



CBI Food Ingredient survey Vietnam



February 2012



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Acknowledgement

On behalf of the Royal Tropical Institute I would like to express our appreciation for being granted the opportunity of assisting the CBI by conducting this Survey on Food Ingredient Value Chains in S.E. Asia. As of February 15th 2012, we have completed all services as described in the Terms of Reference underlying this assignment. The aim of the assignment was to provide the CBI with quality and customised information upon which the centre will be able to select and support most promising value chains through an integrated regional programme on food ingredients in South East Asia.

The research was done through a multi-pronged approach, combining desk-research, expert interviews, field level value chain surveys and multi-stakeholder validation workshops at national level. The assignment has been an exploratory experience. We want to express our sincere words of appreciation to our colleague consultant who carried out the field level value chain study: Mr. Ton That Thien Bao in Vietnam. He worked under intense time pressure and delivered results in short time-spans. We also want to express our appreciation for the workshop host: ITPC in Vietnam.

The final report contains three sections. The first section describes the research methodology and a summary of the results of the desk study conducted. The second and main section of the report presents the results of nine value chain studies conducted in Vietnam. The last section translates the results, findings and recommendations into a consistent CBI business case.

It has been a privilege to work with the CBI and this research has also helped us understand contemporary opportunities and challenges of selected value chains, and their actors, in this southeast Asian country.

We look forward to continuing our relationship.

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Management Summary

The Centre for Promotion of Imports from Developing Countries (CBI) has the intention to further support the food ingredient sector in a selected number of South East Asian countries through targeted CBI support programmes. Tentatively this support programme will focus at Vietnam.

In order to maximise the chance on success of intended country programmes in terms of impacting export volumes and overall turnover, the CBI has contracted the Sustainable Economic Development (SED) department of the Royal Tropical Institute (KIT) to lead the conduction of elaborated sector analysis. The analysis include comprehensive analysis of selected value chains that led into recommendations for possible intervention areas matching CBI's core fields of expertise and services. The fieldwork was conducted in November 2011 and was finalised through in-country validation workshops organised early December 2011. Major findings and recommendations of the survey were captured in a CBI business Case that is forwarded to the CBI Board for their consideration and approval.

As a result of the external analysis conducted, the CBI will be able to target most promising value chains through integrated country programmes. The selection will be based on; (1) opportunities to unleash export potential based on current figures and future trends in the market, (2) the ability of CBI to tackle bottlenecks in the export value chain, (3) the demand for CBI products by value chain actors and (4) the possible significant contribution of the programme to sustainable economic development.

The international market for food ingredients is growing and at the same time becoming increasingly demanding and competitive, particularly when looking at EU import markets. SMEs in targeted country are at risk of not being able to step up against increasing demands and compliance requirements. This would result in losing part of their current market share thus not being able to contribute to sustainable economic development in the agricultural sector. In order to stay competitive, particularly against bigger market players, SMEs in the food ingredient sector have to step up their efforts to effectively coordinate and align trans-actions in the value chain and enhance their own functioning and performance. They will not be able to do this at own force but will require external support and assistance in doing so.

Based on analysis done (desk studies, value chain assessments, validation conferences) this business case proposes the funding of an **integrated, regional programme on food ingredients in S.E. Asia**, focusing on the following sub-sectors:

Core integrated programmes:

- Coffee, tea, cacao: Vietnam (cacao)
- Spices and herbs: Vietnam (pepper)

For all studied export value chain, various bottlenecks that hamper the efficient chain performance were found all along the chain with a concentration at production and supply level. Most government programmes, as well as donor supported programmes, in the targeted sub-sectors, address constraints in the production part of the value chains and work directly with producers and producer groups. The CBI adds value to these efforts by bringing in a complementary pull

factor through working with processors - exporters at the upper part of the chain on the facilitation of export linkages and increasing export volumes.

The business case implies the implementation of integrated programmes, conditioning CBI's engagement in the sub-sectors to the opportunities for alignment with programmes/projects addressing constraints faced by downward chain actors. Partners can include national as well as inter-national agencies. Key CBI partners for the core sub-sectors are:

Cacao, coffee, tea: UTZ certification, Rain Forest Alliance, Solidaridad, Helvetas and ACIDI/VOCA (cacao Vietnam), Tropical Commodity Coalition, GIZ (coffee Vietnam).

Spices and herbs: UNCTAD, IDH, Fair Trade, Pepper Association (Vietnam).

For both targeted sub-sectors, the EU market are moving towards an increasing demand for certified sustainable products. Social and labour criteria are increasingly added (Fair Trade certification). Another emerging market trend in the coffee and tea sub-sectors, is an increasing product diversification, feeding the demand for specialty coffee and tea (pers. comm. importer).

The proposed programme takes the above market trends as starting point. In terms of market segmentation the programme will focus on specialised product-market combinations, targeting specialty (niche-) markets rather than targeting (bulk oriented) commodity markets. Distinct product features and/or qualities can be obtained through certification (organic, Fair Trade, UTZ, RF Alliance) and/or intrinsic quality features (taste, appearance, functional qualities like health benefits). Quality enhancement and traceability will be key elements in moving towards certified sustainable products.

For the selected chains one or two geographical target areas are defined per country, allowing for concentrated, effective and well aligned programme implementation, including provision of CBI modules. Tentatively the selected focus areas are: Binh Phouc (spices) and Dak Lac (coffee, cacao) in Vietnam.

A detailed programme planning will have to be further elaborated per sub-sector and country but would include i) export coaching to targeted exporters (initiated with approximately 70 enterprises), ii) Market Intelligence and iii) Strengthening of Business Support (4 BSOD trajectories) and iv) facilitation of Public-Private-Partnerships at the level of defined target areas.

Programme title	Regional Programme " Export Development Food Ingredients Value Chains of S.E. Asia "
Expected Outcome	Increase EU export volumes for 4 selected sub-sectors by an average 30% with an approximately annual value of 8 million Euros by 2015. ¹

¹ Given estimates of percentage and total value of expected increase in export are based upon earlier experiences in the food ingredients sector and results of conducted value chain surveys. Final figures will depend on number of companies participating, average size (export volume, turn-over) at intake and price development / inflation (see annex 6).

	<p>Direct outputs:</p> <ul style="list-style-type: none"> - A minimum of 20 SMEs increase export to EU - Another 20 SMEs strengthened in business planning & business performance - 4 BSO have the capacity to support SME in EU export trajectories - 4 -6 private sector led commodity association render customised market intelligence to members - 4 informal multi-stakeholder coordination mechanisms render aligned support to the targeted sub-sectors <p>Indirect outputs:</p> <ul style="list-style-type: none"> - SMEs have access to service providers (certification bodies, financial services etc.) - At least two new institutional CBI partnerships established / piloted (UNCTAD, IDH, and others)
Country(s) of Implementation	Vietnam
Sector(s) of Implementation	<p>Food ingredients:</p> <ol style="list-style-type: none"> 1) Coffee, tea, cacao (Vietnam) 2) Spices and herbs (Vietnam) 3)
Major Stakeholders	<p>Direct stakeholders: Selected SME level processors / exporters, BSOs (ITPC, a.o.), Commodity based private sector associations / federations (pepper association Vietnam, coffee and tea association Vietnam)</p> <p>In-direct stakeholders: related government agencies (focussing on sub-national level), banks, research institutes</p> <p>Partners: Development organisations and programmes active in the targeted sub-sectors: UNCTAD, HDI, Embassies, INGOs, bi-laterals</p>



Abbreviations or term of

ACBI	Association of Coconut Brokers Inc.
AFIME	Association of Food Industries Manufacturers & Exporters
Armajaro	US Importer company
BA	Bureau of Agricultural Statistics
BFAD	Bureau of Food And Drugs
BIR	Bureau of Internal Revenue
BOC	Bureau of Customs
BOI	Board of Investments
BSO	Business Support Organization
CAR	Cordillera Administrative Region
CAPE	Consultancy for Agricultural Products Enhancement
CDA	Cooperative Development Agency
CNO	Crude Coco Nut Oil
CORA	Coconut Oil Refiners Association
CSR	Corporate Social Responsibility
DisHutbun	Government Organization of Forestry
DiskopUKM	Government Organization of SMEC
DARD	Department of Agriculture and Forestry (Vietnam)
DENR	Department of Environment and Natural Resources
DENR-EMB	Dept of Environment and Natural Resources – Environmental Management Bureau
DOE	Department of Energy
DOH	Department of Health
DOLE	Department of Labor & Employment
DOST	Department of Science and Technology
DOST-ITDI	Department of Science and Technology – Industrial Technology Development Institute
DTI	Department of Trade and Industry
DTI-RODG	Dept of Trade and Industry – Regional Operations Development Group
ECC	Environmental Compliance Certificate
EPP	Export Pathway Program
ETP	Ethical Tea Partnership
FDA	Food and Drugs Administration (formerly BFAD)
FFJ	Fermented Fruit Juice
GAP	Good Agricultural Practices
GMP	Good Manufacturing Practices

HACCP	Hazard Analysis Critical Control Points
HVCC	High Value Commercial Crops
HCC	Horti Chain Centre
LGU	Local Government Units
MARD	Ministry of agricultural and rural development
MPEX	Manufacturing Productivity Extension Program
MT	Metric Ton
NCR	National Capital Region
NICCEP	National Industry Cluster Capacity Enhancement Program
PAO	Provincial Agriculturist Office
.	
Q Grader	Person who can value the taste of a certain product
RBD	Refined Bleached Deodorized
RFU	Regional Field Unit
ROI	Return of Investment
SMEC	Small Medium Enterprise and Cooperatives
SET-UP	Program - Small Enterprise Technology Upgrading Program
TESDA	Technical Education and Skills Development Authority
TEU	Twenty Equivalent Units
TSP	Technical Support Program
UCPB	United Coconut Planters Bank
VC	Value Chain
VCO	Virgin Coconut Oil
VN GSO	Vietnam General statistic office
VCC	Vietnam Cocoa coordination committee
VICOFA	Vietnam coffee and Cocoa association
VPA	Vietnam pepper association
VISCA	Visayas State College of Agriculture
VECO	Vredes Eilanden, Belgium INGO active in rural development

1. Prioritisation of sub-sectors

1.1. Introduction

Starting point for the study were the 10 food ingredient sub-sectors listed by the CBI:

- Fruits (dried fruit, pulps, puree, juices, concentrates, jams etc.)
- Vegetables (preserved, pastes, stir-fry kits etc.)
- Edible nuts (oils, butter etc.)
- Grains, pulses and seeds (cereals, oils etc.)
- Herbs and spices (sauces, oils, oleoresins)
- Coffee, tea and cocoa (green beans, powder, paste, liquor, butter)
- Honey (wax, pollen, royal jelly, etc.)
- (Cane) sugar and syrups
- Oils and fats (coconut, palm oil etc.)
- Essential oils, oleoresins, plant extracts, natural food colours,

The term food ingredients can be confusing. During the course of the study and in the report the following classification is used as guideline:

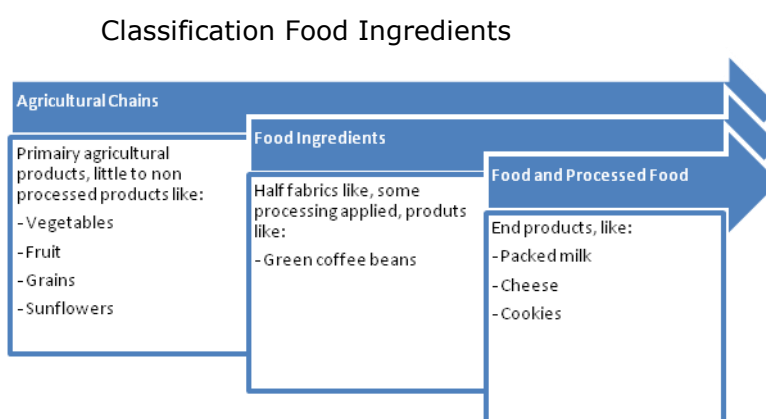


Figure 1 Classification of food ingredients by the CBI

In literature and in main data sources export and import data and figures are mostly provided at commodity level (primary, half-processed produce) and final processing purpose and/or destination is hardly mentioned. We therefore, refer in the report to major commodities, coffee, tea, cashew, palm oil etc. without specifying or distinguishing the type or category of end-products these products will be used in.

1.2. Methodology and Approach

The research was carried out in a sequence of connected phases:

- Desk study and short-listing sub-sectors per target country
- Field Work / data collection of 3 selected value chain per target country
- In-country multi-stakeholder workshops validation workshops

1.2.1. Desk-study

The desk study included a comparative country level assessment followed by sub-sector analysis of the 10 initially listed sub-sectors that led to the short-listing of 3-5 priority sub-sectors per country. The justification and prioritisation made was thereafter discussed with internal CBI and external experts. The long list of the 10 initial sub-sectors is given in annex 1 to this report.

In the comparative country analysis the following parameters were included:

- i) **Overall export figures** and competitiveness of the agricultural sector, its importance to the national economy and its contribution to overall EU27 imports
- ii) The enabling **trade environment**
- iii) Engagement of **SMEs and smallholders**

The indicators mapped provide a comparative analysis at national level of the suitability and potential impact of a support programmes focusing on the export oriented agricultural sector. The results of the country level comparative assessment is given in annex 2.

Thereafter, we zoomed in on the food ingredients sub-sectors as listed by the CBI. The justification for the short-listing of three target sub-sector per country is based upon a mixture of quantitative data and qualitative judgments of the features of the sub-sector per country.

For 3 specific features of the sub-sectors indicators were defined that are found crucial in the prioritisation of sub-sectors.

- i) **Overall economic value and export potential of the sub-sector**, providing an indication of the potential economic scale, outreach and leverage of CBI interventions in the sub-sector
- ii) **Sustainability**, providing an indication of the sustainability dimensions (socio-economic and environmental) of the sub-sector
- iii) **Local economic potential**, providing an indication of the potential for generating economic growth at local levels (involvement of SME's, smallholders)

Per distinguished category, quantitative (if available / accessible) and qualitative indicators are defined that provide indications about the performance of the sub-sector against the defined feature. The indicators per category are:

- 1) Economic value and export potential
 - i) Total export (global)
 - ii) Volume of export to EU (and market trend)
 - iii) Export volume as percentage of overall import of concerned produce to EU ²

² Percentage of EU imports from single country as against total imports to EU together with trend in volume imported from the concerned country provide an indication of the competitiveness of the sub-sector regarding EU import markets.

- iv) Trends in prices
- 2) Sustainability
 - i) Sustainability (accreditation schemes)
- 3) Local leverage
 - i) Number of smallholders involved (in case no data qualitative indications are used)
 - ii) SMEs involved (again if no data qualitative indications are provided)
 - iii) Potential for local or in-country value adding (qualitative indications)

In the final decision making about prioritisation of sub-sectors per country, the first category; “*overall economic value and import potential*”, is leading. This means that, after having mapped the indicators reflecting the economic importance of the sub-sector and its EU27 export potential (category i) indicators), we have made a short list of 3-5 prioritised sub-sectors per country. Further analysis on the other two categories (sustainability, local economic potential / leverage) was carried out extensively for the short-listed sub-sectors.

The results of the assessment and justification for the prioritisation of three sub-sectors per country is given in annex 3.³ A summary of the overall results of the desk-study is provided in chapter one of this report.

1.1.1. Field level value chain analysis

For the field level value chain surveys local consultants were recruited. The surveys consisted out of closed and open interviews.

The value chain approach was leading in the field surveys, mapping value chain actors, their relations, product-, financial- and information flows. Conducted value chain analysis include the identification of constraints in the functioning and performance of the concerned value chain. Although the focus of the survey was on direct chain actors, particularly targeting SME level enterprises (processors / exporters), also chain supporters and influencers like related government agencies (agriculture, trade and investment etc.), commodity based associations, research institutes and other relevant stakeholders were interviewed.

The gathered information and analysis, derived conclusions and recommendations from the value chain analysis form the core part of this report and are described in part two of this report.

1.1.2. Validation conferences

Three national level conferences were organised in Ho Chi Minh City, Vietnam. The conferences were important events in the overall survey’s process aiming at sharing, validating and extrapolating the outcomes and results of field-level surveys and linking validated result to potential CBI propositions.

Objectives of the Conferences

- Share, discuss and validate the major results and findings of the value chain surveys conducted with the participants.
- Participants know what are and agree upon the bottlenecks within the relevant sub-sector;
- Consensus among the stakeholders what can be done to solve the bottlenecks and optimise export of (sustainable) products within the relevant sub-sector;

³ Not for all sub-sectors data were found against mentioned parameters.

- Link the proposition of the CBI in terms of support services with the identified opportunities and constraints in a demand driven, context specific and responsive way.
- Provide specific and quantitative inputs to feed the formulation of a business case regarding CBI support to the food ingredients sector in SE Asia.

In the Vietnam workshop around 25 participants from different stakeholder groups gathered and discussed the findings of the value chain analysis.

During the workshop it was also tried to get feed-back from participants on their needs and preferences in terms of training and coaching services (modules) the CBI could potentially offer in the framework of a future programme on food ingredients. Responses were however scattered and cannot be regarded as representative indications.

The initial ambition to extrapolate the results of the individual value chain analysis to the broader sub-sector during the workshops did not materialise. As a result the extrapolation of the results of individual chains to aggregated levels is not included in the findings, conclusions or recommendations.

1.1.1. Final recommendations

In order to move from the results of the 9 different value chain studies to a comparative analysis that can feed the decision making of CBI in terms of future investments (or not) in the food ingredient sector in SE Asia, it was tried to again judge and rank the results of the value chain studies according to the same set of criteria used in the initial short-listing:

1) Economic value and export potential

- v) Total export (global)
- vi) Volume of export to EU (and market trend)
- vii) Trends in prices

2) Sustainability

- ii) Sustainability (environmental and social accreditation schemes)

3) Local leverage

- iv) Number of smallholders involved
- v) SMEs involved
- vi) Potential for local or in-country value adding

Moreover, the additionality of the CBI interventions is judged as a fourth dimension for judgment

4) Additionality of CBI interventions:

- i) Potential partnerships
- ii) Availability of local BSOs
- iii) Attribution CBI interventions

For the ranking quantitative judgments are provided to each of the mentioned categories as follows:

1 = low; 2 = moderate; 3 = good / high.

In the total score the judgment for category 1, *economic value and export potential* is given higher importance by doubling the score.

The final scores are the backing the decisions as captured in the recommendations and business case provided in chapter 3 to this report.

Value chain - Country

<i>Criteria</i>	<i>indication</i>	<i>comments</i>	<i>Judgment (1to 3)</i>
Potential EU export			(x 2)
Sustainability			
Local leverage			
Presence of SMEs			
Partnerships			
BSOs			
Attribution			
Other issues			No score

End score: (max 8 X 3 = 24, minimum 8 X 1 = 8)

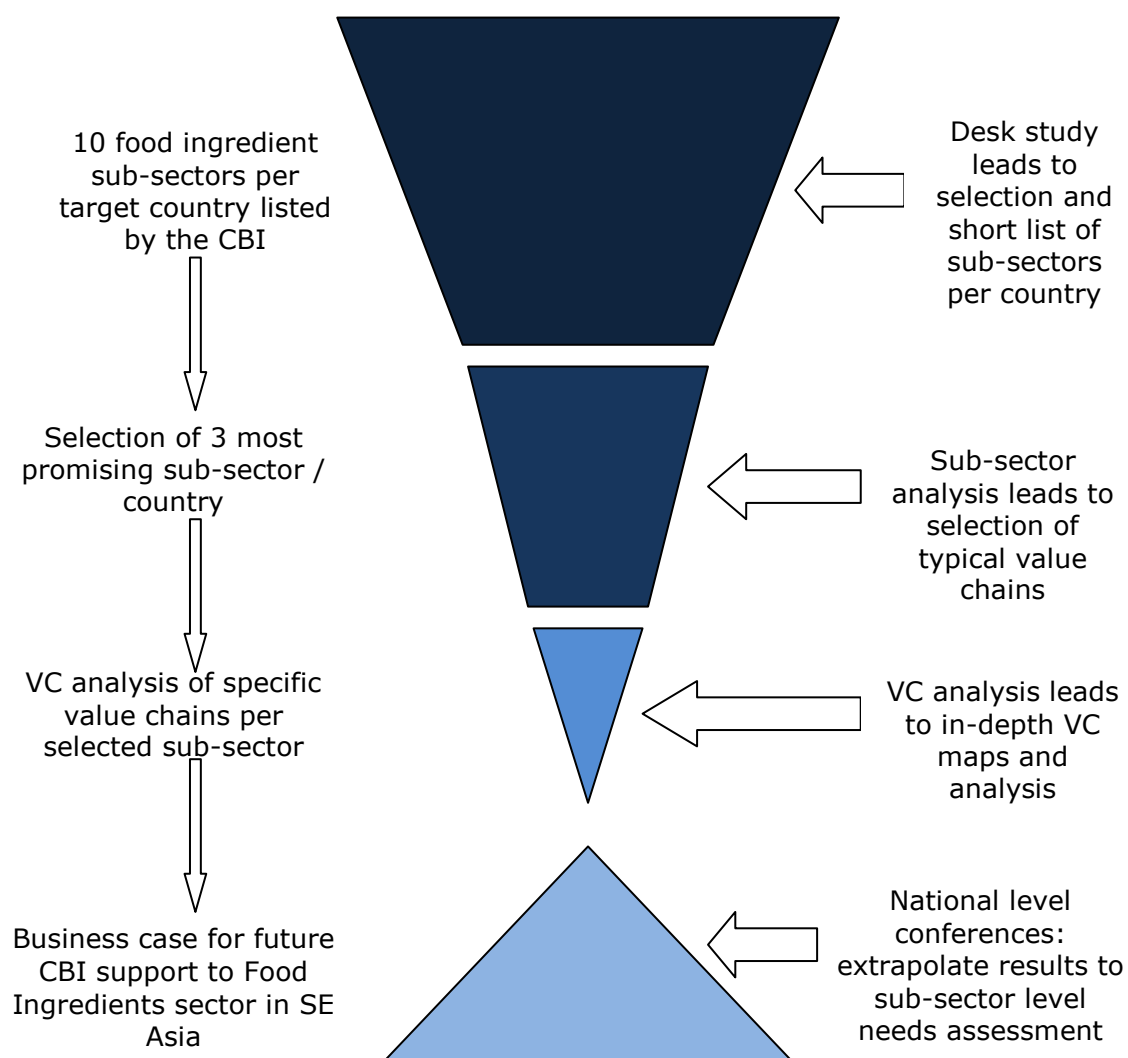


Table 1 Validation process

Rationale for CBI support to the Food Ingredient sector in S.E. Asia

There is an increasing consensus about the importance of private sector development in fostering sustainable economic development. For targeted country Vietnam, SMEs are the motor of the economy and of utmost importance in the generation of employment, local value adding and as a resilience factor in economic downturns. Vietnam is an important EU sourcing destination for agricultural products as shown in table 1 below.

<i>Global ranking (based on value imports in Euro)</i>	<i>Total import to EU27</i>	<i>Import agricultural products to EU27</i>
Vietnam	# 31	# 17

Table 2 Global ranking EU27 imports (EuroStat, 2011)

Vietnam is listed as recommended target country for the CBI Export Development Programme (feasibility study EDP, 2005). In terms of absolute export volumes, the percentage of agricultural produce in this and the export volumes to EU27, Vietnam is the second most important partner country.

Vietnam has made impressive move forward in terms of accessing agricultural world markets. Vietnam has stormed the markets for global commodities like rice, coffee, cashew, tea at times distorting market dynamics through over-supply.

1.2.1. Rationale for CBI support to the agricultural sector

For targeted country Vietnam, the agricultural sector is still of major importance in both aspects, its contribution to the overall economy and GDP, as well as regarding its importance in securing livelihoods. The agricultural sector is also still by far the largest provider of employment opportunities in the country (WB, country reports 2010).

Vietnam is characterised by high percentages of smallholder farmers. Particularly the Vietnamese agricultural sector is characterised by its smallholder dominance and equally divided land ownership.

SMEs are the motor of the economy and of utmost importance in the generation of employment, local value adding and as a resilience factor in economic downturns. The agro-based SME sector seems particularly strong in Vietnam (increasingly developing from micro and small to medium level). The Vietnamese processing and export sector is furthermore characterised by a high level of government owned or controlled enterprises that are in the case of major commercial crops (coffee, tea, cashew etc.) in general market leaders.

	Vietnam
Total agricultural export to EU27 in million US \$	2148
Annual growth overall export to EU27 in % (2005-2010)	10,4
Agriculture as percentage of overall export to EU27	22,8
Agriculture as percentage of GDP	21

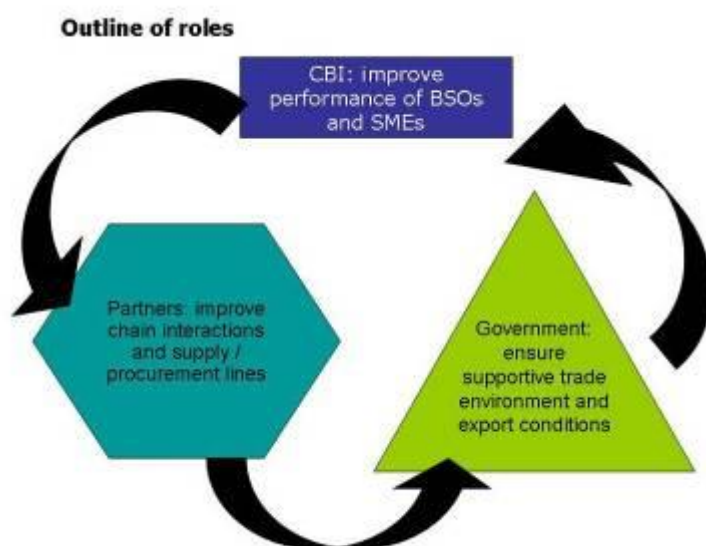
Table 3 EU Export figures/overall economic importance of the agric. sector (EuroStat, 2011)

On country level Vietnam shows clearly a high potential to improve EU export figures in the agricultural sector due to both, higher and increasing volumes and market shares (indicating greater competitiveness in EU markets), and through a relatively more supportive enabling trade environment. (annex 3)

1.2.2. Rationale for CBI support to the Food Ingredients sector

The international food ingredients sector is growing and at the same time becoming increasingly demanding and competitive, particularly when looking at EU import markets. SMEs in targeted country are at risk not being able to step up against increasing demands and compliance requirements. This would mean that they would lose part of their current market share which would hamper sustainable economic growth and its contribution to sustaining and improving livelihoods. Targeted support is required to keep the sector competitive. Such support should cover the entire value chain from producers to exporters as it is the functioning and performance of the entire chain that determines competitiveness.

For this reason an integrated approach is required in which CBI aligns support to its core actors (exporters, BSOs etc.) in the value chain with the support other organisations render to other actors (producers, financial institutes etc.) in the same chain. The opportunities for such complementarities are present in the studied sub-sectors.



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Figure 2 Outline of roles

1.2.3. Sustainability dimensions

Amongst the long-listed sub-sectors some are 'cleaner' and others more contaminating or polluting in environmental terms. Also the characteristics of production models in some sub-sectors are more disruptive in terms of environmental sustainability (palm oil due to deforestation, coffee in Vietnam due to intensive use of chemicals) than others. But it is exactly in the most polluting sectors that most gains can be achieved through the introduction of more environmentally friendly production systems.

For this reason this study accepted the presence and level of application of accreditation schemes focusing on environmental and social sustainability as lead indicator for sustainability of the chain. The accreditation through such schemes assures concrete and tangible gains in terms of sustainability.

External certification schemes regulating and assuring socio-economic (Fair Trade) and/or environmental sustainability (organic, UTZ certification, Rain Forest Alliance) are typically applied for the major commercial commodities (coffee,

cacao, bananas) or at the complete other end of the spectrum, at the level of niche products (essential oils, honey, herbs).

Also sector-led (private certification) schemes are typically developed for major commercial commodities (palm oil, coffee). Some private sector initiatives are responding to the negative publicity in press and negative public perception of the sector like the Round Table on Sustainable Palm Oil.

It is however important to realise that for all types of certification schemes described, the percentage of certified produce as against overall production and traded volumes is (still) limited in Vietnam . This counts overall for certified products. Illustrative is that for coffee the most prominent crop amongst the certified commodities, exports of organic coffee in 2008 are estimated at just over 1.6 million bags of which 41 % went to Europe (or 0,64 million bags) as against of a total of almost 50 million bags of EU imports of coffee. Similarly, a 2010 study by ITC puts 2009 organic coffee imports at around 1.7 million bags or not quite 1.4% of the 126 million bags of 2009 world gross imports.

Label	Vietnam		
Organic	Tea, fruits, essential oils, honey, species and herbs, nuts		
Fair Trade (FLO certified)	Coffee, tea, herbs and species, nuts (cashew)		
National "green" certification schemes / IPM	Rice, soy bean, peanuts, fruits and vegetables		
Sector driven schemes - IDH ⁴ , RSPO	Species, coffee, tea (IDH)		
UTZ Certified	Coffee, cacao		
Rain Forest Alliance	Coffee, tea		

Table 4 Certification Schemes per country and sub-sector/commodity

1.3. Ranking and prioritisation of sub-sectors

Based on the desk research an initial prioritisation of three sub-sectors per country was made. The initial choice was based on quantitative figures combined with qualitative rankings. In order to validate and check assumptions the tentative prioritisation and reasoning behind was discussed with CBI experts and in-country experts. In some cases these consultation rounds did result in changes in terms of prioritisation of sub-sectors. It is important to note that the ranking of sub-sector is an arbitrary judgment and has a relative value only.

In order to compare the different sectors and justify prioritisation we weighed the different categories of indicators according to their importance to the CBI. Economic potential and export volumes are the leading indicator group, and we assigned a comparative weight of 60% to this category. Sustainability (the

⁴ IDH does not accredit sustainability but promotes existing certification schemes according to preferences of participating enterprises. For spices in Vietnam Rain Forest Alliance is preferred.

potential for an improvement / increase in sustainability features) and the potential for local economic development are the two other categories which we weight equally at 20% each. (annex 3)

This qualitative judgment was complemented with comments and suggestions from CBI experts and in-country resource persons approached, including the selected national consultants.

Qualitative ranking of sub-sectors

Sub-sector	End score⁵	Rank	Judgment experts CBI	Judgment in-country partners
Vietnam				
Coffee, tea, cocoa	8,4	1	Cocoa (certified), avoid main stream commodity / bulk chains	Coffee is dominated by large scale players, partly semi-state owned
Edible nuts	6,8	2	No comments	Cashew is a growing sector but internally not well organised
Herbs and spices	6,8	3	Health ingredients (proteins, vitamins), cinnamon, ⁶	Cinnamon and pepper are both suitable. Black pepper sector has advantage of i) more external partners ii) more concentrated / accessible sourcing areas iii) buy-in from government as enhancing quality and sustainability is priority area
Processed Fruits	5,8	4	CBI target sector, processing not yet common.	
Grains, pulses (oils)	5,6	5	No comments	
Processed Vegetables	5,2	6	Frozen vegetables, end products like spring rolls (nems)	
Honey	3,4	10		
Sugar (cane), syrups	3,4	9		
Oils and fats	5,2	7		
Essential oils	4,2	8		

Table 5 Qualitative ranking of sub-sectors

⁵ Based on qualitative ranking of sub-sectors per country as provided in annex 3

⁶ The functional food sector is mentioned as promising for example Aloe Vera. Promote R&D (in collaboration with local Universities and WUR) together with improved chain coordination, scaling and traceability.

1.4. Final selection of sub-sectors

In the final selection of sub-sectors, the expert consultation led to a shift away from some of the economically dominant sub-sectors. Reasoning was found in a combination of arguments related to the nature of the concerned sub-sector: i) sub-sector is dominated by merely large players with little room for SMEs and ii) sub-sector with little scope for in-country value adding or leverage to local economic development iii) sub-sector has a reputation for sub-optimal governance (human rights, un-fair labour conditions) and/or as a source of pollution.

Moreover, interfering in commodity markets goes beyond the mandate and aspirations of the CBI.

Vietnam: Selected food ingredients export chains

Product	Import value in \$US to EU 27	% of total import to EU 27 from the world (\$US)	Comments
Cacao (HS018)	\$8,688,190 (WB, 2010)	0,2% of \$ 4,711,380,000	
Coffee (HS901)	\$881,248,177	10% of \$8,636,056,094	World leader in Robusta
Tea (HS0902)	\$13,618,404	1,7% of \$ 817,655,645	
Edible nuts (SITC 0517)	\$259,195,169	7% \$3,488,050,462	Mainly cashew
Spices and herbs SITC 075	\$157,670,917	17% \$949,549,466	Global market leader in pepper

Table 6 Import value per sub-sectors Vietnam

Source: Comtrade UN, data 2010 <http://comtrade.un.org/db/dqQuickQuery.aspx>

After prioritising sub-sectors the final selection of value chains to be studied was taken in close consultation with the local consultant(s). This led occasionally to changes (pepper instead of cassia in Vietnam etc.).

This resulted in the following choices in terms of value chains targeted during the field level value chain analysis.

Vietnam:

1. Sub-sector coffee, tea, cacao with the recommendation to target the cocoa value chain (certified if applicable) as field level study case
2. Sub-sector edible nuts with the recommendation to target the cashew nut value chain as field level study case
3. Sub-sector herbs and spices with the recommendations to target black pepper value chain as field level case study

1.5. Limitation of the methodology and discussion

Limitations

The followed sequence of methodological steps did result in some constraints in terms of planning. For one, the time-frame was very short. In the end this resulted in the field level surveys being carried out in extreme short time spans. This clearly affected the completeness and depth of the value chain analysis, thus final results as captured in this report.

Secondly, the number of sources used varied broadly and did provide us with non-matching and sometimes even conflicting information and data. At the level of personal interviews, personal views, preferences and interest did sometimes colour the information provided. Structural cross-checking was however not carried out.

Thirdly, this was the first collaboration between the KIT and the CBI of this kind, during which both sides had to learn and adjust. The foreseen extrapolation of specific value chain analysis to sub-sector level turned out to be too much to ask for during the workshops and was pursued in the end.

Framing the results & recommendations

The sub-sector analysis and derived ranking and prioritisation is arbitrary and has a relative value only. Contextual factor play a role in determining the outcomes of future investments in the sub-sectors and value chains at various levels: international / global, national and local.

External conditions that cannot be predicted or foreseen, including economic developments at global and or national levels and not the least, climatic conditions and the occurrence of climate related disasters, will in reality strongly influence the success factor of any investment in any country or sub-sector. Also the specific local context and enabling environment will influence the potential for export growth and the success of any effort to nurture exports.

Predictions and expectations on export increases and expected return on investments, should, although justified by quantitative figures and/or qualitative judgments, not be over-valued and be seen as what they are; predictions rather than forecasts.

The strategic focus of the CBI to give priority to commercially most prominent sub-sectors, instead of for example prioritising sub-sectors having less economic importance but being frontrunners in terms of sustainability or leveraging local economic development, has led the researchers automatically to the most evident commodities. Would the CBI let go its focus on volume and overall economic turn-over and instead focus more stringently on for example, sustainability, a complete different ranking would have occurred.

The prioritised commodity based sub-sectors do however have segmented markets too. In this sense, the recommendation regarding CBI investments point towards high-end, specialty market segments, looking for promising product - EU market combinations.



Value Chain Analysis

2. Vietnam

2.1 Introduction

As mentioned before, the agricultural sector in Vietnam has been booming over the last decade. Focus has been on increasing production (increasing area under production and productivity), rather than on quality and market orientation. The production figures for all three targeted value chains are increasing over the period 2006-2010. Cashew being by far the biggest crop, while cacao was introduced on a commercial scale only in 2007 and steadily increasing in area covered. However, the relative growth of the cashew sector in terms of hectare as well as in production and export figures is impressive.

Hectares under cultivation per year

Year/ha	2006	2007	2008	2009	2010	Notes
Cashew	223,700	302,800	321,100	340,500	340,300	NVGSO
Pepper	39,400	41,100	42,400	44,200	44,400	NVGSO
Cocoa		5,840	10,233	12,208	17,687	VCC

Table 7 Hectares under cultivation in Vietnam

In terms of overall export value, cashew is covering 3% of the agricultural export from Vietnam, pepper 1% while the emerging cacao total export value is still too low to figure in the formal government export overviews.

Key exported products

Key products	In USD	%
Total exporting value 2010	72,191,879,181	
Seafood	5,016,296,557	7%
Vegetables	450,542,607	1%
Cashew	1,134,739,593	2%
Coffee	1,851,357,772	3%
Tea	199,979,419	0%
Pepper	421,403,182	1%
Rice	3,247,860,368	4%
Cassava	564,290,191	1%
Candies and cookies	326,127,780	0%
Coal	1,610,692,272	2%
Crude oil	4,957,579,806	7%
Gasoline	1,346,377,680	2%

Table 8 Key export in 2010 from Vietnam
Source VN GSO

In terms of local leverage all three sector are significantly contributing to employment an income generation at smallholder farmer level as shown in the table below.

Product	Total plantation in 2010 (ha)	Households	Direct beneficiaries
Cashew	340,300	170,150	680,600
Pepper	44,400	22,200	88,800
Cocoa	17,687	8,844	35,374
Total	402,387	201,194	804,774

Table 9 Plantation area, households and beneficiaries Vietnam

Source: VN-GSO (with reporter calculation on the assumption of 4 person/household on average)

All targeted sub-sectors are typically smallholder farmer sectors, to certain extent also linked to SME level enterprises indicating a high potential to contribute to local income and employment generation leading to reduced poverty and improved livelihoods. Yet, in all three sector former state-owned enterprises, currently being transformed (parastatal) play a dominant role.

For all three sub-sectors raw material is in shortage and imported, particularly from sourcing areas in West Africa. This creates dependencies and increases vulnerability of the sector as the supply of raw material is volatile to prices in the world markets.

The major economic base-line figures for all three targeted chains are given below:

	Cocoa	Cashew	Pepper
Current production area in hectares	6,736	372,000	50,500
Current export volume	4,873ton	289,900ton	116,000ton
Current export value (estimates 2011)	\$12,746,695	\$ 1,257,830,000	\$470,000,000
Growth export value (2001/2010)	122%	26%	21.8%
Number of SMEs active in the chain (estimate)	250 ⁷	>1,500	>500
Estimated percentage of export market share by combined SME sector	10% - 15%	60%	40-50%

Table 10 Baseline economic figures Vietnam

Other actors and potential for developing an integrated programme

	Cocoa	Cashew	Pepper
Business Support			
Export / trade support offices	Vicofa	Vinacas	VPA
Services rendered by those offices (vision, mandate, portfolio of services)	Trade fair, client information (rarely don)	Market information, market linkage, ad-hoc support	Market information, market linkage
Potential partners			
Other sub-sector / chain support organisations and projects / programmes	DARD, Cacao association, VCC, ACIDI/VOCA, Helvetas, WWF, IDH	DARD, Cashew association, GIZ	DARD, Pepper Association, IDH

⁷ Estimated number of SME level fermenting / trading companies approximately 150. Estimated number of SME level exporting companies approximately 100.

Intervention level, scope and activities of those support projects	VCC: support establish Cocoa association, ACDI/VOCA: Promotion of Cocoa plantation, IDH promote sustainable production WWF and HELVETAS in VC development and sustainable production	-	HDI-promote sustainable production in compliance with international sustainability standards
Opportunities for synergy with future CBI export promotion programme	Market linkage, establishment of Cocoa association and follow up support. Setup contract farming system, support to producers in sustainable production	Capacity building for Vinacas in international trading and promotion	Capacity building for VPA in international trading and promotion

Table 11 Potential actors Vietnam

For all three targeted chains, government linked commodity organisations are the major potential partners for future CBI export support programmes. As the identified challenges in the chain concentrate to large extent in the lower parts of the chain (production volumes and quality, non-coordinated / irregular supply, also the Ministry of Agriculture (MARD and provincial line department DARD) and its line agencies would need to step-up efforts to improve production levels (quality and quantity) by technically supporting producers.

Access to financial services is another crucial aspect in the overall improvement of the chain performance. Also in this sense the government of Vietnam is operating special programmes making available cheap loans and credits (through the Bank for Agriculture and Rural Development or the Departments of Industry and Commerce).

2.1. Cacao - Vietnam

1.5.1. Economic importance – Baseline

In 2008, MARD approved the project of Cocoa development for Vietnam till 2015 and a strategic vision till 2020. The target is that as per 2015 Vietnam will have 60,000ha of cocoa, increasing to 80,000ha in 2020 of which 35,000 with an average production of 1,5 ton/ha by 2020. However, until now, the take up of cocoa plantation is not according to expectations as farmers are still reluctant to invest due to lack of information and capital. Mr. Nguyễn Văn Hòa, Vice manager of VCC expressed his opinion that the main reason for slow uptake by farmers is that many provinces/districts still wait for a support project of the government or NGOs. Further to this, many provinces have not yet include cocoa into their planning by identifying specific targets and developing support structures and mechanisms.

According to the figures the ICCO regarding the world cocoa production, Vietnam is even not in the statistical scope of ICCO because of its low production (4,783 tons in 2011, around 0.1% of world production). According to the statistics of the National Agricultural Extension Department, 92% of cocoa production is exported under the form of dried fermented beans.

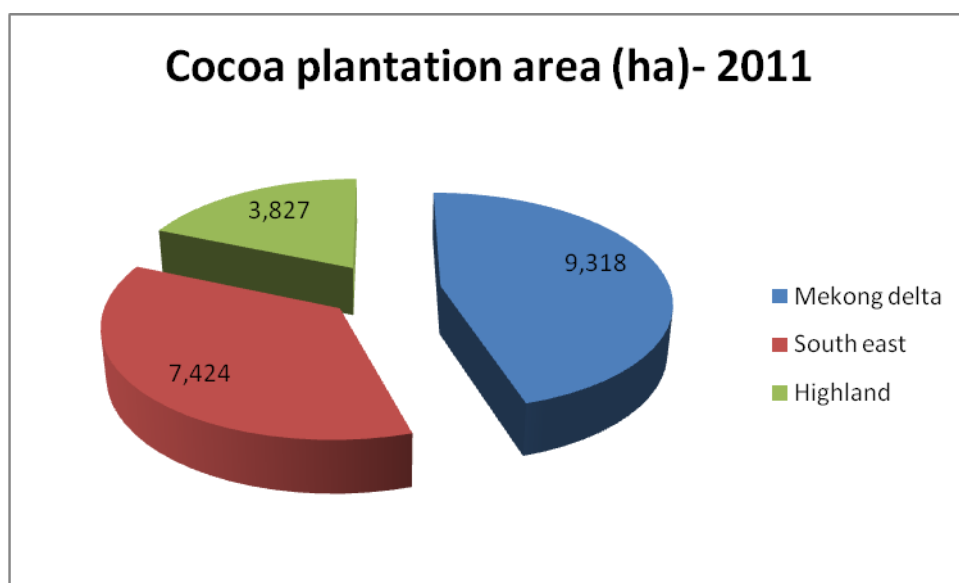


Figure 3 Vietnam cocoa plantation area 2011

The cocoa sector in Vietnam is still in a nascent stage but holds a feasible development potential according feasibility studies carried out by MARD. There are more than 300,000ha of land that are suitable for Cocoa plantation. Competition in the global market (including exports to Europe) will come particularly from the cacao strongholds in West Africa.

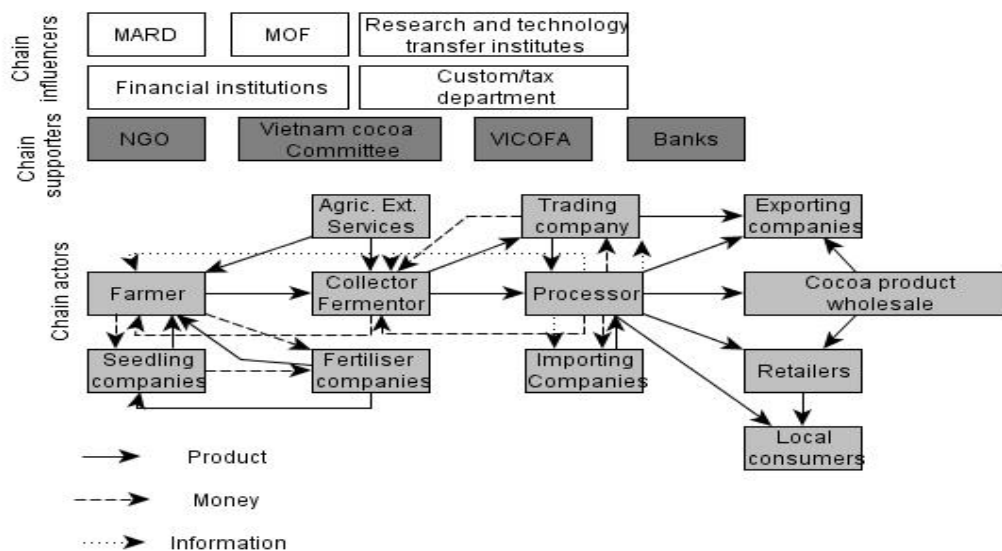
As the cacao sector in West Africa struggles with public outrage about scandals in terms of workers conditions, particularly the epidemic use of child labour, chances for alternative sourcing grounds are increasing, conditioned that those supply areas can assure socially responsible behaviour (pers. com. importer).

Figure 1: Production of cocoa beans (thousand tonnes)						
	2007/08		2008/09		2009/2010	
Africa	2693	71.8%	2518	89.9%	2458	68.0%
Cameroon	185		227		190	
Côte d'Ivoire	1382		1222		1242	
Ghana	729		662		632	
Nigeria	230		250		240	
Others	166		158		154	
America	469	12.5%	488	13.5%	522	14.4%
Brazil	171		157		161	
Ecuador	118		134		160	
Others	180		197		201	
Asia & Oceania	591	15.8%	599	16.6%	633	17.5%
Indonesia	485		490		535	
Papua New Guinea	52		59		50	
Others	55		50		48	
World total	3752	100.0%	3605	100.0%	3613	100.0%

Source: ICDO Quarterly Bulletin of Cocoa Statistics, Vol. XXIV, No. 4, Cocoa year 2009/2010

Figure 4 Production of cocoa beans Vietnam

1.5.2. Value chain



Value Chain 1 Cacao Vietnam

The most evident direct beneficiaries to the CBI in a future cacao export support programme are the wholesalers, exporting companies and commodity based federations like the Vietnam Cacao Committee.

Most exports are situated in HCMC or its vicinity with some processors annex exporters situated in the major production areas (Binh Phouc Province). Export is dominated however by Cargill, claiming approximately 70% of the exported volume and two bigger Vietnamese firms. SME level exporters compete with those companies for supply and market share, capturing currently only 10%-15% of the cacao export market.

Above all, cacao is a lucrative product for farmers as well as for processors / exporters which explains both the fast expansion of the acreage of cacao in Vietnam as well as the imports from Africa and re-exports practices by exporters.

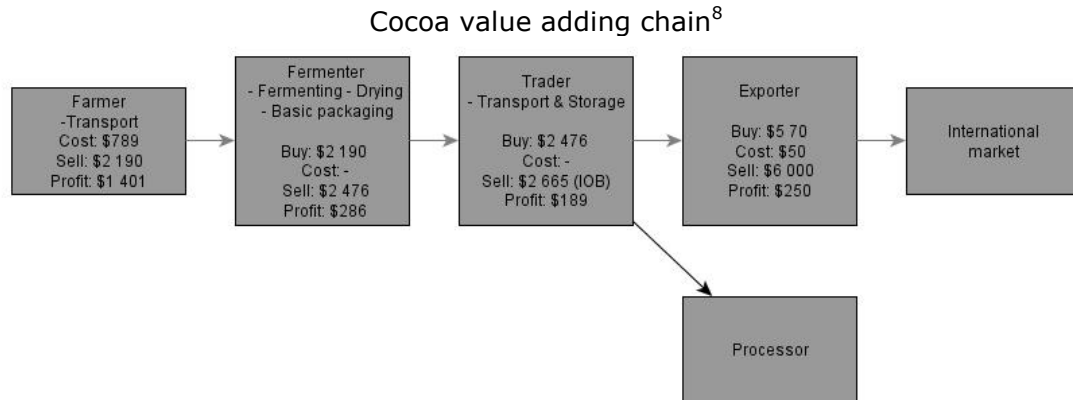


Figure 5 Value adding Cocoa Vietnam

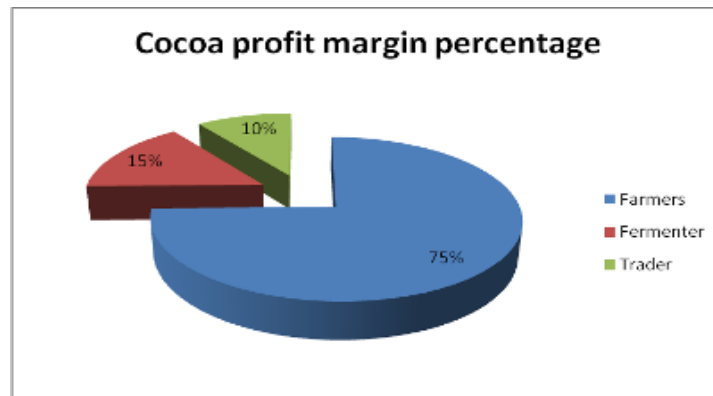


Figure 6 Cocoa profit margin

1.5.3. Chain actors and their functions

Direct chain actors

Farmers: Since 2003 farmers in Ben Tre started their first cocoa plantation at a very small scale. From 2004 onwards, there were many promotion programs either by the government or cocoa companies and the cocoa sector established more firmly in Ben Tre. From couple of hectares in 2003 intercropped with coconuts, there are currently more than 17,687 hectares planted. It takes 5 years for cocoa to mature with stable yields. Every year farmer will collect cocoa pods from November to April. With one hectare of mature cocoa, farmer will get from 2-3tons of pods (fruits). Yearly investment of farmers is fertiliser (NPK) (200, 400, 600grams/tree in year 1, 2 and 3 respectively and 1-1.5kgs /tree from year 4 and 5 onwards). On top of this, cow manure is required of 10kgs/tree for the establishment and 5kgs/tree for the following years. In addition to this, every year, farmer will invest in about 60-80 labour days depending of the plantation model (intercropping or mono-cropping)

⁸ This calculation basing on general practice where farmer's yearly investment is about 36% of their cocoa selling price. Farmers are selling at \$2190/ton, Fermenters sell \$2,476/ton and traders sell \$2,665- basing on average November 2011 price. Fermenting and trading often is combined within one company thus adding up profit margins for both activities.

In recent years, farmers have received a lot of support from seedling companies, processing companies (Cargill, Pham Minh...), NGOS (ACDI/VOCA, Helvetas, and WWF) in technology transfer. Farmers are trained with agronomy and harvesting techniques to improve the yield as well as cocoa quality.

Farmers however still have limited knowledge of pest and disease control. Pest control is rare. When farmers see pests or disease spreading they only then start to find out how to treat to their trees or use chemicals based on their experience which is limited causing mis- or over-use of chemicals affecting the quality and yield of the produce.

Because cocoa is not ripening at the same time but in a period of 2-3 months, farmer harvest and bring the pods to collection stations to sell on a weekly basis during harvest season. There is no existing agreement or contract between farmer and any buyers. Farmers will call around collection stations to check prices and sell to the buyer they feel more comfortable with (short distance of transportation, higher price, acquaintance/friendly collecting station).

The average price of pods in 2010 is around 4,500 to 4,600VND/Kg when farmers transport the pods to collecting station. Many farmers complain that they have to harvest and transport pods weekly in a small amounts which is not cost effective for them.

Last but not least, market fluctuation is quite a challenge to farmers. The world demand and pricing of cocoa decide the whole picture of cocoa planters. When the price comes down, trading companies buy cocoa with low price from farmers and stock to wait for the price to come back to normal levels. So in the value chain, only farmers are affected by the fluctuation of prices as they lack storage capacities.

Cocoa seedling companies: There are many cocoa seeding companies providing seeding to farmers. At the moment there are about 8 provenances (clones) approved by MARD which are distributed throughout cacao growing areas of Vietnam. The most preferred provenance is TD8 and TD9 which farmers confirm delivering good yields and being resistant to pests and diseases. There are about 50 companies producing cocoa seedlings. Most of them are existing nursery companies in rubber, coffee, pepper and fruits. Most of these companies were initially, from 2004 onwards, supported by the First Alliance project (ACDI/VOCA) in an effort to promote the plantation of cocoa in Vietnam for the first time.

According to a study of MARD, cocoa seedling companies are largely lacking quality assurance system. There is no formal certification system for these nurseries and companies are struggling to setup their own quality control system. There is no connection with farmers in terms of their plantation plan so it is quite hard for most seedling companies to have their nurseries prepared up to the need of local farmers. Good seedlings are from 4-6 months old so within this window it is quite hard for nursery companies to plan their seedling production according to farmers' demand without advanced notice of such demand. There are some companies that sell seedlings to farmer with the purpose of buying cocoa pods from those farmers once the seedlings mature. These arrangements are conducted without contracts between farmers and these companies. The only effective controlling is building trust with farmers by providing farmers technologies thus building a good relationship with farmers and offering a competitive buying price at harvest.

A current trend is that nursery companies are even further integrating their seedling provision into the value chain by providing seedlings, input materials, technology transfer (training) to farmers while offering farmers a secured market. This model requires a long term planning as well as a lot of capital which is quite a challenge to SMEs.

In recent years the cocoa plantation is developing so fast that the demand of seedling is higher than the offer resulting in nursery companies using unidentified planting material which brings back low production for farmers. This practice has affected the trust of farmers and has hampered the further development of cocoa plantation in some areas.

Fertiliser companies/retails: There exists an effective distributing system of fertiliser companies from factories to retailers reaching virtually every community in Vietnam. These companies generally use leaflets to recommend farmer which type of fertilisers and preferred amounts are suitable to their crops. There exists a common practice to provide fertiliser on a (in-kind) credit basis to farmers, credits being deducted from the buying price during harvest. Many fertiliser companies have their own extension workers that provide guidance to farmers or cooperatives. These extension workers organise community meeting to promote their products and provide on-the-spot guidance of usage of fertiliser. The fertiliser companies also give out free fertiliser to some selected key farmers (who could have influence in the village) to run pilots for a couple of years as demonstration to other farmers.

The fertiliser companies have great influence on the yield of cocoa if they do their job well because most of farmers are still reluctant to invest in fertiliser for their crop because fertiliser is a big investment for farmers and they still doubt about the correlation between proper use of fertiliser and increased yields.

Collection stations/collectors - Fermenter: Around the cocoa planting area, there are many collection stations which are also fermenters of cocoa beans. When buying cocoa pods from farmers, these pods need to be kept in storage for 7-8 days before the beans will be taken out of the pods manually and will be kept in wooden boxes for 6-7 days (depending on temperature) to ferment. These fermented beans need to be shuffled every 48 hours for 7 days. Thereafter, the cocoa beans will be dried out in the sun for another 6-7 days. The total process from buying cacao pods from farmers to having fermented beans for re-sale takes about 20-22 days.

Daily, the collectors will receive updated from frequent buyer (companies) on buying price by telephone. So within these 22 days (of buying pods and fermenting cocoa beans) these collectors have to take the risks of price fluctuation.

10kgs of pods produces approximately 1 kg of fermented beans. In mid-November 2011, being interviewed on spot, many collector said they are buying cacao pods at 4,500- 4,600VND/kg meanwhile their frequent buyer is buying at the price of 52,000VND/kg for fermented cocoa beans so they will make about 10-13% profit. Regarding the fact that the process is done without many external inputs and merely through family labour, the profit margin is reasonable to good.

Local fermenters / traders are merely small companies, the majority not having prior export experience.

Domestic trading companies: There are more than 100 trading companies (SMEs) engaging in the export trading of cacao. These companies mostly receive orders from processing companies or simply engage in buying and stocking cocoa

beans and making a profit by the fluctuation of the market. These trading companies often offer buying price to collectors/fermenters on a daily basis using the international market price, local prices (current offer of local traders) and their own estimates of future price developments. There is hardly any contractual relationship between traders and collectors/fermenters. As a matter of fact, there are many buyers in the market with little commonly accepted price benchmarks, making the markets complicated and risky. To mitigate risks, traders use trade arrangements based on experiences in the coffee trade, such as stocking, outright contract and price-to-be-fixed contracts.

- Stocking: traders will listen to world market trends, estimate future price developments then buy (when they predict low prices) and stock fermented cocoa beans to wait for price to go up. This arrangement requires traders to have large capital and involves high risk and above all requires experience in /knowledge of cacao markets.

- Out-right contracts: traders contract buyer with a fixed price and fixed delivery time. The price will be the same regardless the change of market price up on delivery time. Again, risk is high for the trader as markets are volatile. Experience is a condition!

- Price-to-be-fixed (PTBF) is a contract that allow the seller and buyer to mutually 'fix the price' in a certain time in future before delivery or receive of cocoa. Buyers and sellers will agree about quantity, quality and delivery month only. At times price benchmarks (minimum, / maximum) are set based on certain percentages of the global market price (London) at time of delivery. The final price is adjusted based on quality characteristics (lower than standard, 'minus' will be applied and in case premium quality a "plus" is applied).

Most of trading companies are relatively small (10-30 employers) and have the difficulties in assessing commercial loans against affordable interest rates. Current commercial rates (20-24%/year) are perceived to be too high. Moreover, most banks required collaterals which most of traders don't have.

Limited experience in international trading of cacao and limited knowledge of the cacao market leads to sub-optimal management and decision making at enterprise level. This category of enterprises is generally not certified.

Processing companies: There are not many cocoa processing (beyond fermenting) companies in Vietnam because of the high investments required. The production of cocoa in Vietnam is not yet sufficient to allow for such large investments. The operating processing companies have their own agents in different areas to buy fermented cocoa from collectors/fermenters. Currently it is a mix of domestic processing companies and international companies buying engaging in semi-processing of cocoa beans like VinaCacao, Vinamilk, Olam, Armajaro, Touton, Mitsubishi, Dakman, Phạm Minh, Thảo Ly. The companies mainly buy cocoa beans for exporting.

There are only very few companies grinding cocoa to sell (export or local confectionary factories) or produce their own end-products (chocolate, candies, butter) such as Pham Minh, Trong Duc, Vina cacao, Trong Dat, mostly for the domestic or regional market. Only Grand Palace has its own chocolate factory in Vietnam but most of it input cocoa is imported. With the short fall of suppliers (cocoa beans) the processing companies also have to import cocoa to fulfil their contracts. The food processing sector still imports cocoa powder up to 180 million dollars for their production to compensate for domestic supply shortages.

Cargill: Cargill holds a dominant stake in the cacao sector in Vietnam. According to the interviewees, Cargill is buying approximately 70% of cocoa in Vietnam.

Cargill has established many cocoa buying stations in cocoa planted areas and is buying fermented cocoa beans. At Cargill's buying station, cocoa price are published at a daily basis. Cargill buys from fermenters and trader without a contract, although Cargill has been supporting more than 5,000 farmers and many fermenters with training in cocoa plantation and fermenting techniques.

1.5.4. Chain supporters and their functions

Agricultural extension services: Most of the agricultural extension services are from Department of Agricultural and Rural development. These public services mostly help farmers through government programs or international development programs. In most cocoa planting provinces, ACDI/VOCA has done many training of trainers for these extension services. However, at the end of the project (external financial support), the extension activities to cocoa farmers largely ceased or continued at limited levels of monitoring and reporting to relevant departments. But in the past years, these extension services have contributed greatly to the development of cocoa in Vietnam due to its local large network from provincial level to the commune levels.

Farmer Unions: The Vietnam Farmers Union (VNFU) is a socio-political organisation of Vietnam peasantry and has the function to protect the right and legitimate interests of farmers. The farmer unions offer various types of support to farmers in rolling out cocoa plantation in the target provinces, mostly through donor supported projects. The activities of Farmer unions in cocoa subsector remain at the level of promotion of cocoa plantation but not yet to the level of marketing or collective action in the cacao chain.

Vietnam Cocoa coordination committee: Established in 2005 under the Decision no 803/QĐ-BNN-NN. VCC the committee has been active in coordinating all cocoa promotion activities in Vietnam. Most interviewees replied they don't know what kind of support the VCC delivered so far, only some big companies said they benefited from VCC in terms of information on trade fairs.

Vietnam coffee and Cocoa association (Vicofa): Has the function of a sector or commodity board, mobilising all relevant organisations in coffee and cocoa sector, to create a stable network for sector coordination and promotion purposes. The objective of the Vicofa is to enhance the product quality and the competitiveness of the sector in the global markets. However, Vicofa has not yet emphasised much on Cocoa subsector as volumes and economic value are still marginal as against the coffee sector.

NGOs: Acdi/Voca, Helvetas, WWF have been active in promoting the plantation of cocoa for Vietnam since 2004. Without the support of mentioned NGOs, the cocoa sector in Vietnam would not have been at current levels. Particularly ACDI-VOCA has been instrumental in helping farmers to grow cocoa (technical transfer and seedlings provision). ACDI/VOCA is extending its interest in assisting other chain actors as in the past support was limited to directly engaging at production levels only.

1.5.5. Chain influencers and their functions

MARD: Vietnam is a country in transition but is still very much characterised by a planned economy. MARD has a great influence in the choice to develop and/or invest in any kind of agricultural product. With the support of MARD, Vietnam became the biggest coffee exporter in the world within 10 years' time. Following similar strategies MARD now has the ambition to make Vietnam the leading country in global cocoa production. This ambition is mapped out in MARD's plan

for the development of a sustainable cacao sector (vision 2020 stipulated in the decision 2678 /QĐ-BNN-KH issued on 14th September 2007, in which 60,000ha of cocoa will be planted till 2015 with 35,000ha in production of 52,000ton/year and 80,000ha in 2020 with 60,000ha in production of 108,000ton/year). MARD assigned the Planting Department of MARD to take the lead in has allocated 40billion VND (\$1.9millions) for this program till 2015 with the priority for the following activities:

Items	Budget (x 1000)	Budget source funding
1. Planning cocoa development till 2015 with vision till 2020	1.000	National (from planning source)
2. Finalising technology process in propagation of seedlings and building cocoa seedling standards	400	National(from science technology)
3. Building agronomy manual for cocoa in different ecology	200	National(from science technology)
4. Building of pre-processing cocoa bean techniques and commercial cocoa bean standard	400	National(from science technology)
5. Selecting cocoa provenance	5.000	National(from science technology)
6. Multiplying cocoa seedlings	15.000	Province budget, organisation, individuals
7. Promotion and extension of cocoa plantation	18.000	National and international outsource
Total	40.000	

Table 12 MARD's strategy

DARDs: Following MARD master planning, DARDs in provinces issue their decisions in development of cocoa with specific targets (hectares, time line, production, assignation of actor and supporters...). In this sense DARD functions as implementing agency to MARDS plans for the cacao sector.

1.5.6. Bottlenecks of the value chain

Identified constraints in the value chain as given in the figure below, are within reach of improvements on the short/midterm and some clearly lie within the reach of the CBI. It is expected that CBI support could significantly contribute to improving the functioning of the export chain and lead to a tangible increase of the export of cacao to European markets.

Macro level

Although cocoa is developing quite fast in the last years, the Vietnamese cocoa sector is still in a nascent stage. Plantation is triggered mainly through investments by donors and international companies. In fact Vietnam has not yet an over-arching strategic development plan for the cocoa sector that goes beyond expansion of production areas and targets for export volumes only.

The availability of such a master plan that can lead the further development of the sector is regarded as essential for developing a sustainable, market oriented cacao sector in Vietnam. With the current situation, whether or not targeted 100,000ton/year in 2020 will be feasible, depends on many factors in which the role of the government policies are most crucial and decisive.

With this, on the macro level, it is recommended that government should set up a legal framework for coca development toward exporting including quality control, post harvesting storage, promotion the capacity development of cocoa value

chain actors (farmers, collectors, fermenters, local processors etc.) and set up the system of monitoring and quality control and clear guidelines for exporting cocoa.

The world market and especially EU market is changing its trends to sustainable production rather than low-end products so Vietnam, in its early stage, can plan its cocoa industry towards sustainable production from the very beginning.

With its early stage of development, Vietnam need a lot of international support in terms of master planning toward sustainable development, producing clean and green (low carbon) products throughout the cocoa value chain with focusing on key actors such as farmers, fermenters, processors, technology transfer services, BSOs, etc.

Macro bottlenecks in the chain

Bottlenecks identified	Critical? (y/n)	Risk for bottleneck non-removal on short term? (H=hi, M=med, L=low)	Proposed solution: Possible CBI's intervention
Development target identified but not backed by a due strategy for sustainable development of the cacao sector	Y	M	External support to develop a national strategic action plan for sustainable cocoa development
Cocoa industry finds itself in early stages of development requiring substantial external support	Y	M	Promotion of Cocoa development: National conference and media coverage on cocoa potential.
Need to develop a standard agronomical manual for cocoa plantation in different agro-ecological zones	Y	L	Connecting /facilitating the connection to experts in cocoa to develop these manuals,

Table 13 Macro bottlenecks in the cacao chain Vietnam

Meso level

As in its early stage with low production, a separate Cocoa association has not yet been established, the support from VCC (government) and Vicofa (with its focus on coffee) is still limited so Vietnam Cocoa sector is struggling itself through its starting phase. It is the wish of cocoa players that they have their own association with specific activities directly supporting the cacao sector going through the start-up phase. At the meso level, there are many local organisations involved in the development of cocoa sector but they still lack coordination, due

funding and sufficient capacities to effectively assist the enhancement of the sector.

Meso bottlenecks in the chain

Bottlenecks identified	Critical? (y/n)	Risk for bottleneck non-removal on short term? (H=hi, M=med, L=low)	Proposed solution: Possible CBI's intervention
Lack of coordination between actors at meso level due to not having own commodity association.	Y	M	Facilitating/support the establishment of Cocoa association
Not having main support focus to cocoa members because most members are involve in coffee	Y	M	Facilitating/support and mobilising VICOFA to separate cocoa subsector and help to establish Cocoa association
Need further funding for cocoa promotion and follow up cocoa development in targeted regions	Y	L	Sourcing for external funding cocoa development project with connection to EU importers. Could be investment of EU cocoa importer for sustainable source of cocoa.
In need of promotion of direct export to EU	Y	M	

Table 14 Meso bottlenecks in the cacao chain Vietnam

Micro level

Further expansion of the cacao production areas is crucial to the development of the sector. This requires direct involvement of farmers in targeted production areas. The key constrain of farmers for the development of cocoa sector are:

- Lack of market knowledge and entrepreneurship: farmers are largely market illiterate and face problems in assessing profitability of moving into cacao. Or in another word, they do not see how they can make money out of cocoa plantation until they see their neighbours doing so. This can be addressed through promotion programs and demonstration plantation using lead farmers.
- Lack of plantation technology and good planting material: pre-condition to further development of the sector is the use of selected seedlings, appropriate plantation techniques (mostly embedded in seedlings selling companies), and due harvesting and post harvesting technology. - Lack of establishment capital: the initial investment in cocoa plantation is quite high for farmers and it takes at least 4 years before stable returns can be expected. This is quite a big constraint to the development of cocoa sector as farmers lack access to affordable credit facilities. This constrain can be addressed with an advanced contract farming system which involves famers, investors (could be interesting for DFIs – Development

funding institutes), cocoa trader/buyers, local authorities, farmer union (acting as production organiser), cooperatives.

Micro bottlenecks in the chain

Bottlenecks identified	Critical? (y/n)	Risk for bottleneck non-removal on short term? (H=hi, M=med, L=low)	Proposed solution: Possible CBI's intervention
Lack of capital for initial investment in plantation	Y	H	Linkage to financial institution/develop cocoa development fund
Lack of technical knowledge on effective pest and disease control	Y	M	Strengthening extension services in cocoa sector/support them in providing services when the market is not strong enough for extension service to sustain themselves financially.
Lack of market information: cocoa price are highly volatile and profits can depend on day's margins.	Y	M	Need for up-to-date pricing information system accessible to traders, fermenters and buyers
Lack of established trade relations hampers predictability and stability of supply	Y	M	Development of contract farming system between processor and farmers of producer organisations
Lack of importer on international market demands incl. EU market	Y	M	Market linkage activity: trade fair, information network
Lack of capital for stocking	Y	H	Linkage to financial institution/develop cocoa development fund
No support from association	Y	M	Establish Cocoa association
Slow uptake of new plantations hampers further expansion of cacao production area	Y	M	Promote plantation and production of cocoa via project of cocoa development

Table 15 Micro bottlenecks in the cacao chain Vietnam

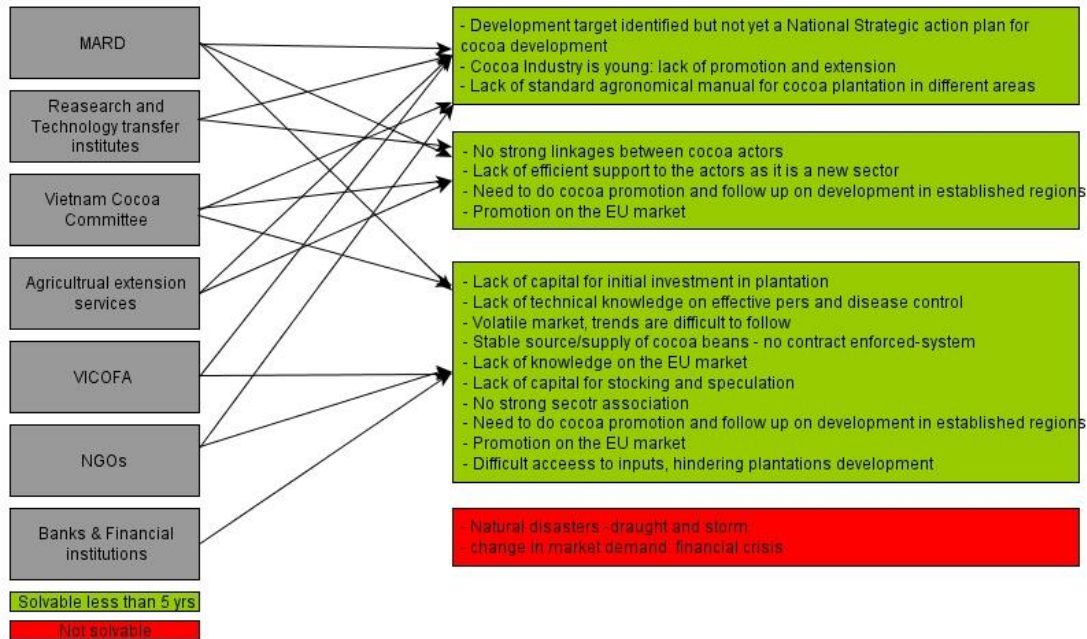


Figure 7 Constraints mapping Cacao

1.5.7. Conclusion Cacao

Compared to the other chains (pepper, cashew) the cacao chain is still in a nascent stage, while showing good (economic) potential and a high level of local economic leverage (income for smallholder farmers). The fact that the cacao is not a well-established sub-sector yet has both, advantages and disadvantages in the framework of a future CBI support programme. The advantage lies largely in the impact a well-targeted CBI support programme could have on the further development of a sustainable export oriented export sector for cacao. In an emerging sector like the cacao sector standards, benchmarks and value chain / trade relations and linkages still have to be largely developed. The opportunity to contribute to, and guide the further sub-sector development is significant larger than in an already well-established sub-sector in which standard, quality benchmarks and (market) linkages are already set. However to effectively intervene in the cacao sector well aligned coordination with government agencies and with other development partners focusing on the basis of the value chain (input supply, production, supply arrangement) is necessary. Without such multi-stakeholder buy-in, the CBI will not be able to trigger or facilitate major changes to the sector as its mandate (export promotion) and means and scope of operations (budgets, number of clients) is too limited. Synergy and complementarities are a prerequisite for entering the cacao sub-sector.

The cacao sector in Vietnam is at a crucial phase and at cross-roads. It is required to grow in order to have sufficient volume to allow for a supportive environment and to gain continued government support, at the other side it should not fall into the trap of becoming the next low value bulk commodity in Vietnam. Trough targeted intervention further development of the cacao export chain could be steered towards sustainable and quality production rather than developing another bulk commodity sector.

The dis-advantage is obvious; in an emerging sub-sector the levels of investments in capacity building and establish effective trade linkages will be significantly higher.

In terms of volume, expected increase in exports and client choice, the sub-sector its due to its small size limited. Moreover, some big players dominate the export sector (Cargill alone captures 70% of overall exports). In order to safeguard the continued presence of a vivid SME sector, investing in the competitiveness of the SME sector is crucial. If not the SMEs will face a cumbersome future and/or abandon the cacao sub-sector.

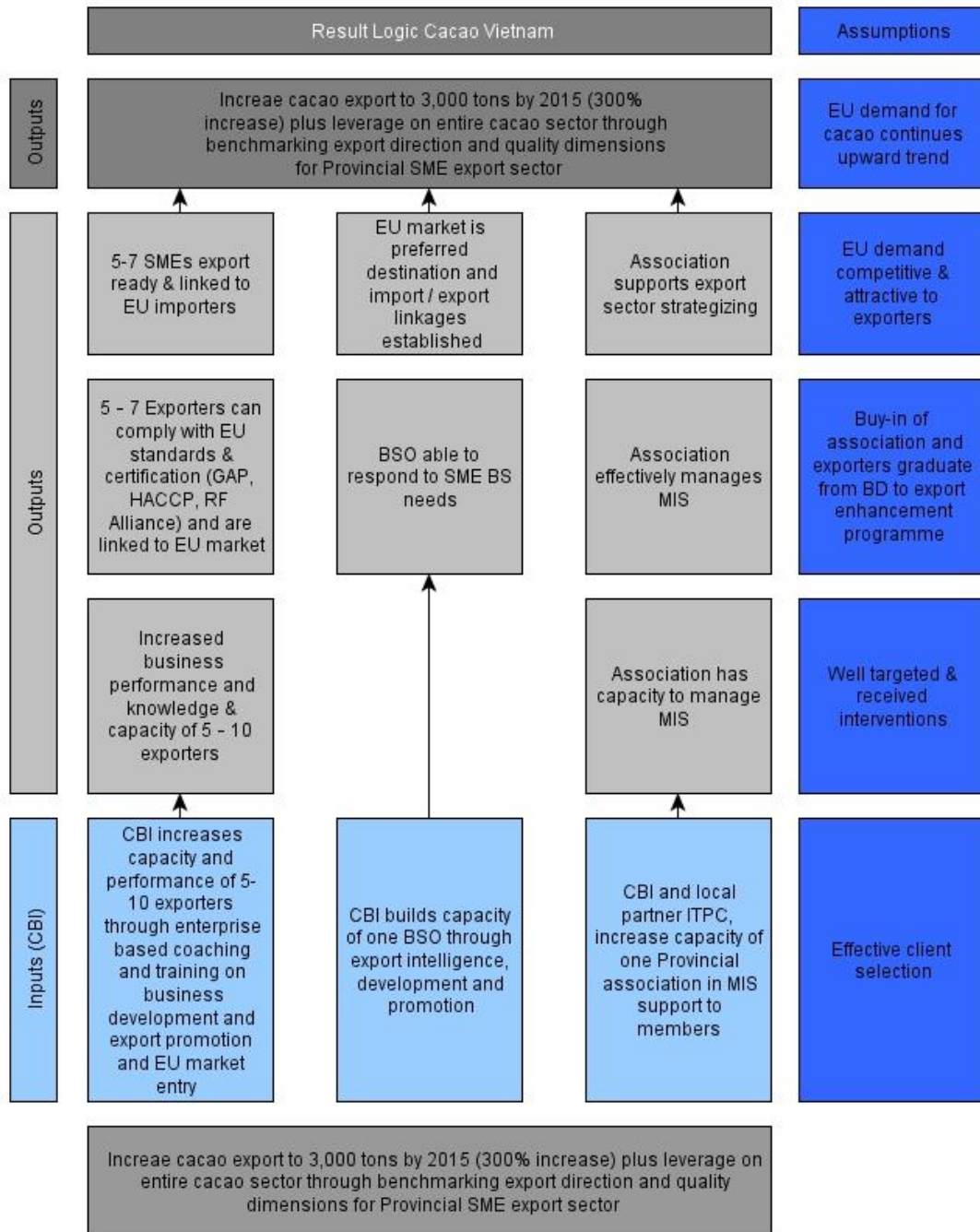
Its recommended to start up a programme focusing on certified cacao. At this moment around 10 companies (processor – exporter) companies are already UTZ certified and the number of certified growers and processors/exporters is growing.

Cacao - Vietnam

	Indications	Comment	Ranking
Potential EU export	Good on short/mid term	EU export figures are increasing, growth market.	2-3
Sustainability	Reasonable, no major issues	Perennial crop, often inter-cropped, no intensive use of chemical inputs (yet). Raising awareness about sustainability issues, UTZ/Rain Forest Alliance increasingly certifying at production / export level.	3
Local leverage	Good	Typical smallholder crop providing good income to farmers	2-3
Presence of SMEs	Low	SMEs operate in the shade of big inter-national companies (particularly Cargill) and hold 10-15% of export shares only.	1-2
Partnerships	Good	National and Provincial government eager to support the sector. Internationally Acdi-Voca, WWF, Helvetas, Solidaridad and, Tropical Commodity Coalition and IDH are potential partners.	2-3
BSOs	Low	The ITPC could assist the sector but needs internal capacity.	1-2
Attribution	Moderate	Major constraints at production level, yet additional support in market development / export capacity is required	2
Other issues		Sector at cross-roads, SMEs need support in order to make a shift to more sustainable production.	

Total: 18

Table 16 Chain evaluation



Result Logic 1 Cacao Vietnam

Pepper - Vietnam



1.6. Pepper - Vietnam

1.6.1. Economic importance – Baseline

The international (black) pepper market is highly volatile. Since 2006, pricing is playing an important role in total exporting value, not volume. 85% pepper export from Vietnam is in crude pepper.

In 2010 the global production of pepper for export has decreased to a record low of 218,100 tons, a decrease 10.23% in comparison to 2009. This has pushed the price of pepper to historical high prices in 2010. According to National Custom Department, Vietnam exported 116,500 tons of pepper with the total value of \$419.2 million. Comparing to 2009, the Vietnam pepper export decreased by 12.1% in volume but increase 21.8% by value.

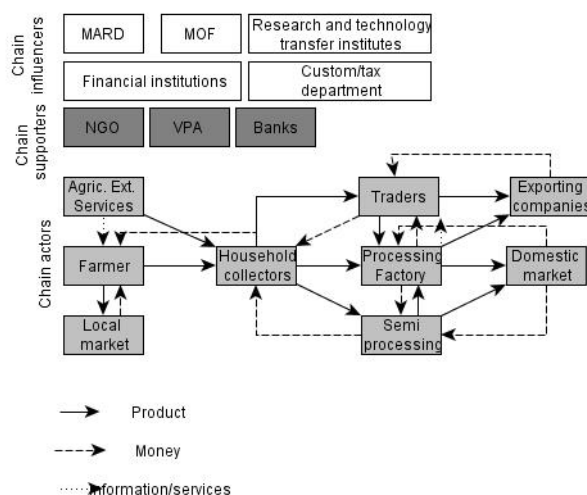
Against an export value of \$420 million in 2010, Vietnam paid \$65millions to import pepper. In comparison to 2009, the total export value increased by 21.8% but the costs for importing pepper increased by 180.3%, affecting the profitability of the sector heavily! However, due to global shortage and sky-rocketing prices on the global markets overall profitability in 2010 still increased. The Ministry of Industry and Trade, estimates export of pepper from Vietnam at 120,000 ton in 2011, comprising a total export value of \$470 million.

Overview of pepper export over 5 years

Year	Plantation(ha)	Production(ton)	Export(ton)	Total exporting value (\$million)	Average price/\$ton
2006	48,500	80,000	116,600	195	1,671
2007	48,500	90,000	82,900	286	3,200
2008	50,000	98,000	90,000	310	3,300
2009	50,500	108,000	134,000	348	2,599
2010	51,500	110,000	116,000	421	3,629

Table 17 Overview pepper export Vietnam
Source: VPA – 2011

1.6.2. Value Chain



Value Chain 2 Pepper Vietnam

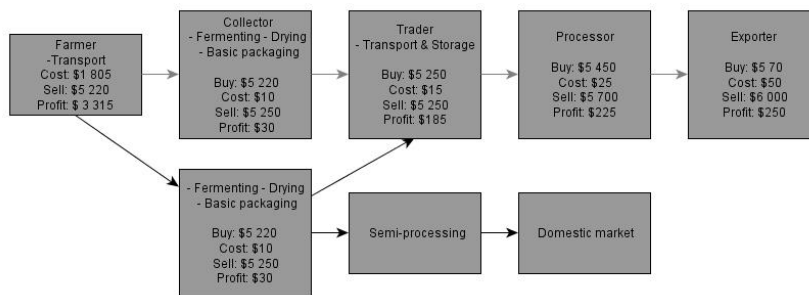


Figure 8 Pepper Vietnam value adding chain

1.6.3. Chain actors and their functions

Direct chain actors and their functions

Farmers: Investment in plantation is a big challenge for farmer because pepper starts producing only 4 years after planting. For the first 3 year farmers have to invest about \$13,000 for 1 ha with 1,100 pepper vines. With 1hectare, farmer can harvest an average of 2 tons of pepper per year. Most pepper growers sell pepper within 2 to 3 months after the harvest. Harvesting time of pepper in Vietnam is from January to May. Main reasons for not storing pepper for longer periods after harvest are the need for cash to back family expenses, debt re-payment for recent investment in pepper plantations as well as the need for capital to invest in plantation expansion. Other reasons mentioned are the fact that farmers do not have proper storing facilities and are afraid of the risk connected to speculating on increasing prices. Farmer households that stock pepper over 3 months are often rich, middle-income households or households having incomes from other agricultural and non-agricultural activities. In recent years, pepper planters have faced severe diseases with limited or no support from extension services. Furthermore there is a great difference in the yield of pepper between households and between regions (from under 1 ton to 4 tons/ha) due to differences in applied technologies and management practices.

Household collector: Pepper growers do in general not sell directly to wholesaler agents or export enterprises but mainly to local collectors (private traders). The pepper price is decided and agreed by buyer and seller, depending on the market price at times of transaction, bulk density and moisture content of the peppercorn. In some areas such as Xuan Loc district of Dong Nai province, Chau Duc district of Ba Ria-Vung Tau province and most recently Chu Se district of Gia Lai province, black pepper has been processed to make pepper kernel for selling to collectors and local markets. Household collectors are advantaged over wholesaler agents because they can reach out to remote areas to collect and bulk.

Traders/wholesale: There are more and more pepper growers who want to sell their product to wholesaler agents directly; pepper selling can take place at wholesaler's place or at farm gate. However, the volume of direct sale to wholesaler agents is still limited (22% of production), compared to sales to local collectors (78% production) at farm gate.

In fact, prices gap between collectors' intake and that of wholesales is not big, often around 80-100VND/kg. Growers indicate their preference for dealing with wholesalers not by price difference but by having more trust in a fair treatment by wholesalers in terms of determining quality and weight of product.

Household collectors often sell their collected pepper to wholesaler agents within the same day or several days after collection; few traders stock to wait for better prices. Whenever a trader/wholesale needs a large volume of pepper, he/she will provide a cash advance to household collector to collect / bulk pepper on his/her

behalf. Default by local traders is common, mixing high quality pepper being graded by growers with bad pepper being bought at lower prices before re-selling to agents. Quality control mechanisms including rewarding of high quality with premium prices are an urgent need.

Trader/Wholesale normally have storing facility that can stock tons pepper depending on the pepper plantation area and their finance capacity. These traders often have direct contracts with processing factories or pepper trading-exporting enterprises. Pepper collected from traders or producers is handled in two ways, either being sold right away to processing factory/enterprise on a profit margin of around 5-10%, or semi processed through sun drying lowering the moisture content below 14%. When selling semi-processed pepper, wholesaler agents gain about 7-10% profit.

The average volume traded by a regular trader per season is approximately 200-300 tonnes, with occasionally traders reaching up to 500 tons or more.

Small/semi processing: Several wholesalers/trader with substantial capital and good warehouse condition not only conduct black pepper trading but process black pepper into pepper kernel/white pepper.

Processing factories: There are many big processing companies such as Olam, Phúc Sinh, Intimex HCM, Ngô Gia and Nedspice processing from 7,000 – 16,000tons/year. These companies have sometimes direct contracts with international importers but the majority of their orders run through exporting companies.

Pepper exporting companies: Most of exporting companies involved in pepper also export other agricultural products and are not specialised in, or dedicated to pepper only. Most of such exporters expressed their need for international market information in terms of client networks, market trends and international/EU regulations.

1.6.4. Chain supporters and their functions

NGOs: not many NGOs are active in pepper sector except some ad-hoc support in the North central of Vietnam. These NGOs mostly conducted TOT for lead farmers in hope that they will teach their colleague farmers in advanced pepper plantation techniques and management.

Vietnam Pepper Association: In the past years the Vietnam Pepper Association (VPA) has been active in helping pepper sectors in plantation technology, market information, trade fair, study visit and access to market information. The VPA coordinates with relevant departments of ministries and works closely with farmers and key stake-holders to develop Vietnam pepper sector. VPA is also active in supporting the exporters in terms of providing information, building brand names and promoting the international cooperation in the pepper sector. The VPA indicated that there is a need for internal capacity building of the VPA in order to allow the VPA to contribute more effectively to further enhancement of the pepper sector in Vietnam.

Banks: With the recent stricter regulation of the banking system, most companies and traders are suffering from a lack of working capital for buying and stocking pepper during the harvesting season. On top of this, the interest rate is quite high (18-24%/year) preventing companies to take up loans to invest in new equipment and storage facilities of pepper.

1.6.5. Chain influencers and their functions

MARD: MARD is reviewing and adjusting the planning to develop pepper industry in the year 2010-2015 with orientation till 2020 with the contribution from VPA. The Provincial chapters (DARD) will implement the programme.

1.6.6. Bottlenecks of the value chain

According to the annual report of Vietnam pepper sector in 2010 and the potential of 2011, although Vietnam takes 43.6% of pepper exporting of the world, Vietnam will continue to fall into the trap of selling big volumes when price falls and being short of pepper to sell when the price is high. This happens because both farmers and traders are short of capital and have limitation in storage and stocking capacity forcing sales directly after harvest.

Another constraint is the limited capacity at primary production level to produce cost-effectively and sustain the ecological environment at the same time. Some cultivation techniques are improper such as making use of wooden poles for pepper plants while the issue of shadowing plants for pepper is not properly considered. In order to maximise the potential of pepper farming, balanced mixtures of fertiliser applications are necessary. Diseases and insects on pepper trees are out-of-control, with limited strategies for disease prevention available.

Pepper price are highly volatile holding high the risks for all chain actors. Consumers' requirement for product quality as well as food hygiene and safety are increasing rapidly. Besides, consumers are getting more concerned about the sustainability issues connected to production of pepper. In order to sustain the competitive advantage of the Vietnamese pepper sector, a transition towards more sustainable production systems while safeguarding the net income of chain actors is required. This calls for immediate action in terms of sector coordination, increased innovation capacity and strengthened support systems.

Bottlenecks identified	Critical ? (y/n)	Risk for bottleneck non-removal on short term ? (H=hi, M=med, L=low)	Proposed solution: Possible CBI's intervention
Farmer have to sell at farm gate after harvest because liquidity constraints and lack of financial services	Y	M	Support farming contract systems in which buyers invest in farmers in sharing / pre-financing of cost for inputs with a fair buy back price covering price fluctuation
High investment for farmer in the first 3 year	Y	M	
Lack of proper support from extension services: leading to big variance of yield in the same region	Y	L	Support extension services to deliver their service on a fee basis (could be capacity building, funding, enabling these service to be financially sustainable)
Missing	Y	M	Support in linkage, information

international branding for Vietnamese pepper: focus on exporting pepper un-processed			in international branding and in-country processing.
Lack of sector coordination and promotion particularly regarding export (EU) markets.	Y	M	Sourcing/design capacity strengthening project for VPA to further support the pepper sector to boost exporting to EU

Table 18 Bottlenecks in the pepper Value Chain

Moreover, a lack of international market information and linkages and knowledge of market trends and international/EU regulations is expressed as major constraint in further market development and in applying smarter trade strategies.

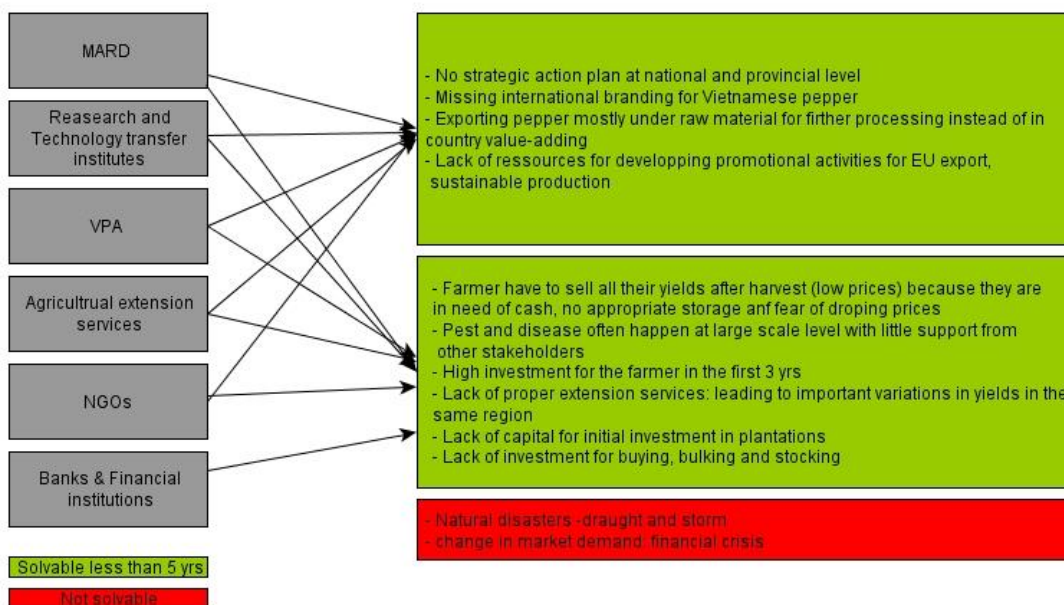


Figure 9 Constraint mapping pepper

1.1.1. Sustainability (People, Planet profit)

People	Planet	Profit
Health and safety issues	Forest conversion (India)	Low incomes / wages
Working conditions (job insecurity, discrimination)	Water pollution	Price volatility
	Chemical use	Insecurity of supply
	Soil degradation	Yield performance
		Quality/food safety

Table 19 Sustainability Vietnam Pepper

The IDH judges sustainability issues in the global pepper sector as above. In Vietnam, the sector offers farmers and labourers hundred thousands of jobs, but working conditions are an issue requiring serious attention. For farmer households, pepper has been a good income source over the last 6-7 years, lifting many rural families out of poverty (MARD, 2010).

There are however increasing concerns towards the overuse of chemical fertilisers and plant pesticide which are not under control from relevant authorised agencies

in most of pepper farms in pepper producing regions of Vietnam. This is due to the fact that pepper farmers often do not use chemical fertilisers for their farms in appropriate manner and process, either too much or too less depending on their financial capacity and market price of pepper.

1.6.8. Conclusions Pepper

The Vietnamese shift to produce more pepper reflected, in part, the deterioration in the global price for coffee, a major crop for the country, and the increasing demand from the international food-processing sector for high-quality black pepper and exotic spices. However, the international pepper market is a highly volatile market while responses to market dynamics take time due to the maturing time of pepper trees. Although volumes and captured market shares are impressive the Vietnamese pepper sector seems not well coordinated and not sophisticated in terms of market knowledge or used technologies. It is typically a sector that grew (too) fast targeting export volumes rather than focusing on quality in connection with more lucrative markets and maximising profitability.

The potential to guide the sector towards lucrative (European) markets will require investments at various levels but is feasible. Looking at key constraints identified the CBI could play a crucial role in such efforts. Integrated programmes focusing on the pepper sector should focus on improving quality in order to access higher end markets, rather than on increase in absolute volumes. Preference should be given to chains/exporters engaging in certified (organic or other) production and trade.

Due to the immense economic value of the pepper export sector, potential Returns on Investment on support interventions are high.

As most exporters engage in the trade of multiple spices it is recommended to extend the CBI support programme beyond pepper only and include a broader range of high potential spices (cinnamon). This would increase leverage and impact of a future CBI support programme.

The Sustainable Spices Initiative as a potential partner for CBI

The spice sector is being confronted with increasing transaction costs in the supply chains. Growing competition for natural resources, but also stricter quality regulations on import are weakening the position of the Dutch spice industry, still one of the biggest industries for global spices. Simultaneously, at farm level, the livelihoods of most spice farmers continue to be extremely vulnerable. Farmers and industrial players have high transaction costs due to the small size of their farm practices. Farmers are not often organised, they lack knowledge on good agricultural practices, they have unstable income from spices due to volatile markets and they cannot access credits to invest in sustainable production or finance trade. Sustainability dimensions have to be captured in a certification and accreditation scheme that has to be meaningful yet feasible and accessible for industry partners. A sustainability standard should support the industry in reaching market standards, and simultaneously respond to the needs of farmers in the supply chains.

In reaction to this, in May 2011, a few frontrunners in the Dutch spice industry together with their major stakeholders proposed a development program to the IDH council in order to make the global spice sector more sustainable; the Sustainable Spice Initiative (SSI). Over the next 1.5 years 2 to 3 pilot programs (Producer Support Pilot Programs (PPSP)) will be set up in order to understand sustainability issues on the ground, to support spice producers in successfully dealing with these issues and to develop a global sustainability standard and

verification system that complies with the issues on the ground and, on the same time, benefits the industry as a whole. The SSI members have decided for the Rain Forest Alliance certification to be leading.

Within the framework of the sector-wide PPSP effort, special attention is given to the Dutch SME sector being part of the international value chains for spices. The IDH-SSI working group on Sustainable spices operates as major focal point.

The mentioned Producer Support Pilot Programmes will start being operational during the first quarter of 2012 among others focusing on Vietnam. Focusing on challenges at production and supply level, the CBI would add significant value as a partner by delivering complementary services at exporters – importers level.

Box 1 The Sustainable Spices Initiative as a potential partner for CBI

Viet Nam, with its highly competitive labour costs, is an attractive option for American and European buyers looking for low-cost future suppliers of greater volumes of pepper and spices. The active support from American Spices Trade Association - ASTA to the Vietnamese pepper industry is bearing fruits. The ASTA-quality standards for pepper – covering amongst other things the pepper grade, weight, volatile oil content and moisture content – is broadly used by international exporters.

It is predicted (ITC) that in the near future there will be a significant rise in investor interest in Vietnamese pepper and spice production. We will see more joint ventures with international companies who will bring greater knowledge and more sophisticated technology to domestic black and white pepper production and processing. ITC also believes that Vietnamese producers themselves will increasingly invest in new technologies to improve the quality of their pepper and produce value-added products such as essential oil and oleoresin.

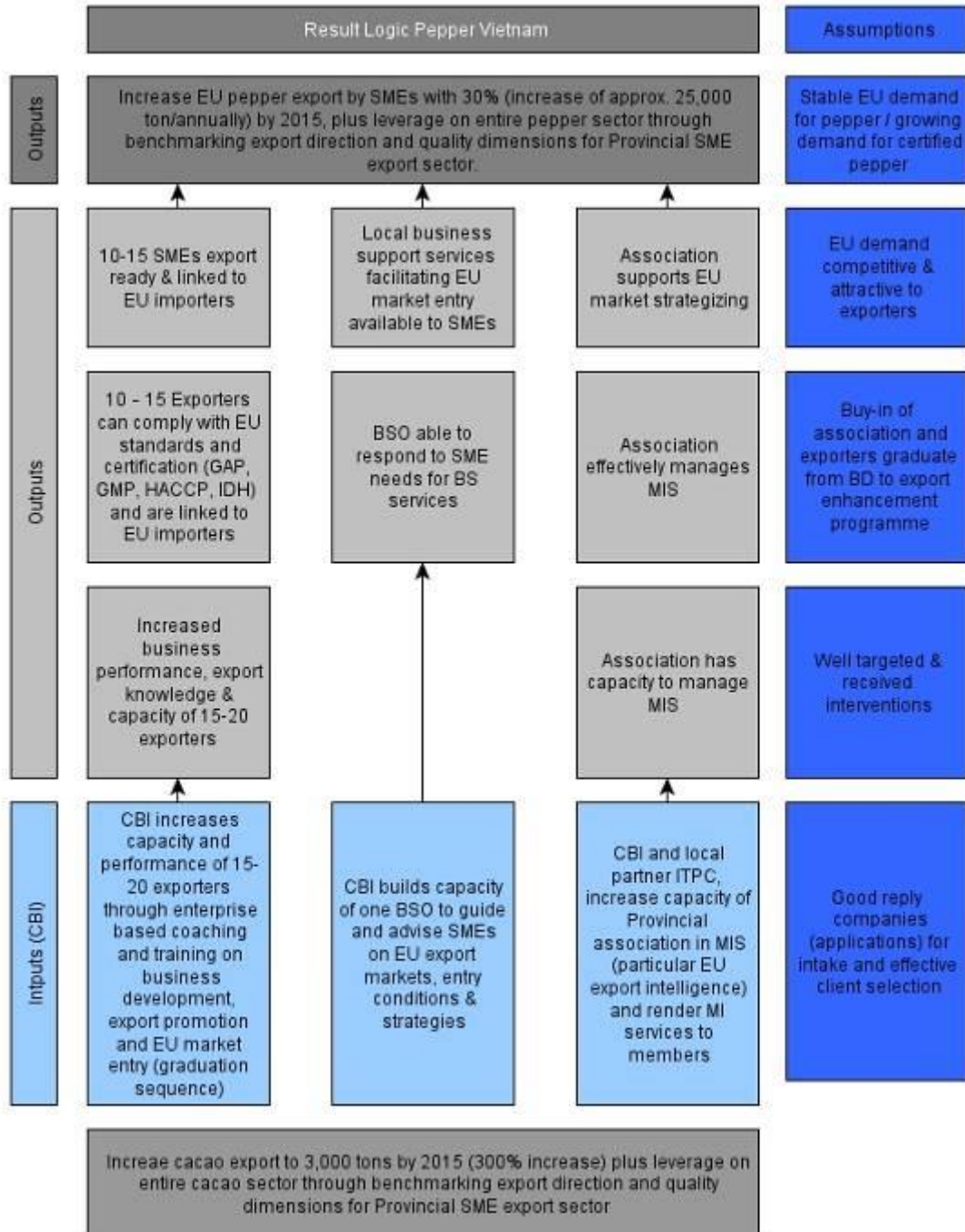
Black Pepper - Vietnam

Criteria	Indication	Comment	Ranking
Potential EU export	Good on short/mid term	Competitive sector with increasing EU export figures.	3
Sustainability	Critical	Pepper production is a high-input intensive culture causing environmental challenges. Awareness about more sustainable production methods is growing partly as a response to market demands	1-2
Local leverage	Good	Typical smallholder crop, little in-country value adding. Tendency to move to semi-processed products.	2-3
Presence of SMEs	Average	SMEs operate next to bigger companies and hold 40-50% of the export market	2
Partnerships	Reasonable	Public sector and pepper associations, IDH Sustainable Spices Initiative, Rain Forest Alliance	2
BSOs	Low	ITPC needs additional capacity to support the sector. Pepper Association is a good alternative to ITPC.	1
Attribution	Moderate	Most identified constraints are in supply, however improved compliance at level of exporters can be addressed by CBI	2
Other issues		Merely bulk oriented sector with emerging tendency towards higher-end products	

Total: 17

Table 20 Chain evaluation

In addition to pepper, Viet Nam's major spice crops are cassia and star anise, with lesser volumes of ginger and turmeric and chillies. Most exporters tend to engage in the trade of multiple spices.



Result Logic 2 Pepper Vietnam

Cashew Vietnam



1.7. Cashew - Vietnam

1.7.1. Economic importance - Baseline

According to Vinacas, Vietnam is global market leader in the export of cashew, exporting a total of 189,900 ton of cashew in 2010, taking 37% of world market share, a year-on-year increase of 11.8 per cent and worth over \$1billion. With these figures Vietnam bypassed India as the world leader in export of cashew. Vietnam is exporting cashew to 52 countries and regions in which USA takes 35%, China 20% and EU 25%. Cashew is clearly an economically promising sub-sector with growth figures driven by a strong international market demand.

Cashew production over 5 years

Year	Cashew produced in Vietnam (thousand ton)		Imported	Total processed	
	Source	GSO			Vinacas
2005		240.2	320	80	440
2006		273.1	340	100	480
2007		301.9	350	200	550
2008		320	350	250	600
2009		294	300	250	600
2010		290	350	405	755

Table 21 Cashew Production in Vietnam
Source: Vinacas and GSO

1.7.2. Value adding and local leverage

In the international market, different types of cashew are traded. Cashew *kernels* or raw cashew *nuts* are traded and defined by physical quality description (size, colour and % broken). *Kernels* represent the last step of processing before exporting and further processing, as salting, packaging, etc. Largest exporters of cashew kernel are India, Vietnam and Brazil.

Secondly, cashew is traded in a semi-processed form of *raw nuts* or *nuts in shell* (NIS). Countries with limited processing capacity, especially West African countries, are mainly exporting raw nuts to countries with excess processing capacities. In contrast to African countries, Asian producing countries have been successfully increasing processing capacities over time to be able to process at least the local production. By that, countries can limit export of raw nuts while increasing in-country value creation to process cashew kernels and export directly to consuming countries.

Cashew is a demanding crop in terms of labour. Profitability amongst the entire chain has been good to reasonable over the last 5-6 years, explaining the fast growth of the sub-sector in terms of acreage of plantations as well as exports.

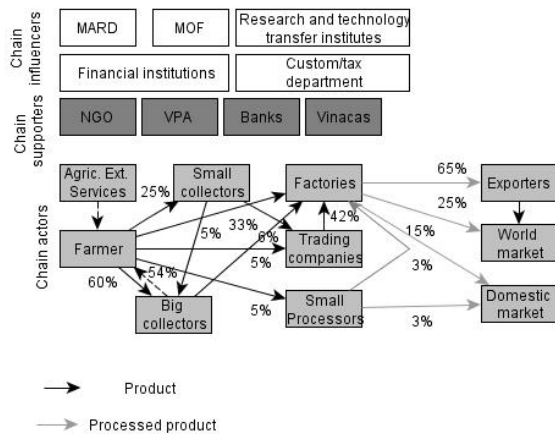
Besides the smallholders engaging in production, the cashew sub-sector does provide employment to 2.2 million of labourers (Source Vinacas). From this perspective, cashew processing has established a new rural industry with all related job creations of transport, services, etc. Particularly, the first processing (peeling, cleaning) of cashew is a very labour intensive process. The majority of the workers are women. Labour conditions (fair salaries, conditions, no child

labour) should be a point of attention. Adaptation of Fair trade principles and certification is an optional pathway to ensure such.

In Vietnam, only the cashew nut is processed and used economically; the cashew apple is not used for further processing but only dumped or used as garden compost. Vietnamese industry representatives stated that ripe cashew apples are quickly contaminated with soil and bacteria after dropping from the tree and are not considered safe for food processing.

New, more efficient and cleaner technologies have been developed already in Vietnam to avoid environmental contamination; however, these technologies have not made it to industry standard yet. Changes in processing techniques to cleaner production must be promoted by industry (e.g. VINACAS) and government agencies (MoNRE) by showing economic benefits of cleaner and more efficient production. It cannot be expected to be implemented before the present technologies have been fully written off and out of production. In a final step, cashew shells can be sold as fuel for industrial and home use after oil has been extracted.

1.7.3. Value Chain



Value Chain 3 Cashew Vietnam

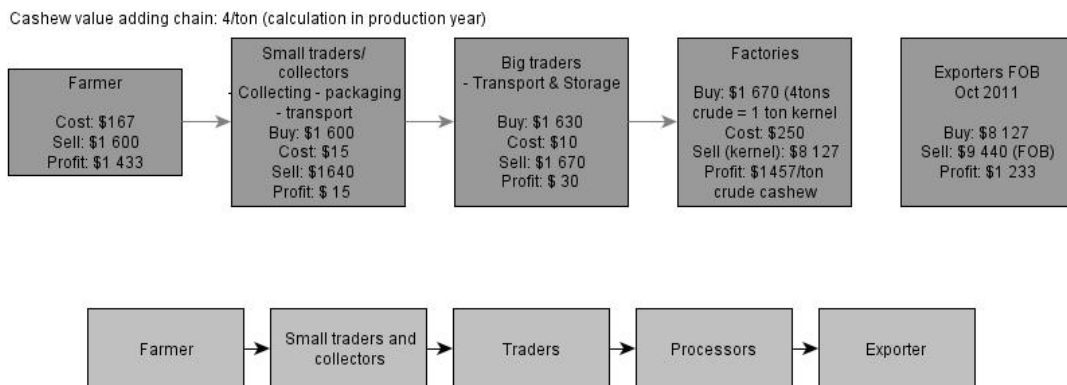


Figure 10 Value adding Cashew Vietnam

Originally, cashew was promoted in Vietnam solely as a crop for poverty reduction in the southern provinces of Vietnam on marginal soils and harsh, hot climate. It was often stated: "*Cashew is for the poor, coffee for the rich*". Last few years, the situation turned ironically; cashew reaped better income for farmers than coffee at relatively low establishment and investment costs. Currently, however cashew plantations are in competition with particularly the rapidly emerging rubber sector.

1.7.4. Chain actors and their functions

Despite the success of cashew, the Vietnamese government never envisaged Cashew as a major export product and/or currency earner and as a result, the direct involvement of the state in the cashew sector is limited. Structures in the cashew sector evolved over time on merely private initiatives. Nevertheless, export figures have recently been frequently succeeding the official targets, proving the viability of private sector development.

Different to the tea or coffee sector, the Vietnamese cashew sector is not organised and developed via a state owned General Corporation (GC), e.g. like VINATEA or VINACAFE. The objective of General Corporations is to develop certain (agricultural) sectors under the direct guidelines and funding of the Government as a State Owned Entity. Recently, many General Corporations are in the process of disintegration under the increasingly inefficient structures and high debts to the state. This painful and costly process is not needed in the cashew sector, because organisation is market driven and privately organised.

Farmers: According to Vinacas, in 2009 Vietnam has to import 250,000ton of crude cashew and in 2010 the number is around 300.000 tons and will be increased in the coming years because the plantation area of cashew is decreasing due to farmers cutting down cashew to grow other crops which secure quicker and/or more stable incomes or more value such as rubber, coffee or cassava. It takes 4 years to have the mature trees securing stable production thus income to farmer households. The establishment cost in year 1 is around \$200-\$300/ha. And in the next 3 unproductive years the maintenance cost is around \$200/ha for weeding and fertilisation. In the production phase (year 4 onward), average investment in labour, fertiliser is around \$250/ha. The harvesting time is from February to June every year. After harvesting, farmers have to detached the cashew nut from the fruit and dry the cashew nut in the sun for 2-3 days to have the moisture decrease under 9% in order to be able to sell their produce. Average yields account for approximately 0.71 tons of cashew nut/ha. With the current buying price of 35,000,000VND (\$1,666)/ton, the income of farmer per hectare is around \$933/ha/year.

Small Collectors: These collectors are individual trader going around to buy crude cashew nut from farmers and re-sell again to bigger collector or to trading companies. The small collectors at times advance money or fertiliser to farmers and fix the price with farmer before harvesting time. In general they account for 5% of the farm-gate buying price for their services (collection/bulking only).

Big collectors: These collectors are small companies sometimes owned by bigger producers in the plantation areas. They advance fertiliser or money to farmer to make sure that farmer will sell to them. Sometimes they also buy the crop before harvesting time at a fixed price if they estimate price will increase in the near future. Similar to the smaller collectors the bigger ones charge approximately 5% - 7% of the buying price for their services.

Trader: The traders are generally buying, stocking and selling cashew and make a profit by anticipating on the fluctuation of the market price. They also use the trading contracts of "out-right" and "price-to-be-fixed" as in the cocoa sub-sector. Traders often make 7-10% margin on the buying price.

Factories: Most of the factories have to stock cashew for 1 season and most of these factories are involved in export trading as well. Most factories also have their direct exporting channels via direct buyer contracts. Around 80% of the crude cashew will be processed into cashew kernel for exporting and the balancing 20% (which are normally secondary quality) are used to produce other end products. In Vietnam until the end of 2010, there were about 225 factories, the majority in the SME range, registered as being involved in the production of cashew nut (mostly process crude cashew to kernel for export).

The largest cashew processor/exporter in Vietnam is the provincial owned processor and exporter DONAFOOD in Dong Nai Province (processing and exporting around 7.000 tons of kernel in 2004, or 7% of the total crop).

Exporter: The exporters roam around at the international markets and contract importers around the world. Availability of cashew for trade (domestic or imported from Africa) is their biggest challenge.

2.4.5. Supporters and their functions

Vinacontrol: Vinacontrol is a joint stock company specialised in quality control of exporting coffee, cashew and other agricultural product. With every exporting batch, a sample should be sent to Vinacontrol to get the quality certification.

INGO: There is hardly any NGOs active in the cashew subsectors in Vietnam because the sector itself is quite strong. However, looking into the chains, there is a strong need for production management and organising producers for collective action.

Vinacas: Internally, the Cashew sector is organised through the Vietnamese Cashew Association (VINACAS). VINACAS is financed by member fees and was established by a private initiative of processors and exporters in 1990. Today, VINACAS constitutes of 112 Members including researchers, farmers, processors and exporters. It is the duty to derive research questions, identify problem areas for solutions and bring together different viewpoints of sector participants. Vinacas as a commodity sector representative organisation is quite strong and has a lot of support and recognition from its members. Vinacas is regarded to play a hardly needed and crucial role in working out the balance of importing and exporting to create a favourable environment for the development cashew sector.

2.4.6. Influencers and their functions

MARD: MARD issued decision 39/2007/QĐ-BNN translating the government's intention to further develop the cashew sector as a target commercial sector by targeting 450, 000 ha of cashew plantations by 2010 and approximately 360.000 ha under production by 2020.

2.4.7. Bottlenecks of the value chain

Identified constraints are centred on the local supply of raw material. Vietnam imports approximately 250,000 ton crude cashew merely from Ivory Coast and Nigeria at additional costs of around 20% as compared to local sourcing. (Vinacas, 2009)

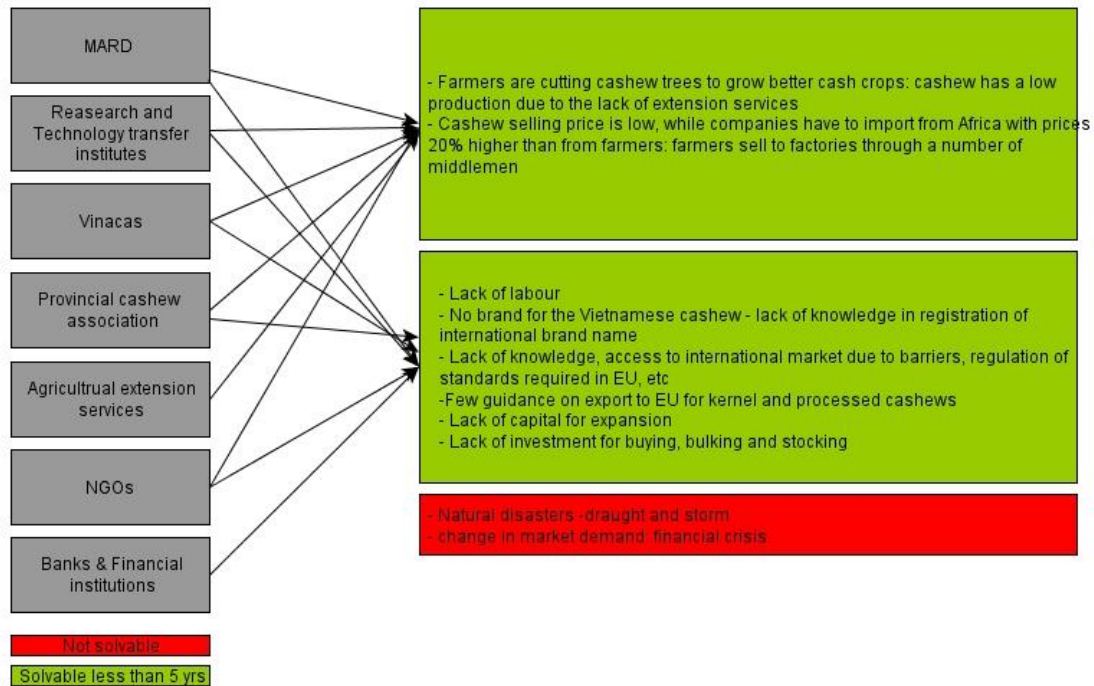


Figure 11 Constraints mapping cashew

Most of exporting companies are facing constraints and limitations dealing with export barriers, regulation and hygienic standards (which are changing quite frequent) of import market in the world. The majority of processing factories in Vietnam are still of small and medium scale, out of 255 companies the number of companies that qualified for ISO and HACCP are only 20.

The biggest constraint of the value cashew chain is the however the domestic lack of raw material / cashew. As a matter of fact, factories have to import crude cashew with an added price of 15-20% compared to local purchases from farmers. This is a big loss for both Vietnamese planters and factories. Vietnam is getting into the dilemma of shortage of domestic cashew supply while farmer are cutting down cashew trees, at the same time Africa reduces its export volumes to Vietnam and Vietnam looking for direct markets or in-country processing. The shortage of raw material hampers the competitiveness and growth of the sector significantly.

During the interviews, most companies said the sector currently faces many other challenges, including shortages of workers and increasing costs of production (electric, transportation, labour cost). In addition to these, abnormal weather patterns decreased domestic yields and many growers shopped down their cashew trees and turned to rubber and other commercial trees in a search for higher profits. The low profitability at farmers level partly due to non-coordinated chain inter-actions leading to too many chain layers (actors like middle-men) frustrates expansion of production areas and further development of the sector. A structural issue is that Vietnamese firms only undertake activities in the lower part of the value chain that add little value like production and primary processing. Advanced processing including seasoning and packaging that secure significant value addition are done abroad.

The highest domestic price of crude cashew at one time is about 40millionVND/ton but farmers never can sell better than 30-35million VND/ton because of there are many layers of traders and buyers existing in the market.

In addition to the above commercial banks have tightened their loan conditions since 2010 leading to increased constraints for small and medium size companies (97% of the sector) to attain hardly needed loans to buy raw material (short term working capital) or invest in advanced processing equipment (long term investment loans).

Lately the global financial crisis hitting European countries hard has diminished exports to the EU in 2010.

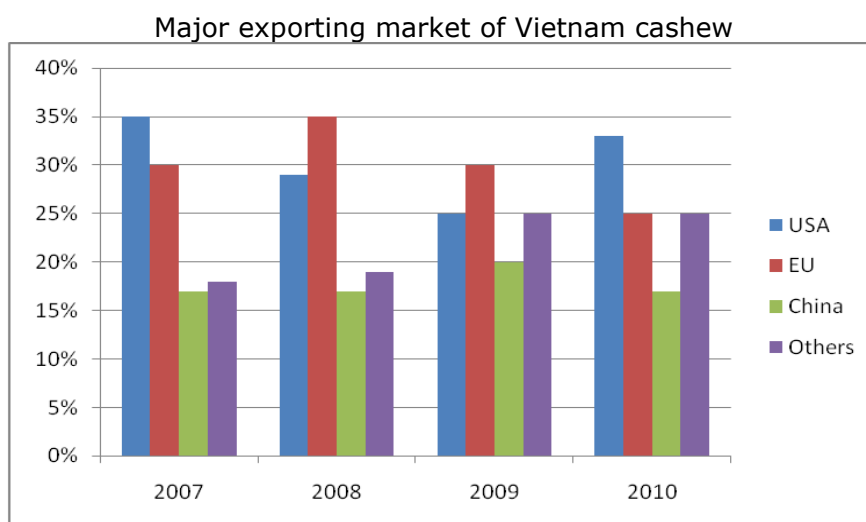


Figure 12 Major exporting market of Vietnam cashew
Source: Vinacas 2011

Currently, cashew processing sector faces a serious shortage of labour. The labour market only meets to 60% of the factories' need. There is an estimated need of 300,000 additional workers in 2011. The main reason is low payment in cashew sector (about 800,000 - 1,000,000/month).

Bottlenecks

Bottlenecks identified	Critical? (y/n)	Risk for bottleneck non-removal on short term? (H=hi, M=med, L=low)	Proposed solution: Possible CBI's intervention
Cashew is not profitable to farmers leading to cutting cashew trees to grow other commercial crops providing higher margins.	Y	M	Support extension services to deliver their service on a fee basis
Cashew selling price is low (while companies have to import from Africa)	Y	M	This is a macro level issue that involves policies makers in formulating policies that protect use of domestic raw

with price 20% add-on costs) because farmers sell to factories via many middle layers that cut off price			produce. CBI could lobby or assist in a developing strategic action plan at national level to address this.
Lack of labour	Y	M	A provincial strategic action plan for sustainable cashew development and fair labour conditions. Fair Trade certification and marketing in EU Fair Trade markets could be a feasible solution that is worth pursuing.
No brand name for Vietnamese cashew - Lack of knowledge in registration of international brand name	Y	H	Support in linkage, information in international branding.
Lack of knowledge, on access to the EU markets in terms of EU import standards / conditions and requirements.	Y	L	Support in linkage to source of information or promotion campaign of exporting to EU. Strengthening companies in the sector the exporting capacity (via association activities)
Companies / the sector does not have specific guidance to export to the EU for kernel cashew and /or processed cashew products	Y	L	

Table 22 Bottlenecks cashew chain

1.7.8. Sustainability (People, Planet, Profit)

The IDH judges the sustainability issues of the global cashew sector as follows:

People	Planet	Profit
Child labour	Forest conversion (mainly Africa)	Low incomes / wages
Poor working conditions	Chemical use (especially on large plantations)	Price volatility
Health and safety issues (chemicals)		Insecurity of supply (industry)
		Yield performance and quality

Table 23 Sustainability indicators

In Vietnam the sector provides jobs and income to over 2 million labourers, merely women, but labour issues require serious attention (see above). Adopting Fair Trade could offer partial solutions.

Environmental considerations of cashew are ranging from cultivation to processing. Under present policy recommendations, a consolidation of cashew growing areas is recommended. That means that it is not to be expected that natural forests including their habitat are being endangered in view of cutting down for the establishment of new cashew plantations.

1.7.9. Conclusions Cashew

Cashew is a relatively well developed sector with good economic potential in terms of exports. It's a typical SME sector and suits CBI's mandate. Moreover, constraints in the chain are to certain extent solvable through interventions the CBI could offer. However, EU imports are decreasing in recent years, partly for macro-economic reasons (recession in Europe) but also because of cashew exporters in Vietnam not being able to cope with quality demands of the EU market. Interventions in the cashew sub-sector should target at regaining market shares and moving up to higher market segments due to improved quality management, rather than at absolute increases in export volumes.

Due to the immense economic value of the cashew export sector, potential Returns on Investment on support interventions are high. Fair Trade certification offers entries to new markets and could safeguard working conditions for the millions of (female) labourers active in the sector.

Most obvious partner in solving constraints that go beyond CBI's mandate or scope is the Government of Vietnam; Vinacas, Vinacontrol, MARD-DARD.

Cashew - Vietnam

Criteria	indication	Comments	Ranking
Potential EU export	Low on short term, good - stable on mid / long term	Competitiveness depending heavily on imports (from West Africa), volatile to EU economic developments. The cashew market has been less volatile than other agricultural markets over the past 5-6 years.	2-3
Sustainability	Moderate	Cashew is not a demanding crop and can be grown under semi-intensive production systems. Limited waste management (apples) is causing challenges.	2-3
Local leverage	Good	Typical smallholder crop, peeling provides approx. 2 million jobs to merely women. Labour conditions could be improved through social (FT) certification schemes	3
Presence of SMEs	High	SMEs dominate the sector and hold over 60% share of the total export market.	3
Partnerships	Reasonable	National public sector and cashew association, IDH, Rain Forest Alliance	2
BSOs	Low	ITPC needs additional capacities in order to support the sector. Cashew Association would be an alternative supplier of BDS services.	1-2
Attribution	Low	Major constraints at supply level, pull factor of export promotion will have limited effect.	1
Other issues		At farmers level cashew competes with other commercial crops particularly rubber	

Total: 18

Table 24 Chain evaluation

2.1. Conclusions and recommendations Vietnam

1.8.1. Economic potential

All three sectors show clear economic potential also in terms of EU market potential. The export sectors for cashew and pepper are well-established while the cacao sector, although showing high potential, yet being in a nascent stage. All three sectors are typical to the boom in the Vietnamese agricultural sector, purely export oriented, focussing on quantities (bulk) rather than quality. This is causing challenges in many aspects (price volatility, thin profit margins, sustainability issues) and a turning point in terms of quality awareness seems to emerge.

Constraints in all three value chains are partly concentrating on production and supply levels. These cannot directly be addressed by the CBI but will require other partners to get involved. To improve the export capacity and readiness of the targeted chains sub-sector or value chain level interventions will be required, parallel to enterprise specific support.

Based upon the survey we recommend CBI to invest in two sub-sectors: i) cacao, coffee and ii) spices and herbs, on the condition that a multi-stakeholder buy-in can be realised. Edible nuts - cashew although being a promising sector would fall out as the CBI strives to develop a regional programme and in this sense cashew would be a stand-alone programme in Vietnam only.

1.8.2. Scope and level of the programme

In order to ensure targeted impact and leverage, enterprise level capacity building / coaching trajectories should be conducted parallel to improvements in the enabling sub-sector environment like access to sub-sector and EU specific market intelligence. For the entire Vietnam programme, with three sub-programmes on respectively cacao, pepper and cashew, 25 to 35 enterprises would be directly involved.

In terms of BSO support it is suggested to assess the possibility to enhance the capacities of the Provincial chapters of the commodity associations in Binh Phouc (pepper and cashew) and Dak Lac (cacao) to become BDS service providers to their members. This will require investment in developing market diagnoses and market intelligence. Good alignment with the Provincial Agricultural Offices (DARD) will be required. In case ITPC will take up a coaching role towards the associations it will require additional capacity building in order to become familiar with the agricultural export sector.

In terms of level and scope we advise to focus on Provincial level PPP intervention plans (including exporters located elsewhere but sourcing from these Provinces, mostly situated around HCMC).

CBI is advised to mobilise an informal PPP platform around the sub-sectors involving government agencies (MARD and DARD of concerned production areas), commodity associations, accreditation schemes (UTZ, Rain Forest Alliance), BSO (ITPC?) and selected companies (processors and exporters). Further elaboration of action-plans and roles (and commitments to take up this role) of stakeholders need to be discussed.

Suggested target Provinces:

Cacao: Dak Lak (around 50% of total production of cacao)

Pepper: Bhin Puoc (around 25% of total production of pepper).

Suggested partners

Suggested partners include Provincial Agricultural Department (DAFO), Provincial commodity associations, local and HCM based exporters, BSOs such as ITPC.

1.8.3. Buy-in and commitment

The most crucial aspect is the commitment of participating enterprises; a sincere commitment towards a focus on EU markets is prerequisite for success of the programme.

Exporters

The majority of SME level exporters are not specialised (in terms of product or market segment) and rather follow the flavour (market opportunity) of the month. Entering EU markets will however require certain level of specialisation to justify required investments in capacities, quality control and certification and facility upgrades. A careful selection of participating exporters, selecting the 'champions' in the industry, will be critical to the success of the programme. A sincere intension to specialise as an exporter and commitment to strive for exporting to EU is conditional. In the selection also the availability of English language skills should be taken into account.

It is recommended that in the selection of enterprises priority is given to processing annex exporting companies for two reasons:

- Processors / exporters combine essential functions in the value chain in terms of marketing strategy (choice for product – market combination), quality management and compliance. They will be better suited to control change processes towards quality enhancement and EU market orientation.
- Contrary to most agro-exporters, processors / exporters are committed to one specific product. Besides the availability of more product specific knowledge and product specific networks (value chain actors) these processing annex exporting companies will also show higher levels of commitment to invest in developing a market strategy for their crop.

With few exceptions the majority of the exporters will have to go through a business development trajectory prior to entering export oriented training and coaching.

Government sector - DARD

The Government of Vietnam has largely de-centralised its planning of and support to the agricultural sector to Provincial levels. The Provincial level agricultural offices (DARD) decide about priorities in the agricultural sector in terms of prioritised sub-sectors/commodities and earmark budgets to support targeted sub-sectors / commodities. For Binh Phuoc Province, both pepper and cashew are priority crops and DARD welcomes any investment to further the development of these sub-sectors. For Dak Lak, cacao is embraced as priority crop (partly to balance for dependency on coffee which has created challenges) and DARD invests heavily in increasing the area under cacao production. Also in the Dak Lak case, the CBI investment will be welcomed and regarded as complementary to current public investment in the cacao sector.

Provincial level Commodity Associations

The commodity associations are still heavily connected to the government and not independent private sector representative organisations. Increasingly they however take up a more independent role, partly because government support to associations has diminished. In order to stay functional (and survive) they are urged to render services to members. Managing market information systems and render MI service to members would enable the associations to take up new/additional function and justify their "raison d'être" towards members and the government.

Indirect partners

Besides the MARD and country level commodity associations also Vinacontrol has an indirect role to play. Vinacontrol is a joint stock company specialised in quality control of exporting coffee, cashew and other agricultural products. With every exporting batch, a sample should be sent to Vinacontrol to get the quality certification. The capacity of Vinacontrol in terms of knowledge of quality standards is essential for further promoting the export sector. Although, specific strengthening of Vinacontrol goes most probably beyond CBI's mandate, establishing effective linkages between participating enterprises and Vinacontrol is crucial.

	Coco oil
Export / trade support offices	UPAC and member organisations
Services rendered by those offices (vision, mandate, portfolio of services)	Primary purposes to unite all elements of the coconut industry and work for their common good; (b) promote harmonious coordination among the various sectors of the industry for the common benefit of the producing, trading, processing and consuming public; (c) to inculcate and preserve high standards of honour and integrity among its members and to promote just and equitable principles and practices of trade; (d) to serve as a centre of information about the coconut and related subjects; and (e) to provide a forum for discussion of problems, issues affecting the coconut industry and/or any of its sectors..



2. Recommendations

From value chain analysis to formulation of a business case

2.1. Summary Recommendations

The international market for food ingredients is growing and at the same time becoming increasingly demanding and competitive, particularly when looking at EU import markets. SMEs in targeted country are at risk of not being able to step up against increasing demands and compliance requirements. This would result in losing part of their current market share thus not being able to contribute to sustainable economic development in the agricultural sector.

Based on analysis done (desk studies, value chain assessments, validation conferences) this business case proposes an integrated, regional programme on food ingredients in S.E. Asia, focusing on the following sub-sectors:

Core integrated programmes:

- Coffee, tea, cacao (Vietnam)
- Spices and herbs: Vietnam (pepper)

The business case implies the implementation of integrated programmes, conditioning CBI's engagement in the sub-sectors to the opportunities for alignment with programmes/projects addressing downward chain actors and activities. Partners can include national as well as inter-national agencies. Most obvious CBI partners for the core sub-sectors are:

Cacao, coffee, tea: UTZ certification, Solidaridad, Helvetas (cacao Vietnam), Tropical Commodity Coalition, GIZ (coffee Vietnam).

Spices and herbs: UNCTAD, IDH, Fair Trade, Pepper Association (Vietnam).

For both sub-sectors the EU market are moving towards an increasing demand for certified sustainable standards. Social and labour criteria are increasingly added (Fair Trade certification). Another emerging market trend in the coffee and tea sub-sectors is the urge towards product diversification feeding a demand for specialty coffee and tea. (KIT, 2010)

The proposed programme takes the above market trends as starting point. In terms of market segmentation the programme will focus on specialised product-market combinations, targeting specialty (niche-) markets rather than targeting (bulk oriented) commodity markets. Distinct product features and/or qualities can be obtained through certification (organic, Fair Trade, UTZ, RF Alliance) and/or intrinsic quality features (taste, appearance, functional qualities like health benefits).

Most government programmes, as well as donor supported programmes in the targeted sub-sectors, address constraints in the production / supply part of the value chains. The CBI adds value to these efforts by bringing in a complementary pull factor through the facilitation of export linkages and increased export volumes.

A detailed programme planning will have to be further elaborated per sub-sector and country but would include i) export coaching to targeted exporters (initiated with approximately 70 enterprises), ii) Market Intelligence and iii) Strengthening of Business Support (4 BSOD trajectories) and iv) facilitation of Public-Private-Partnerships. One or two geographical target areas are defined per country, allowing for concentrated, effective and well aligned programme implementation including provision of CBI modules. Tentatively the selected focus areas are: Binh Phouc (spices) and Dak Lak (coffee, cacao) in Vietnam.

2.2. Ranking value chains

Overall results of the quantitative indications per chain and ranking are as follows:

Value Chain	Overall result quantitative judgment
Cacao Vietnam	18
Pepper Vietnam	17
Cashew Vietnam	18

Table 25 Overall Chains evaluation

Following the logic used in the ranking, the cacao, pepper and cashew chains in Vietnam score the highest, merely due to their high score on economic potential.

In translating the above ranking into concrete recommendations for future CBI programme investments another factor was taken into account. In cases where a value chain was judged as contributing low on a certain aspect / criteria (marked as a 1), it was judged whether or not, such low qualification could possibly be overcome through taking specific measures or through adapting the programme design. In cases where this was not found feasible we recommend the CBI not to invest in the concerned sub-chain, although the overall score may be comparatively good.

This is the case for:

- Cashew Vietnam: ranking the lowest score (1) on attribution. The cashew sector is a huge economic sub-sector, regarded as well established in terms of trade flows. We expect, also partly based on the absence of crucial strategic partners for the CBI, that this cannot be overcome. As a result we do not recommend the CBI not to intervene in the cashew chain in Vietnam.

The sector has limited economic (export) importance and hence do not attract a lot of attention from other development partners nor of government agencies. However, it is judged that once the CBI could through limited yet targeted support prove the potential of both products at EU level, other partners can be interested to invest in both chains. As a result we recommend

to design a limited support programme focusing on further identifying product-market combinations holding future potential.

The results of the comparative analysis feed into the recommendations as described in the chapters below.

2.3. Proposed strategy

2.3.1. Need for integrated approach

In all targeted sub-sectors constraints in the value chain are not confined to marketing constraints only but concentrate to certain extent in down-ward linkages. Reliability of supply lines is core to successful market development.

For reasons of complementarities an integrated approach is recommended in which CBI aligns support to its core actors (exporters, BSOs etc.) in the value chain / sub-sector with the support other organisations render to other actors (producers, financial institutes etc.) in the same chain or sub-sector (see figure 1 below).

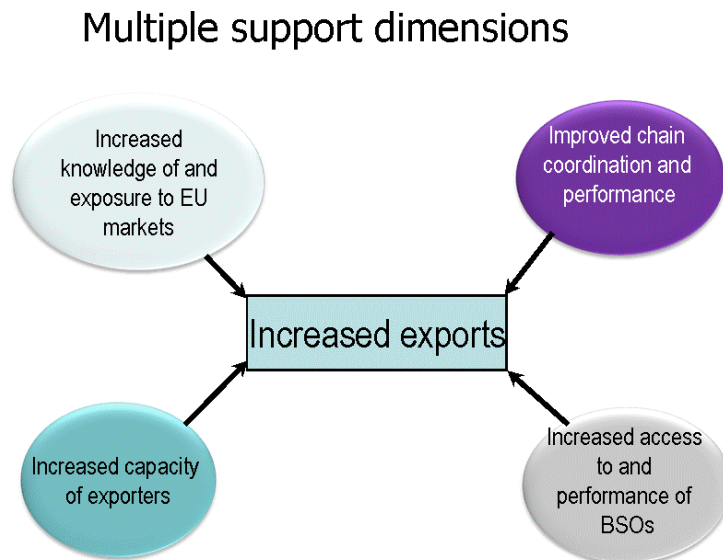


Figure 13 Multiple support dimensions

Direct programme partners to the CBI will be: selected SME-level processor/exporters, selected BSOs and private sector commodity based associations or federations. Indirect partners will include: government agencies, development organisations and financial service providers.

Direct objectives for the CBI programme are:

- Increase knowledge of and exposure to EU markets (participation in trade fairs, business visits, trade missions, MIS systems etc.) for targeted enterprises
- Improve chain coordination and chain performance through partnering with other support organisations to ensure support to the entire chain
- Increased capacities of the targeted enterprises in complying with EU trade conditions and market demands through customised capacity building trajectories on enterprise level and generic training packages for targeted enterprises

- Increase the access to and performance of local BSO and BDS service providers through training and coaching trajectories

Moreover, efforts to improve the policy environment for export oriented trade are required. This task lies largely with government agencies as mentioned before. Private sector associations can fulfil however an important advisory role towards the government and can engage in advocacy to promote favourable trade conditions. In Vietnam such private sector associations are operational, generally organised around main commercial commodities. An effective dialogue and interaction between these bodies and policy makers should be stimulated.

Observed constraints in the value chain	Critical constraints? (Y/N)	Solvable in short time (Y/N)	If a solution yet provided? If yes, CBI or others?	Risk that it be effectively solved (high/low)
Quantity and quality of supply and reliable procurement modules	Y	Y (within 5 years period)	Mostly government led programmes supported by development partners are addressing supply constraints	Medium
EU export market readiness of processor / exporters	Y	Y (within 5 years period)	No, CBI has unique proposition in this	low
BSO – BDS support to SME sector	Y	Y (within 5 years period)	To certain extent but at insufficient scope	Low

Table 26 Value chain constraints analysis

2.3.2. Need for an area focus

To ensure effectiveness of the CBI interventions vis-à-vis interventions of other support organisations an area based approach is proposed. The core concept is an area confined and sub-sector or value chain based Public Private Partnership (PPP). Scope of interventions combines Value Chain Development with Local Economic Development (LED) at sub-national (mainly Provincial) level. Targeted Provinces are selected upon:

- i) Being major production areas
- ii) Characterised by significant presence of SME level processors / exporters engaging in targeted sub-sectors
- iii) Priority areas for public investment in concerned chains/sub-sectors (alignment with policies)
- iv) Presence of partners and potential complementarities and synergy (integrated programme) and/or multi-stakeholder initiatives around the targeted sub-sectors
- v) Concentration of various sub-sectors targeted by the CBI Food Ingredients programme in one geographical area.

Based upon the above criteria the selected focus areas are: Binh Phouc (spices) and Dak Lak (coffee, cacao) Province in Vietnam.

It is expected that buy-in and commitment of required programme partners and effective functioning of the sub-sector PPP's can be achieved more easily at sub-

national level. Successful PPPs could thereafter be up-scaled / rolled-out to other Provinces.

2.3.3. Push – pull linkages

Intervention areas do respond to identified constraints in the (export) value chain in an integrated manner (see table 56 above). The parallel increase of sub-sector linkages and sub-sector coordination with increased capacity of exporters and an improved service environment due to capacitated BSOs will create synergy as interventions and their results will mutually re-enforce each other. The complementarities between production oriented support intervention (push factors) by partners and the pull marketing brought in through the CBI support will be complementary and increase effectiveness, efficiency and leverage.

The precise mixture and targeting of the various CBI modules has to be finalised in a customised way based on the specific characteristics of the country, the targeted sub-sector and the capacities of participating exporters and BSOs. Regarding the generally low capacities of most exporters, a clear graduation sequence has been regarded in the design of the Export Coaching trajectories; participation in business development modules will be required prior to engagement in export oriented coaching modules, certification and market entry.

2.3.4. Safeguarding social dimensions

The SME sector is typically the back-bone of the economy in Vietnam, providing the majority of the income and jobs for both men and women. In the food ingredients export sector SME level processors/ exporters are competing with bigger companies. In case not assisted they will not be able to stay on even competitive levels losing out market shares which would lead to the loss of much needed jobs and income. The proposed programme will strengthen the resilience of the SME food ingredients sector, increase competitiveness, market penetration and export potential, leading to sustained employment creation and income generation. Moreover, the promotion and adaptation of certification schemes focusing on sustainable and fair production and trade (RF Alliance, IDH, organic etc.) and CSR concepts will lead to tangible improvements in terms of sustainability (People, Planet, Profit);

People: generate employment and income for the (rural) poor under fair conditions, promote gender balance and ban child labour, promote Fair Trade certification.

Planet: strive for sustainable production methods and promote / facilitate certification (organic, RF Alliance, IDH)

Profit: contribute to sustainable economic development in the agricultural sector through employment and income generation, in-country value adding.

2.4. Sustainability of the programme (results)

As the programme results and impact are grounded in increased capacities and linkages (within the value chain and import-export) which are in nature irreversible, results and impact will sustain beyond the programme duration.

Targeted support is required to keep the sector competitive. Such support should cover the entire value chain from producers to exporters as it is the functioning and performance of the entire chain that determines competitiveness.

For this reason an integrated approach is required in which CBI aligns support to its core actors (exporters, BSOs etc.) in the value chain with the support other organisations render to other actors (producers, financial institutes etc.) in the

same chain. The opportunities for such complementarities are present in the studied sub-sectors.

Solution design

Constraints	Why does this prohibit exports?	How can this problem be solved?	Can this be achieved through a CBI module
Quantity and quality of supply and reliable procurement modules	Unreliable exports, low responsiveness to market dynamics and demands	Production enhancement, increased value chain coordination	No
Export readiness exporters 1); Exporters are not aware of requirements and / or lack capacities to comply	Low compliance with EU market requirements, lack of certification (HACCP, GAP etc.)	Capacity building trajectories for selected exporters	Yes, through Export coaching modules: audit, BD, export capacity, certification
Access to EU market intelligence	No forecasting nor product-market differentiation and low competitiveness	Access to tailored EU market Intelligence	Yes, MI modules
Access and quality of BSO and BDS	Lack of guidance and advise hampers (EU) market direction and compliance	Strengthening of BSO and increased access to services	Yes, BSO modules
Market linkages			Yes, Market entry modules

Table 27 Solution design

2.5. Result framework

Programme: Export Development Food Ingredient Value Chains S.E. Asia			
Goal	Contribute to sustainable economic growth in the target country through employment and income generation in the food ingredients sector.		
Objective	Increase the export capacity of 50-60 SMEs and improve the enabling environment for EU export through strengthened BSOs, accessible Market Intelligence and improved sector coordination.		
Project 1	Increase export capacity for 50-60 SMEs across four sub-sectors		
Output 1	Increased business planning and performance for 70 SMEs	Activities: (Export coaching modules) - Business audit (70) - Business Planning Development (70)	Un-intended result:
Output 2	Increased export	Activities: (export	Un-intended results:

	capacities, compliance with EU import requirements and certification (50-60 SMEs)	coaching modules) - Export Capacity Building - Certification	
Output 3	Increased linkages to EU markets and Import-Export linkages (50 SMEs)	Activities: (Export Coaching Modules) - Market entry regional and EU (50)	Un-intended results:
Project 2	Improved service environment for SME export through customised and accessible business support services and market intelligence		
Output 4	4 BSOs have the capacity to respond to business support needs of SMEs	Activities: (BSOD and MI modules) - BSO diagnoses (6) - Market intelligence (4) - Export Development and promotion (4)	Un-intended results: Disturb BSO market due un-equal competition. Mitigation: open tender for participation
Output 5	Market Intelligence is accessible to SMEs through commodity based private sector associations (4-6 associations)	Activities: (MI modules) - Market Intelligence - Tailored Intelligence (coco-oil niche products, processed fruits) - Export intelligence	Un-intended results:
Project 3	Improved sub-sector coordination through (informal) Public Private Partnerships around targeted sub-sectors development.		
Output 6	Improved coordination and alignment in 2 core sub-sectors	Activities: - Advocate for / facilitate (informal) PPP mechanism	Un-intended results:
Output 7	Improved access to other service providers like financial services, certification / accreditation agencies etc.	Activities: - engage with stakeholders from start - Inception workshop	Un-intended results:

Table 28 Result framework

See the figure below for the detailed result chain.

Regarding the attribution of results and outcome and impact, precise estimates can typically not be forecasted for integrated programmes in which capacity enhancement is the major driver for change.

We are however able to judge the attribution of the CBI investment to outputs and outcomes as follows:

Attribution level 1	Development would not occur without mentioned interventions
Attribution level 2	Development would occur without mentioned interventions but at a slower pace
Attribution level 3	Development would occur without mentioned interventions

We characterise attribution as follows for the different result levels:

Output level: 1 (would not occur without CBI intervention)

Outcome level: 1 (would not occur without CBI intervention)

Impact level: 1-2 (would not occur or occur at a slower pace without CBI interventions)

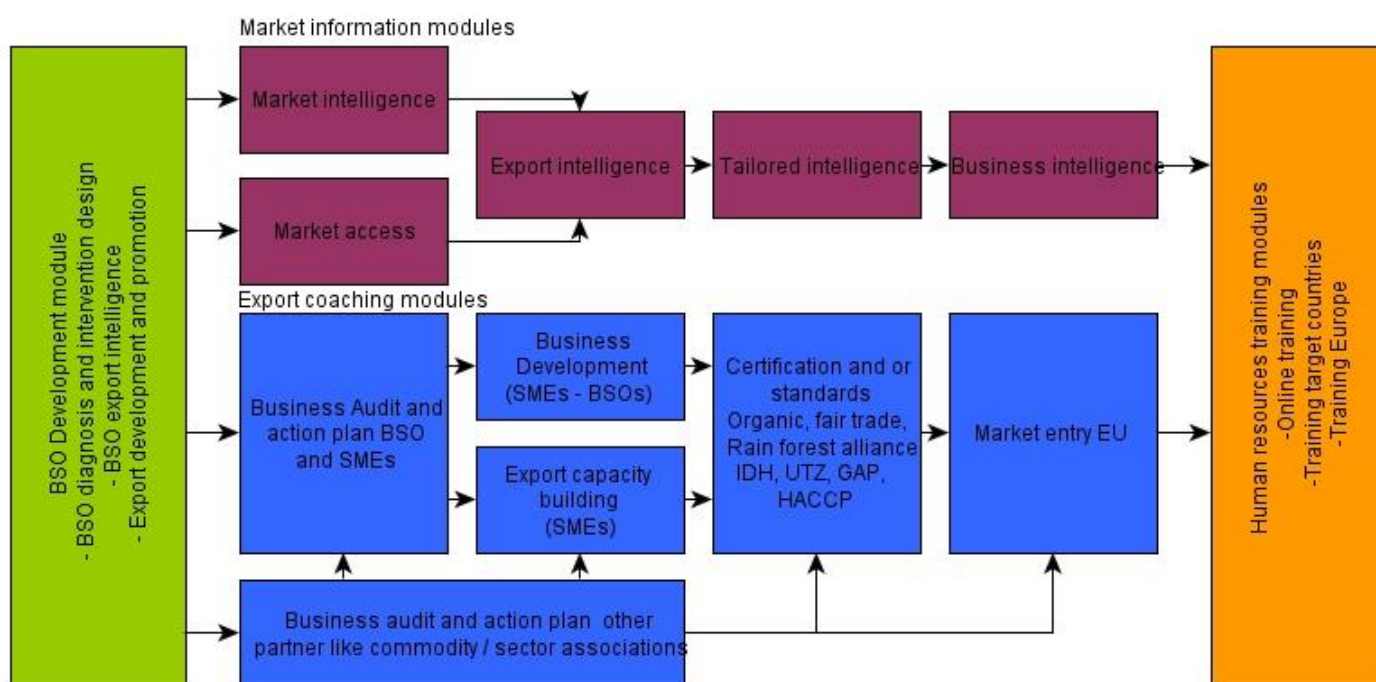
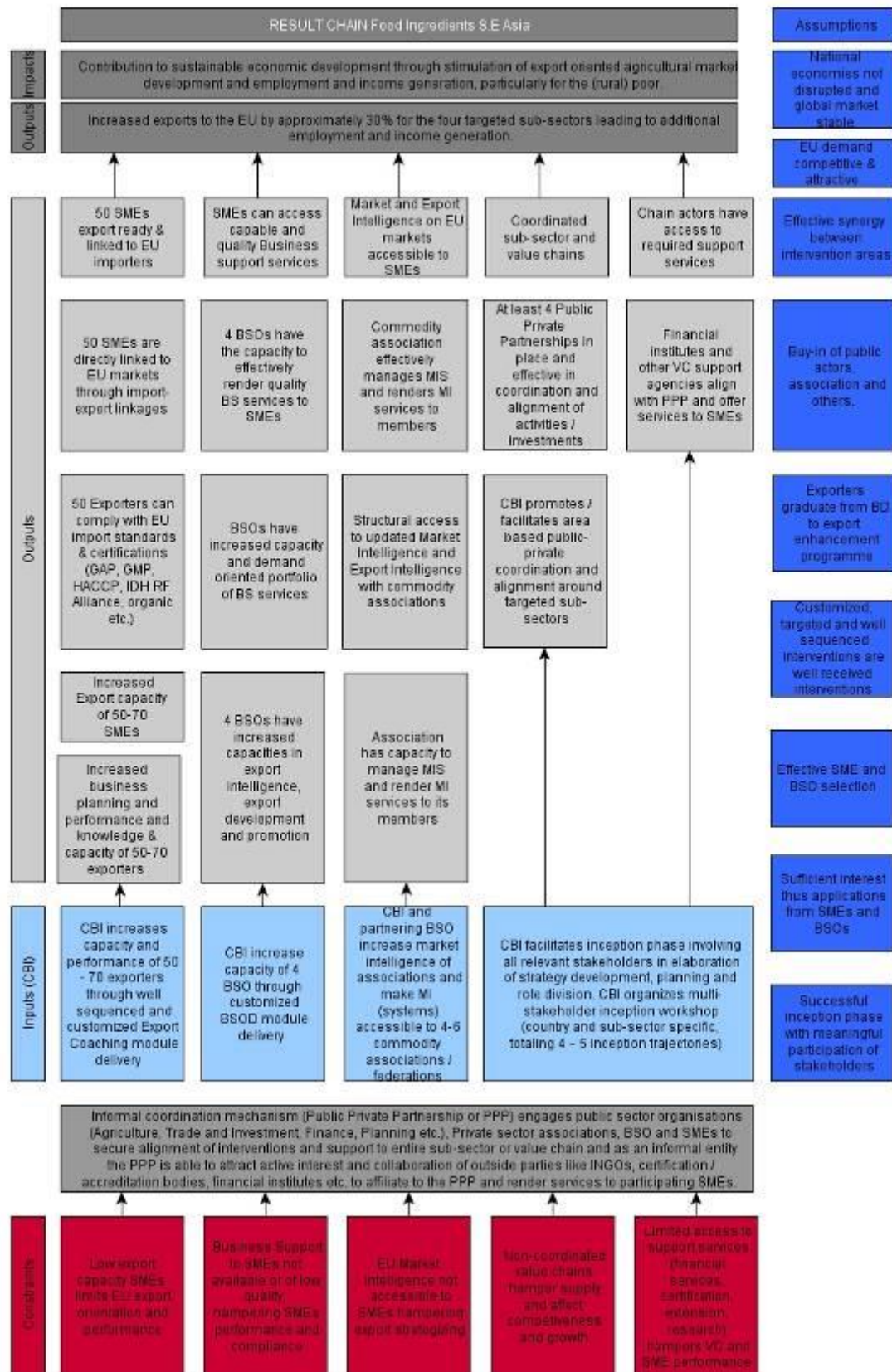


Figure 14 Modules sequencing

Result Chain CBI programme Food Ingredient South East Asia



Result Logic 3 CBI programme Food Ingredient South East Asia

2.6. Risk assessment

Risk assessment and mitigation

Risk event	Potential impact(s) on proposed CBI interventions	L	I	Risk mitigation measures
Risks on Programme (strategic and planning) level				
The programme cannot identify promising businesses and/or high potential businesses do not show an interest in the programme offer	Sub-optimal client selection leading to lower results and impact	1	5	Use existing networks, linkages and CBI partners to identify, select and communicate with potential target businesses. Formulate a clear proposition regarding CBIs offer to be disseminated amongst potential clients.
No suited / capable local BSO partners can be located and interested to collaborate.	Hampering sustainability and outreach of the interventions.	1	4	In the early phase BSO are actively approached and invited to engage in the process of developing the programme.
Wrong match between the CBI service offer and real challenges / demand of businesses involved	Non effective / efficient programme implementation leading to sub-optimum results	2	4	In-depth participatory analysis of constraints and challenges in the chains and sub-sectors taking into account perspectives of all relevant stakeholders. Cross-checking of findings is necessary.
Averse economic developments at EU side hampers exports to EU	Foreseen impact in terms of increasing export figures are threatened	3	4	A flexible programme design led by a due monitoring system that allows for a timely response to changing external market conditions
Averse changes in the in-country policy environment relating to trade and exports of agricultural products	Foreseen impact in terms of increasing export figures are threatened	2	3	Including sector organisation with a strong lobby / advocacy agenda in the programme design and implementation.
No / limited government buy-in	Government agencies do not engage / support and parallel structures prevail, losing out on synergy.	2	3	Public stakeholders are approached and invited to be part of the design process of the programme from the very beginning.
Challenges encountered in target value chains and sub-sectors are too big to handle for CBI or not relating to CBI's support offer.	CBI interventions are not targeting real challenges and constraints resulting in foreseen impact being threatened	3	4	Due value chain analysis and involvement of other support programmes / initiatives that are complementary to the CBI programme in terms of VCD. CBI interventions should also focus on building linkages and improved coordination within the sub-sectors and targeted VCs.
Development "fatigue" of SMEs / private sector due to large number of external	SMEs / private sector loses interest in partnerships and	4	4	Coordination and alignment between different external sector project and programmes is an absolute necessity. CBI should from the beginning look for synergy

interventions	collaboration with support initiatives			and complementarities and not act in isolation.
Emergence of a negative "competitive" culture and attitude amongst SMEs threatens joint agenda setting on behalf of the sub-sector.	Unwillingness to coordinate and collaborate leading to in-efficient / in-effective collective agenda setting and action on behalf of the sector and SMEs	3	2	Ensure inclusiveness of the CBI support with clear eligibility criteria. Balance specific support to SMEs with support to the sector as a whole.
Interventions of CBI are not well aligned thus not complementary	Foreseen synergy between various intervention levels is not happening hampering effectiveness and overall results	3	4	Align and sequence interventions well. Refrain from isolated interventions and strive for a complete support package addressing all constraints identified in the chain and in the chain environment
Interventions and results of interventions are not sustainable	Results will fade after CBI interventions	2	4	Adopt from the off-set a strategy of empowering local support providers through improving the capacities of local BSOs and BDS service deliverers. Fee for services programmes should be promoted.
Foreseen Public Private partnerships are not functional	Supportive context and leverage potential is missing, supply problems can hamper targeted exports.	3	3	Invest in buy-in of concerned governments and other partners. Ensure clarity about objectives and expected roles through multi-stakeholder inception workshop prior to programme initiation.

Table 29 Risk assessment and mitigation

Key

L = Likelihood	(5 = Almost certain, 4 = Likely, 3 = Possible, 2 = Unlikely, 1 = Rare)
I = Impact / Consequences	(5 = Severe, 4 = Major, 3 = Moderate, 2 = Minor, 1 = Negligible)
High likelihood ranking plus high Impact ranking (L x I) indicates high risk level (max risk 5x5 = 25 versus min. risk 1x1 = 1)	



Annexes

Annex 1 Initial long-list of eligible food ingredients sub-sectors

The CBI listed 10 sub-sectors in the food ingredient sector as follows:

- Fruits (dried fruit, pulps, puree, juices, concentrates, jams etc.)
- Vegetables (preserved, pastes, stir-fry kits etc.)
- Edible nuts (oils, butter etc.)
- Grains, pulses and seeds (cereals, oils etc.)
- Herbs and spices (sauces, oils, oleoresins)
- Coffee, tea and cocoa (green beans, powder, paste, liquor, butter)
- Honey (wax, pollen, royal jelly etc.)
- (Cane) sugar and syrups
- Oils and fats (coconut, palm oil etc.)
- Essential oils, oleoresins, plant extracts, natural food colors,

Annex 2 Country level indicators

Criteria	Indicators	Viet Nam	
		Absolute quantity or score	Relative score: 1-3
Export general ⁹	Total current export (in US \$)	66,374,608,264	2
	% export growth (last 5 years)	7.02	1
	Average annual growth of exports towards EU	10.40	2
	Growth of export to EC (in %) average 2001-2009	12.60	1
	Percentage agro-sector in total export to EU27 (in %)	22,8	2
	Percentage of agro-sector in overall GDP (in %)	21.00	1

⁹ Data derived from DG Trade 2011 and EUROSTAT. Please note that some figures are provided in US\$ while other are mentioned in Euro.

	FDI (in million US \$)	8173.00	2
Score	SUB TOTAL SCORE		1,6
Enabling Trade Environment ¹⁰	Doing business (ranking)	78	1
	Cross-border Trade (ranking)	63	3
	Enforcing contracts (ranking)	31	1
	Lead time to export (median case – days)	7	1
Score	SUB TOTAL SCORE		1,5
			3,1
SME sector ¹¹	Total number of MSMEs	2,707,800	2
	Income equality: Gini Coefficient	37,0	2
Score			2
	TOTAL SCORE		5,1

¹⁰ Data derived from WB at <http://data.worldbank.org/data-catalog> and <http://www.ciesin.org/IC/wbank/sid-home.html> and <http://www.photius.com/rankings/> (Photius) and <https://www.cia.gov/library/publications/the-world-factbook/> (CIA)

¹¹ Data derived from UNDP, FAO, WB http://en.wikipedia.org/wiki/List_of_countries_by_income_equality and <https://www.cia.gov/library/publications/the-world-factbook/> and <http://faostat.fao.org/> and <http://www.fao.org/economic/>

Annex 3 Qualitative Ranking of sub-sectors per country

Qualitative ranking sub-sectors¹²

<i>Sub-sector</i>	<i>Economic potential and export volume to EU</i>	<i>Potential to improve sustainability dimension of the sub-sector</i>	<i>Local leverage (SME, added value and smallholders)</i>	<i>End score</i>	<i>Rank</i>
	Weighing factor 60%	Weighing factor 20%	Weighing factor 20%	Total 100% (maximum score = 10)	
Vietnam					
Coffee, tea, cocoa	10	7	5	8,4	1
Edible nuts	8	5	5	6,8	2
Herbs and spices	8	4	5	6,8	3
Processed Fruits	5	6	8	5,8	4
Grains, pulses (oils)	6	5	5	5,6	5
Processed Vegetables	4	7	7	5,2	6
Honey	2	4	7	3,4	10
Sugar (cane), syrups	2	5	6	3,4	9
Oils and fats	5	7	4	5,2	7
Essential oils	3	4	8	4,2	8

¹² The absolute numbers given are arbitrary and based on indicative judgments of the sector against indicator groups. The weighing factor is based on priorities as indicated by the CBI.

Annex 4 Assumptions in calculating increase in export value

Predicting the outcomes of CBI investments in terms of additional export volumes and value of such increase in exports is challenging. We are talking about highly volatile markets, at unstable economic times.

Uncertainties do not only exist at production level due to increasingly unpredictable weather conditions and ecological hazards that can change product flows dramatically from one year to another, but also due to rapid changes at the demand side. International trade and particularly international trade in luxury and/or high-end products depend highly on the overall economic developments at the importers side. Additionally, consumer preferences experience unprecedented dynamics in terms of quality, taste, appearance etc.

And again, changing consumer preferences and overall economic performances are strongly inter-linked.

Destinations and trade directions can switch easily as a result of recessions / low economic growth in one part of the world and/or fast economic growth in other parts.

In short, in order to predict future outcomes of any CBI investment, many variables have to be taken into account and assumptions have to be made.

The attached business case takes investments in 3 sub-sectors and 8 value chains as a starting point. The base-line of participating SMEs in terms of current export capacities vary greatly per value chain. Moreover, great differentiation between SMEs exists in size and export figures within one value chain. It is impossible to define a "typical" SME in the food ingredient sector in terms of export capacities, volumes and values, so estimates are based upon estimated averages of a diverse array of SMEs interviewed during the study.

The overall estimates in terms of prognosis increased in export volumes (percentage) and overall value of such increase should be seen in the light of the above.

Three main assumptions are key:

i) Number of SMEs participating:

Figures are based upon a total of 50 to 70 selected SMEs participating in a 4-years programme. The precise numbers of SMEs participating per sub-sector and country will largely depend on real interest and current capacities of SMEs.

ii) Increase in export volumes / value per enterprise

Furthermore we estimated an average of 30% increase in export volumes per participating SME enterprise that have engaged in the entire support trajectory offered by the CBI. Also this figure varies widely per value chain (from an estimated 300% increase for cacao to an estimated 5-10% increase for coco oil products).

iii) base-lines of SME enterprises at times of intake.

Again this figure varies widely per chain. Current export volumes / values will be relatively small for cacao in Vietnam relatively large for pepper and coffee in Vietnam. Also based on the experience CBI gained in former support interventions in the food ingredient industry an average of 100,000 to 150,000 Euro increase in export value per SME enterprise is estimated. This implies an

average export value of participating SME enterprises at times of intake ranging from 300,000 to 500,000 Euro.

Minimum scenario: 50 enterprises X 100,000 Euro increase in export value = 5,000,000 Euro

Optimum scenario: 70 enterprises X 150,000 Euro increase in export value = 10,500,000 Euro

<i>Sub-sector</i>	<i>End score¹³</i>	<i>Rank</i>	<i>Judgment experts CBI</i>	<i>Judgment in-country partners</i>
<i>Vietnam</i>				
Coffee, tea, cocoa	8,4	1	Cocoa (certified), avoid main stream commodity / bulk chains	Coffee is dominated by large scale players, partly semi-state owned
Edible nuts	6,8	2	No comments	Cashew is a growing sector but internally not well organised
Herbs and spices	6,8	3	Health ingredients (proteins, vitamins), cinnamon, ¹⁴	Cinnamon and black pepper are both suitable. Black pepper sector has advantage of i) more external partners ii) more concentrated / accessible sourcing areas iii) buy-in from government as enhancing quality and sustainability is priority area
Processed Fruits	5,8	4	CBI target sector, processing not yet common though.	
Grains, pulses (oils)	5,6	5	No comments	
Processed Vegetables	5,2	6	Frozen vegetables, end products like spring rolls (nem)	
Honey	3,4	10		
Sugar (cane), syrups	3,4	9		
Oils and fats	5,2	7		
Essential oils	4,2	8		

¹³ Based on qualitative ranking of sub-sectors per country as provided in annex 3

¹⁴ The functional food sector is mentioned as promising for example Aloe Vera. Promote R&D (in collaboration with local Universities and WUR) together with improved chain coordination, scaling and traceability.

Annex 7 List of interviews Vietnam

1	CÔNG TY CỔ PHẦN CACAO VIỆT NAM	Cacao	224 Lý Long Tường, Mỹ Kim III, Phú Mỹ Hưng, Quận 7	Tel : 84 (8) 54122755 - 54122754
2	Công Ty TNHH Cacao Phạm Minh	Cocoa	Ấp 1, xã Hữu Định, QI 60, Huyện Châu Thành, Tỉnh Bến Tre	(075) 2468477 - Fax: (075) 3813416
3	ACDI/VOCA Vietnam	Cocoa	Phòng D.2, 40 Bà Huyện Thanh Quan, Quận 3, TP Hồ Chí Minh	Tel: (84 8) 39 305 689 - Fax: (84 8) 39 302 783 - Email: hr@acdivoca.org.vn Website: www.acdivoca.org; www.thesuccessalliance.org
4	Cao Nguyen Xanh - Daklak	Cocoa	Dinh Hai Lam: lam.dinh@cnx.com.vn	0913532563
5	Cho Gao Coop	Cocoa	Cho Gao - Tien Giang	Mr. Tu
5	4 Collecting stations	Cocoa	Around Ben Tre - Tien Giang	
6	Collecting stations	Cocoa	Krongpa - Buon Ma Thuot - Lak village - Daklak	
7	Chung Dung Company	Cocoa/ Pepper	19/15 tay Village - Thuan An - Binh Duong	Tel: 06503797210
8	Joint Stock Investment and Export Coffee Highlands - Buon Ma Thuot Vinacafe	Cocoa	Km 7, Quốc lộ 27, Xã Hòa Thắng, Buôn Ma Thuột - Daklak	Tel: (0500)3862742 - (0500)3862896
9	Con Minh Co. LTD - Cocoa Seedling company	Cocoa	362 Phu Rieng Do - Binh Phuoc	Tel: 06513881407
10	Công ty TNHH Mai Hương.	Cashew	Quốc lộ 14, Xã Minh Hưng Huyện Bù Đăng Tỉnh Bình Phước Điện thoại :	

			0651.3971083 - Fax : 0651.3971066	
11	CÔNG TY CỔ PHẦN HÀ MỸ	Cashew	Địa chỉ: Xã Tân Lập, huyện Đồng Phú, tỉnh Bình Phước Chi nhánh tại TPHCM Địa chỉ: GF02 - Tòa nhà Vietnam Business Center. 57 - 59 Hồ Tùng Mậu, P.Bến Nghé, Q.1, TP.HCM	Tel: (0651) 3871.999 - Fax: (0651) 3871.998 Tel: (08) 3914.6385 - Fax: (08) 3914.6382 Email: hamyco@hamyco.com.vn - Website: www.hamyco.com.vn
12	Văn phòng Hiệp hội Điều Bình Phước	Cashew	ĐC: 70 Nguyễn Chí Thanh - P. Tân Phú - TX.Đồng Xoài - Bình Phước.	ĐT: 0651.3899.789
13	Ông Nguyễn Văn Thoả	Cashew	PCT Hiệp hội Điều VNChủ tịch Hội điều Bình Phước	Số Điện Thoại : 0913 880018
14	Hiep hoi Dieu Vietnam	Cashew	Địa chỉ: 135 Pasteur, Phường 6, Quận 3, Thành Phố Hồ Chí Minh, Việt Nam	Điện thoại: (08) 3.8242 136 - Fax: (08) 3.8242 138 Email: info@vinacas.com.vn - Website: http://www.vinacas.com.vn
15	Công ty CPTM DV DLXNK Mỹ lệ	Cashew	Đường Nguyễn Huệ, TT Thác Mơ, huyện Phước Long, tỉnh Bình Phước.	0972 087979 - Email: tam.myleco@gmail.com
16	Doanh nghiệp tư nhân Cẩm Hồng	Cashew	KP Phước Vĩnh, Phước Bình, Phước Long	Ms. Hà: 0909935935
17	Dong Nai Import Export Joint Stock Company	Cashew	Số 73-75 Đường 30/4, Phường Thanh Bình, Tp. Biên Hòa, tỉnh Đồng Nai	Tel: 061)3822529 - (061)3822547- (061)3822589
18	Collecting station Tiet Nhi	Cashew	Tan Luc - Bu Nho, Binh Binh Phuoc	Tel: 06513776546

19	Hong Suonbg processing	Cashew	Thon Tan Luc - Bu Nho - Binh Phuoc	Tel: 0913101075
20	Phu My Trading	Cashew	420 Duong 471 - Binh Phuoc	Tel: 0651470889
21	Công ty Phúc Sinh : office@phucsinh.com	Pepper		Mr. Phan Minh Thông - Di động: 0903.685.458
22	Hiệp hội Hồ tiêu Việt Nam	Pepper	135A Pasteur, Lầu 4, Quận 3, TP.HCM	<u>Tel: +84.8.38.237.288 - 38.223.901</u>
23	Simexco Daklak	Pepper	23 Ngô Quyền Tp. Buôn Ma Thuột Tỉnh Daklak, Việt Nam	T:+84 500 3950787 F: +84 500 3950015 info@simexcodl.com.vn
24	Daklak Investment Export - Import Joint Stock Corporation	Pepper	228 Hoàng Diệu Thành Phố Buôn Ma Thuột Tỉnh Đăklăk	84.500.852233 / 856250 84.500.852864
25	Thai Phuc Trading	Pepper	350 Phan Chu Trinh - Ban Me Thuoc - Daklak	Tel: 0503953908
26	Ngo Gia trading	Pepper	Di An - Binh Duong	Tel: 0838964951
27	Agrexport SG	Pepper/coc oa	135 A Pasteur - HCM	Tel: 0838298332
28	Hai Van Trading Company	Pepper/coc oa	533 Dien Bien Phu - HCM	Tel: 0838396908
29	Vina Control	Pepper/coc oa/cashew	45 Dinh Tien Hoang	Tel: 0838223183