Sector organization. Micro Finance Schemes and other NGO support	Informed banking sector. State intervention.	Limits access to finance, yet formalised land tenure not necessarily an effective security
Production - Processing						
Unseasonal rainfall - drying	Probable	Moderate	Early Warning Systems Drying equipment	Weather stations Investment Finance	Sector organization	Lower quality and value
Theft	Occasional	Variable	Trade controls Insurance	Good Sector organization	State intervention	Direct loss
Poor or erratic Quality	Occasional	Variable to considerable	Research and Extension Services Standards	Good Sector organization Farmer education	State supportive. Sustainability Programs	Lower value, at times severely so. Risk of mould and insect infestation
Processing errors	Occasional	Variable to Considerable	Training Extension Services Quality control	Good Farming organization	Sustainability Programs	Can destroy quality and value. Risk of loss of reputation.
Inadequate Storage	Occasional to Probable	Variable to Moderate	Farmer Education	Good Sector organization Investment finance	Sustainability Programs	Lower quality, theft. Risk of ingress of pests, mould, contamination etc.

Poor Roads/Lack of transport	Occasional to Probable	Variable to considerable	Infrastructure investment	Good Sector organization Investment finance	State intervention	Higher costs. Limits market access.
Production Marketing						
Poor or Erratic Quality	Occasional	Variable to considerable	Quality Control Trained staff Standards	Good Sector organization	Sustainability Programs	Less buyer interest, reduced values
Limited (farm gate) competition	Probable	Variable	Good farmer organization Price information	Good sector organization	Trade support, Education	Low prices. No quality premium
Excessive (farm gate) competition	Occasional	Variable				Unrealistic price promises. Quality destruction.
Lack of Working Capital/Crop finance	Probable	Variable to considerable	Well organized Audited Accounts Good Reputation	Good Sector organization. Security pledges that can be exercised	Informed banking sector. State and buyer support	Unable guarantee supply = less buyer interest, lower price
Poor Roads/Lack of transport	Occasional to Probable	Variable to considerable	Infrastructure investment	Good Sector organization Investment finance	State intervention	Higher costs. Limits market access. Shipping delays = lower revenues
Lack of market information/inability to interpret market behaviour	Probable	Variable to considerable	Trained staff 'know' coffee…. Decent communications	Good Sector and Farmer organization	Trade support, education	Lower prices, wrong decisions
Production–Prices						
Unstable internal prices	Highly Probable	Considerable	Forward sales Risk Management	Good Sector and Farmer organization	Informed banking sector. State and buyer support	Inability to raise finance or plan investments Unstable incomes
Prolonged external price falls	Remote but possible	Catastrophic	Improve yields Improve quality Research and Extension Reduce costs	Good Sector and Farmer organization	Informed banking sector. State and buyer support. Sustainability	Impossible to 'manage'. Destruction of assets. Increased poverty.

					Programs	
Day to day external price volatility	Highly Probable	Considerable	Trained staff 'know' coffee…. Decent communications Risk management	Good Sector and Farmer organization	Informed banking sector. State and buyer support.	Often no link with local markets. Inability to time sales. Increases exploitation by intermediaries
Exchange rate volatility	Probable	Moderate to Considerable	Decent communications Risk management	Good Sector and Farmer organization	Informed banking sector. State supportive.	Increases domestic price volatility. Strengthening local currency = lower sector revenues
Production - General						
Lack of clarity around real cost of production	Probable	Moderate	Farmer organization. Training	Good Sector and Farmer organization.	State supportive. Sustainability programs and other NGO initiatives.	Not managing costs. Inability to make informed comparisons and investment decisions.
Lack of Financial Literacy	Probable	Moderate	Farmer organization. Training	Good Sector and Farmer organization.	State supportive. Sustainability programs and other NGO initiatives.	Uninformed investment decisions. Potential for financial loss if not exploitation.
Inadequate Research and Extension Services	Possible	Considerable	Identify priorities and set strategies. Provide resources.	Good Sector organization	State intervention. Sustainability Programs	Falling volumes and quality. Over time can mean becoming 'irrelevant' in market terms, followed by farmer withdrawal.
Interest rate risk	Possible	Variable	Strong industry representation Lobbying	Good Sector organization.	State supportive. Informed banking system Final buyer support (occasionally)	Rising interest rates impact directly on farm gate prices as all along the value chain pass this cost back. Can disadvantage domestic operators.

Lack of (neutral) price information	Probable	Variable	Easily available neutral price and market information	Good Sector organization. Training on how to analyse/interpret information		Exploitation by middlemen. But information excesses can be equally problematic.
Lack of long term investment finance	Probable	Variable	Good farmer organization. Extension Services	Good sector organization. Demonstrate cost/benefit of crop rejuvenation	State supportive. Informed banking system. Sustainability programs.	Many unable to even afford annual replanting of small numbers of trees. Lower yields and falling quality. Increasingly uncompetitive.

INITIAL DRAFT MATRIX OF COFFEE SECTOR MARKET RISKS AND ISSUES

Sector	Probability	Impact	Potential Mitigation	Support Environment	Links	Value Impact
Domestic Collection Marketing						
Erratic quality Adulteration	Possible to probable	Variable	Quality control Trained Staff Reward 'quality'. Extension Services	Sector regulation Standards Farmer training	State supportive Sustainability Programs	Reduced values. Risk of rejection.
Unseasonal rainfall - drying	Probable	Moderate	Early Warning Systems Drying equipment	Weather stations Investment finance	Informed banking system. Final buyer/exporter support	Lower quality. Risk of rejection.
Excessive (farm gate) competition	Occasional	Variable	Specialise = Reward 'quality' Farmer training	Extension Services Sustainability Programs	Sector Regulation	Quality destruction. Risk of grower default.
Poor roads/lack of transport	Occasional to Probable	Variable	Infrastructure improvement	Good Sector organization. Investment finance	State intervention	Higher costs Limits market access.
Inadequate storage	Occasional to Probable	Variable	Trained staff	Investment finance	Informed banking system. Final buyer/exporter support	Damage and/or loss of quality, ingress of pests. Higher insurance and finance costs or, inability to raise finance.

Sector	Probability	Impact	Potential Mitigation	Support Environment	Links	Value Impact
Poor intermediate processing	Occasional to Probable	Variable	Trained staff Good supervision Understand 'quality'	Sector regulation. Good Sector organization	Final buyer/exporter support	Quality and value destruction. Unnecessary losses.
Theft	Occasional	Variable to Considerable	Secure storage Insurance	Good sector organization Trade controls	State intervention	Direct loss. Possibly inability to insure/raise finance.
Day to day (external) price volatility	Probable	Considerable	Trained staff 'know' coffee… Decent communications	Links with final/export buyers. Access to market information	Informed banking system. Final buyer/exporter support	Emphasizes trading back-to-back = not always possible and, lower margins. Or take more risk
Lack of market information/ inability to interpret market behaviour	Probable	Variable to Considerable	Trained staff 'know' coffee… Decent communications	Links with final/export buyers. Access to market information	Informed banking system. Final buyer/ exporter support	Trading 'blind', speculatively so if no internal discipline and trading limits.
Major price moves	Possible	Variable	'Know' your growers and your buyers.	Links with final/export buyers. Access to market information	Sector regulation	Grower and/or buyer default on earlier commitments.
Prolonged external price falls	Remote but possible	Variable	Specialise on 'quality' Diversification…	Links with final/export buyers. Access to market information	Informed banking system. Final buyer/exporter support	Low prices = lower margins. Increased quality problems. More risk if stock holdings increase
Lack of working capital	Probable	Variable to Considerable	Well organised Disciplined trading Audited accounts Track record	Security pledges that can be exercised.	Informed banking system. Final buyer/exporter support	High cost of funding. Unable to attract volumes =less buyer interest=lower prices/margins.
Interest rate risk	Possible	Variable	Strong industry representation Increase turnover speed. Improve efficiency	Good Sector organization Final buyer/exporter support.	State supportive Informed banking system	High domestic interest rates increase costs and reduce turnover/buying capacity =lower farm gate prices. Can also disadvantage domestic operators.
Export Marketing Environment						
Erratic quality Inferior quality Adulteration Unfit for human consumption	Possible to Probable	Variable to Considerable	Know your domestic counterparts. Quality Control Reward 'quality' Refuse to accept substandard coffee. Employ qualified staff.	Good Sector organization Standards	Sector regulation Sustainability Programs	High cost of processing. Reduced to bulk or commodity level = lower value, higher risk. Possible export default

Sector	Probability	Impact	Potential Mitigation	Support Environment	Links	Value Impact
Inefficient export Processing	Possible	Variable	Trained staff who 'know' coffee and keep proper records Monitor…	Good Sector organization Standards Self-regulation	Sector regulation	Excessive weight loss and quality destruction. Can hide fraud/theft. Limits markets. Loss of value.
Inadequate shipping opportunities	Possible to Probable	Variable to Considerable	Infrastructure investment	Good Sector organization. Decent port structures. Investment finance	State supportive	Shipping delays, transhipment = higher costs. Puts off buyers, especially roasters. Limits markets.
Overregulation Bureaucracy	Possible to Probable	Variable	Strong industry representation. Streamline procedures. Self-regulation	Good Sector organization. Sensitization programs.	State intervention	Limits competition. Adds 'invisible' costs that reduce farm gate prices.
Counterpart cum Reputational risk - defaults	Possible , both internal and external	Variable to Considerable	Know your domestic counterparts. Good Sector organization.	Sector regulation. Formal dispute resolution procedures	State supportive. Appropriate, effective legal framework offering redress	Quality claims and defaults put off many buyers, especially roasters. Increases cost of doing business.
Theft and Fraud	Occasional	Variable to Considerable	Know your domestic counterparts. Good internal monitoring. Insurance	Sector regulation.	State supportive Appropriate, effective legal framework offering redress	Increases the cost of doing business and reduces farm gate prices.
Excessive export costs and taxes	Possible	Variable to moderate	Strong industry representation. Open monopolies to competition Follow best practices	Good Sector organization. Lobbying	State intervention	In the end all coffee is priced 'landed roasting plant'. Farm gate prices are what remains after deducting all costs and margins…
Corruption	Possible	Variable	Strong industry representation	Good Sector organization.	State intervention	See above…
Lack of affordable trade finance	Possible to Probable	Variable	Well established Audited accounts. Acceptable balance sheet. Security… Collateral management	Good Sector organization. Final buyer support.	State supportive. Informed banking sector.	Lower farm-gate prices Limits competition. Can disadvantage domestic operators.
Interest rate risk	Possible	Variable	Strong industry representation Increase turnover speed. Improve efficiency	Good Sector organization Final buyer support.	State supportive. Informed banking system Access to external financial markets	High domestic interest rates increase the cost of doing business =lower farm gate prices. Can also disadvantage domestic operators.
Currency risk	Probable	Variable to	Access to risk management	Good Sector organization.	State supportive	Inability to manage currency risk requires

Sector	Probability	Impact	Potential Mitigation	Support Environment	Links	Value Impact
		Considerable	instruments. Monitoring Discipline	Enabling regulatory regime.	Informed banking system Access to external financial markets	higher margins = lower farm gate prices. In worst case scenarios can eliminate some actors thereby reducing competition. Can disadvantage domestic operators.
Country Risk	Possible	Moderate	Strong industry representation	Good Sector organization	State intervention. Informed banking sector	Increased country risk raises the cost of finance = lower farm gate prices
Insufficient clarity on contractual rights and obligations	Possible to Probably	Variable	Training, seminars etc.	Good Sector organization.	State supportive. Informed banking sector	Impact can range from simple errors and inconveniences to almost catastrophic losses
Inadequate, inefficient or non-existent Sector Representation	Possible to Probable	Variable to considerable	Understand and promote the common interest. Demonstrate the impact of 'invisible costs'…	Good Sector organization, able to analyse constraints and make strong representations	State supportive. Informed banking sector. Enlist help of final buyers	Without credible representations the revenue impact of constraints remains hidden.
Export Marketing Price Risk						
Day to day external price volatility	Highly probable	Considerable	Trained staff who 'know' coffee… Good communications Trading limits and discipline. Risk management	Good sector organization. Access to affordable risk management solutions. Enabling regulatory regime.	Informed banking sector. Possible State support and help from final buyers.	Often no link with local markets. Increases risk and complicates both purchase and sales decisions. Hedging means margin calls and options not always the answer… Lack of access to risk management options disadvantages domestic operators.
Basis or Differential risk	Highly probable	Considerable	Trained staff who 'know' coffee… Good communications Trading limits and discipline. Understanding local markets and how PTBF contracts really work.	Good sector organization. Training and information sources.	Informed banking sector. Possible State support and help from final buyers.	Cannot be 'managed' other than by limiting exposure = disciplined trading. Impact can be huge.
Speculative risks	Possible to Probable	Moderate to Considerable	Trained staff. Trading limits. Position reports. Unfortunately it is possible to 'hide' short sales until….	Training and information sources.	Informed banking sector.	Over-trading or speculative positions can lead to defaults and bankruptcy. Affects sector reputation.

Sector	Probability	Impact	Potential Mitigation	Support Environment	Links	Value Impact
Counterpart risk	Possible	Variable	Know your suppliers and buyers. Set individual exposure limits for forward commitments, outstandings… Daily reports. Shipping documents via banks. Etc…	Sector regulation. Access to information sources (although credit reports not always helpful).	Informed banking sector. Enabling legal environment.	Defaults by either suppliers or final buyers can bankrupt one.
Quality and Value risk	Possible	Variable	Quality control. Does quality of purchases, arrivals or stocks match sales?	Sector regulation. Standards.	Informed banking sector. Collateral management	Incoming quality doesn't match what is sold or, is unusable. Can mean having to buy new stock and sell unfit stock. Often means huge price impact, especially if had been hedged…

PRELIMINARY LISTING AND CONSIDERATION OF FINANCING ISSUES FACING COFFEE SECTORS

Sector	Availability	Cost	Limitations	Impact	Potential mitigation	Support Environment	Value Impact
Production							
Longer term Investment finance	Limited to nil	?	No security and/or insecure land tenure. Not a commercial bank activity or priority.	Inability to renew or extend plantings.	Good Sector and Farmer organization.	State supportive. Agriculture credit channels for longer term finance. Sustainability programs.	Declining yield and quality. Increasingly uncompetitive, becoming unsustainable.
Medium Term Investment Finance	Limited to nil	?	No security and/or insecure land tenure. Not a commercial bank activity or priority.	Inability to construct or upgrade processing and storage facilities	Good Sector and Farmer organization.	State supportive. Agriculture credit channels. Sustainability programs	Unable improve quality, address food security concerns or diversify into specialty markets.
Crop Finance	Limited to nil	?	As above. Also, in cooperatives and farmer groups crop may be diverted or quality delivered may be too poor.	No inputs or untimely application. Forced to use informal credit channels.	Good Sector and Farmer organization.	State supportive. Agriculture credit channels. Sustainability programs and value chain partners.	Lower yield and quality. Forced to pay usury rates of interest.

Sector	Availability	Cost	Limitations	Impact	Potential mitigation	Support Environment	Value Impact
Post-harvest							
Collection and Interior Processing credit	Limited. Ratio to own funds: lowest	Highest	Insufficient security. No formal accounts. Limited own funds. Price, quality and theft risk.	Use own funds or informal credit channels.	Good Sector and Farmer organization Adequate storage, insurance. Collateral manager. Bank has real title to goods.	Agriculture credit channels. Informed banking system Sustainability programs and supportive value chain partners. Letters of Credit…	Reduces competition whilst higher cost of funds mostly recouped from farm gate prices. Can exclude small farmer organizations.
Export							
Stock credit	Limited. Ratio to own funds: lowest	High	Must have own funds, pledgeable security. Stock rotation. Price, quality and theft risk.	No credit for speculative (unsold or unhedged) stocks.	Adequate storage, insurance. Collateral manager. Bank has real title to goods. Pre-sold to approved buyers or hedged	Informed banking system. Appropriate, effective legal framework. Access to hedging instruments. Supportive value chain partners, Letters of Credit…	Can exclude small farmer organizations from moving up the value chain. Can disadvantage domestic operators.
Export Processing credit	Limited to Adequate. Ratio to own funds: higher	High	Must have own funds, pledgeable security. Stock rotation. Price, quality and theft risk.	No credit for speculative (unsold or unhedged) stocks	Adequate storage, insurance. Collateral manager. Bank has real title to goods. Pre-sold to approved buyers or hedged	Informed banking system. Appropriate, effective legal framework. Access to hedging instruments Supportive value chain partners. Letters of Credit…	Can exclude small farmer organizations from moving up the value chain. Can disadvantage domestic operators.
Pre-shipment finance	Adequate. Ratio to own funds: higher	Lower	Must have own funds, pledgeable security. Stock rotation. Price, quality and theft risk.	No credit for speculative (unsold or unhedged) stocks	Adequate storage, insurance. Collateral manager. Bank has real title to goods. Pre-sold to approved buyers or hedged	Informed banking system. Appropriate, effective legal framework. Access to hedging instruments. Supportive value chain partners. Letters of Credit…	Can exclude small farmer organizations from moving up the value chain. Can disadvantage domestic operators by excluding potential but unknown buyers.

Sector	Availability	Cost	Limitations	Impact	Potential mitigation	Support Environment	Value Impact
Negotiation of shipping documents	Adequate. Ratio to own funds: highest	Lowest	Understands the business. Collateral manager. No errors. Must have good track record.		Sold to pre-approved buyer. Documents in bank's name, providing real title.	Informed banking system. Appropriate, effective legal framework.	Can disadvantage domestic operators by excluding potential but unknown buyers. Costs can be manipulated.
Different types of advance Letters of Credit	Variable	Variable	Understands the business. Collateral manager. No errors. Must have good track record.	Can be very helpful but recipient still has to conform to local bank's requirements and limitations.	Sold to pre-approved buyer. Documents in bank's name, providing real title.	Informed banking system. Appropriate, effective legal framework.	Many buyers dislike opening L/C's. Cost always calculated and deducted. But can assist especially smaller operations.

INITIAL LIST OF MECHANISMS AND TOOLS FOR IMPROVING COFFEE SECTOR FINANCE AND REGULATORY / ENABLING ENVIRONMENT PREREQUISITES AND REQUIREMENTS

General	Pre-conditions	Comment
Foreign funding	Can be freely repatriated.	No 'unexpected' regulations or controls. No taxation ambiguity.
Pre-financing in foreign currency	Against certified purchases/stocks. Insured in convertible, transferable currency. Can be directly offset against collection of export proceeds.	Ditto
Collateral	Clear, unambiguous documents of title. No prior liens or rights. Must be enforceable under local legislation = fiduciary transfer of goods and authority to sell the goods.	Clear legislation. Functioning (commercial) courts. No endless 'delays' or surprises.
Collateral Management	Collateral Manager carries appropriate liability/indemnity cover. Proceeds freely transferable or cover taken out abroad.	Recognised in domestic legislation.
Warehouse Receipts	Formally recognised as *enforceable* documents of title. No prior liens or rights. Warehousemen carry appropriate liability/indemnity cover.	Recognised in domestic legislation Functioning (commercial) courts. No endless 'delays' or surprises.
Execution of Collateral rights	Clear procedures governing default confirmation and execution. Underlying goods can be freely processed and/or exported by or on behalf of the creditor.	Recognised in domestic legislation. Functioning (commercial) courts. No endless 'delays' or surprises. Automatic trade or export license where required Buyer accepts contract execution by lending institution, i.e. contracts are pledged to the lender.

General	Pre-conditions	Comment
Taxation	Clarity on external lender's liabilities and rights in terms of interest income.	No 'unexpected' regulations or controls. No taxation ambiguity.
Lending limits	Provision of external funds through local banks does not necessarily release these from their own or local lending limits.	Limits (or caps) always apply to maximum exposure to the sector and to individual borrowers. Ratio of lending to pledged securities will never be 100%.
Commercial	**Pre-conditions**	**Comment**
Underlying transaction	Agreed structure. Pre-approved buyers. Fixed price, risk management or fully hedged.	Borrower has all authorizations necessary to export. All levies, taxes are paid up to date. Legal opinion confirms lender's rights.
Risk management	Hedging tools, in-built margin call financing	Access to financial markets/risk management instruments Clarity on how PTBF contracts are to be fixed Clear in-house position and exposure limits Regular reporting plus spot checks
Insurance	Full commercial all-risks cover up to/including placing on board vessel or as stipulated in the contract, pledged to lender. Suitable political risk cover.	To include exporter default due to export restrictions, riots etc.
Physical stocks as security	Pledge agreement. Stored in approved warehouses, properly marked and identifiable. No commingling.	Warehousemen carry appropriate liability and indemnity cover. Quality and weight certificates are available.
Stock values	Daily verification of market value.	Top-up clause in lending agreement if value falls. Monitoring of processing and turnover speed.
Collateral Management Agreement	Must be in place. Must include performance and indemnity insurance, including fraud/negligence by own staff.	Collateral Managers and Warehousemen should not hold pre-emptive rights to the goods. Local legislation must be clear on this.
Export documents	Always in name of or assigned to the lending institution.	Must be negotiable. No ambiguity as to how or when shipping documents come under the lender's control.
Payment Risk	Pre-approved buyers only. Pre-set individual exposure limits.	Monitor payment speeds. Look for changes in payment patterns.
Daily position reports	Provide daily overview of borrower's entire trading operation.	Quantity and type of stocks; sold or unsold; amount of stocks under processing; goods awaiting shipment/in transit to port; outstanding invoices by individual buyer; open sales contracts by type (fixed price/PTBF) and by individual buyer; does quality of stocks match outstanding sales.