




**Coffee Industry Corporation**

# **STRATEGIC BUSINESS PLAN 2020 - 2024**



© February 2020

ISBN: 9980-943-16-5

Coffee Industry Corporation Ltd  
P O Box 137  
GOROKA 441  
Eastern Highlands Province  
Papua New Guinea

# Coffee Industry Corporation Strategic Business Plan 2020 - 2024

**Institute Strategic Structural and Management Reforms in Coffee Industry Corporation to Revive and Transform the Industry from a Stagnant Subsistence Status to a Professionalized, Robust and Sustainable Sub-sector, Economically Profitable for all Value Chain Participants, and Restore Papua New Guinea's Unique Position in the World Coffee Market.**

# Table of Contents

|   |            |
|---|------------|
| <b>ACRONYMS</b>   | <b>III</b> |
| <b>FOREWORD</b>   | <b>IV</b>  |
| <b>ACKNOWLEDGEMENTS</b>   | <b>V</b>   |
| <b>EXECUTIVE SUMMARY</b>  | <b>VI</b>  |
| <b>1.0 INTRODUCTION</b>   | <b>1</b>   |
| <b>2.0 OBJECTIVE AND SCOPE</b>                                    | <b>1</b>   |
| 2.1 Objective of the Strategy                                     | 1          |
| 2.2 Scope of the Strategy   | 2          |
| <b>3.0 COFFEE INDUSTRY CORPORATION ROLES AND RESPONSIBILITIES</b> | <b>3</b>   |
| 3.1 Legislative Framework   | 3          |
| 3.2 The CIC Board   | 4          |
| 3.3 CIC Functional Structure and Management                       | 4          |
| 3.4 Research and Grower Services Division                         | 4          |
| 3.5 Industry Operations Division                                  | 5          |
| 3.6 Kopi Management Services Limited                              | 5          |
| <b>4.0 VISION, MISSION AND VALUES</b>                             | <b>6</b>   |
| 4.1 CIC Governance Principles                                     | 6          |
| 4.2 Code of Conduct   | 7          |
| <b>5.0 CONTEXT OF THE INDUSTRY</b>                                | <b>7</b>   |
| 5.1 Contributions to the National Economy                         | 7          |
| 5.2 Coffee Industry Performance                                   | 7          |
| 5.3 Coffee Industry Challenges                                    | 14         |
| 5.4 Strengths, Weaknesses, Opportunities and Threats              | 16         |
| 5.5 Coffee Supply and Demand                                      | 18         |
| 5.6 Coffee Industry Revival and Sustainability                    | 19         |
| 5.7 Market Dynamics on Production Behaviour                       | 19         |
| 5.8 Certification Schemes   | 19         |
| 5.9 The State and the Farmer                                      | 19         |
| <b>6.0 DEFINING THE STRATEGY</b>                                  | <b>20</b>  |
| 6.1 Strategic Direction   | 20         |
| <b>7.0 MARKET ANALYSIS</b>  | <b>20</b>  |
| 7.1 Increase Production and Improve Quality                       | 20         |



|             |  |           |
|-------------|--|-----------|
| <b>8.0</b>  | <b>PRODUCT ANALYSIS</b>  | <b>22</b> |
| 8.1         | Professionalize Operators and Streamline Internal Markets        | 22        |
| <b>9.0</b>  | <b>COMPETITION ANALYSIS</b>                                      | <b>23</b> |
| 9.1         | Competitive Coffee for New Markets                               | 23        |
| <b>10.0</b> | <b>INSTITUTIONAL ANALYSIS</b>                                    | <b>24</b> |
| 10.1        | CIC Structural Reforms   | 24        |
| 10.2        | Proposed CIC Organisational Structure                            | 26        |
| <b>11.0</b> | <b>COLLABORATIVE PARTNERSHIPS</b>                                | <b>27</b> |
| <b>12.0</b> | <b>MICRO-ENVIRONMENT ANALYSIS</b>                                | <b>28</b> |
| 12.1        | Industry Review Committee  | 28        |
| 12.2        | Strategic Alignment to MTDP III                                  | 28        |
| 12.3        | Need for Priority Intervention                                   | 28        |
| <b>13.0</b> | <b>KEY OBJECTIVES, GOALS, MEASUREMENTS AND ACTIVITY ANALYSIS</b> | <b>30</b> |
| 13.1        | Key Objectives   | 30        |
| 13.2        | Business Plan, Budget and Production Projections                 | 33        |
| 13.3        | Leadership: “Take Back PNG”                                      | 34        |
| 13.4        | PPAP Integration into CIC Activities                             | 35        |
| 13.5        | Improve Rural Road Network                                       | 36        |
| 13.6        | Stable Coffee Farm-gate Prices                                   | 37        |
| 13.7        | Cooperatives and International Trader Relationships              | 37        |
| <b>14.0</b> | <b>GROWTH STRATEGY</b>   | <b>38</b> |
| 14.1        | Strategic Choices  | 38        |
| 14.2        | Strategic Statement  | 39        |
| <b>15.0</b> | <b>IMPLEMENTATION FRAMEWORK FOR BUSINESS PLAN</b>                | <b>39</b> |
|             | <b>ANNEXES</b>   | <b>40</b> |

## ACRONYMS

|          |   |
|----------|---|
| CACC     | Central Agency Coordinating Committee                               |
| CBB      | Coffee Berry Borer  |
| CEO      | Chief Executive Officer   |
| CIB      | Coffee Industry Board   |
| CIC      | Coffee Industry Corporation Limited                                 |
| CIC Act  | Coffee Industry Corporation (Statutory Functions & Powers) Act 1991 |
| CIC SBP  | Coffee Industry Corporation Strategic Business Plan 2020 - 2024     |
| CRI      | Coffee Research Institute   |
| EHP      | Eastern Highlands Province  |
| FOB      | Free on Board   |
| gb       | green bean  |
| GoPNG    | Government of Papua New Guinea                                      |
| ha       | hectare   |
| HIV/AIDS | Human Immune Deficiency Virus & Acquired Immune Deficiency Syndrome |
| IOD      | Industry Operations Division  |
| kg       | kilogram  |
| KO       | Key Objective   |
| KMSL     | Kofi Management Services Limited                                    |
| MDG/SDG  | Millennium Development Goals/Sustainable Development Goals          |
| M&E      | Monitoring & Evaluation   |
| MIS      | Management Information Systems                                      |
| MTDP III | Medium Term Development Plan III                                    |
| NEC      | National Executive Council  |
| NGOs     | Non-Governmental Organizations                                      |
| NPC      | National Planning Committee   |
| PIP      | Public Investment Program   |
| PNG      | Papua New Guinea  |
| PSR      | Public Sector Reform  |
| PSRAG    | Public Sector Reform Advisory Group                                 |
| NCDR     | National Coffee Development Roadmap 2020 - 2030                     |
| PPAP     | Productive Partnerships in Agriculture Project                      |
| PSC      | Premium Smallholder Coffee  |
| SDS      | Sector Development Strategy   |
| WHP      | Western Highlands Province  |

## FOREWORD

The Coffee Industry Corporation Strategic Business Plan 2020 - 2024, reflects the converging views and consensus reached on Key Objectives from participatory consultations. The Strategy aims to transform the industry from a subsistence level to a well-coordinated and sustainable sector, economically profitable for value chain participants and to restore PNG on the world coffee market.



The CIC SBP is consistent with the GoPNG's vision to "take back the economy with special focus on Agriculture as the mother of all industries". The Plan's innovative approach is anticipated to enhance productive relationships among stakeholders to develop efficient coffee supply chain linkages and as a result improve productivity and coffee quality. However, success of the Plan begs for urgent structural and operational reforms in CIC and value chain to experience a sustained transformation of the coffee industry to help GoPNG's efforts to "Take Back PNG".

A participatory approach involving consultations with value chain actors, including state agencies, research institutions, farmers, processors, service providers, experts and development partners and their views and expectations gauged; which are articulated in this Plan.

The CIC SBP captures a targeted range of perspectives, inclinations and aspirations of stakeholders and for each to play the required role, to actively contribute to assist in the industry's recovery and to attempt to restore it to its former prominence. Consensus on Key Objectives set the strategic direction for remedial measures which shall be implemented to revive the industry to meet production targets.

It is a Plan that anticipates the unknown future and requires the collaborative efforts of all parties concerned to translate the projected orientations and recommendations into practical actions. It will mean harnessing and mobilizing efforts within the parameters of the integrated resource framework to attain visible outcomes over the 5-Year Plan cycle.

The success of this Strategy is intrinsically linked to CIC's capacity to regulate and value chain actors' adherence to this Plan which guarantees that priority is accorded to elements that have higher input or margin of success to bolster the industry. It is incumbent on management to optimize positive results with synchronized and efficient use of resources during implementation. The Strategy is not an end in itself; it will evolve to adjust to emergent circumstances with adequate capacity to collectively crystallize the results and ensure the industry's resilience to adapt to the changes in the domestic, regional and global context.

One very difficult question yet to be resolved is; "why the productivity for coffee farmers is low and production levels continue to decline up to now?" The CIC SBP will attempt to answer that question. The proposed interventions will help mitigate the adverse chronic legacies that constrict the industry in stagnancy and decline.

A handwritten signature in blue ink, consisting of a series of loops and a long horizontal stroke at the bottom.

---

**Charles Dambui**  
Chief Executive Officer

## ACKNOWLEDGEMENTS

The realisation of the Coffee Industry Corporation Strategic Business Plan 2020 - 2024 was made possible by the dedicated commitment and inclusive participation of coffee industry value chain participants, central Government departments, State agencies and institutions, Coffee Industry Corporation, its core functional entities and divisions, sister commodity agencies, development partners, industry experts, independent consultants and the invaluable technical inputs and facilitation of specialised United Nation's agencies.

Their individual and collective contributions and assistance set the platform to appraise the industry performance and inherent issues affecting consistency in production and map a viable path forward to resuscitate and develop a sustainable coffee industry over the coming five years and beyond. These organisations and individuals who availed time and contributed to the discourse to frame the CIC SBP are gratefully acknowledged:

- Office of the Minister for Agriculture and Livestock
- Office of Vice Minister for Agriculture & Livestock - Coffee
- Coffee Industry Board
- Coffee Industry Corporation Ltd
- Productive Partnerships in Agriculture Project - Coffee Component
- Academic and Research Institutions and Private Training Providers
- Smallholder Coffee Growers Associations, Cooperatives, Blocks and Plantations
- Processors, Traders, Exporters and Forwarding Agents
- National Government Agencies (Department of Agriculture & Livestock, National Agriculture Quarantine and Inspection Authority, Department of National Planning & Monitoring and Department of Treasury)
- Sister Commodity Bodies and Research Institutions (Cocoa Board, Kokonas Industri Koporesen and Fresh Produce Development Agency)
- Banks and Financial Institutions
- Development Partners (Australian Centre for International Agriculture Research, Food & Agriculture Organisation and United Nation Capital Development Fund)
- Specialised Service Providers



## EXECUTIVE SUMMARY

Significant internal and external issues affecting Coffee Industry Corporation's performance since its inception as Coffee Marketing Board in 1964, and the present dynamism of market forces that adversely influences production and market behaviour were analysed through consultative processes to help craft the Coffee Industry Corporation Strategic Business Plan 2020 - 2024. The medium-term plan's Vision and Mission proclaims that:

### Vision

CIC facilitate structural changes in coffee industry to help it reach consistent production of 3 million bags by 2030 generating over K1.5 billion.

### Mission

To provide enabling regulatory environment and facilitate the industry's development through research, extension, information sharing and market development services to bring better financial returns to the coffee value chain actors.

The CIC SBP defines the Key Objectives and deliverables, and the resource needed and timeline to achieve them. These Key Objectives to translate the Vision and the Mission Statement into tangible outcomes for the CIC and the coffee industry at large are:

1. Strengthen regulatory functions in the industry for licensed operators;
2. Realign functional areas in CIC to cater to emerging needs, resources, human talents and organisational capacity development;
3. Foster and actively promote partnerships and marketing;
4. Revise and develop a standardized approach to extension inputs to improve market access, production and productivity;
5. Adopt an approach of intervention through organized farmer groups or at aggregate level; and
6. Develop technology-driven systems and processes for market information collection, analysis and dissemination.

CIC would then encapsulate the outcomes of the Key Objectives consistent with the GoPNG Policy Platform and integrate them in the MTDP III and other sources of funding. The Plan's innovative approach is anticipated to have a profound impact in improving household income and reducing poverty in rural areas. Consequently, the coffee industry is expected to transform and help the GoPNG "Take Back PNG".

The changing landscapes in the market place compelled CIC to shift business focus to improve the quality of its coffee production modules and performance indicators through collaborative alliances among value chain participants. In order for that to happen the CIC Act 1991 requires urgent review and re-alignment as well as the restructure of CIC's role to regulate and increase PNG coffee profile through a professional approach to revive the industry's performance.

The CIC SBP underpinned that there is urgent need for institutional reforms to instill discipline in corporate leadership. This means CIC adopts a strong uncompromising regulatory control for coordinated production strategies, incentives for stakeholders, product processing, quality standards, market access protocols, and enhance competitiveness to capture the domestic, regional and international markets.

This Plan also plots an indicative sense of direction and what CIC aspires to be over the long term, beyond 2024 in the National Coffee Development Roadmap 2020 - 2030. Therefore, each change agent at functional unit level from the pinnacle down should aim to achieve that ultimate goal and that requires individual discipline, commitment and team cohesion.

## 1.0 INTRODUCTION

GoPNG specified strategies and resource framework to revive the coffee industry are articulated in the MTDP III. However, the steady decline in production and exports and loss of PNG's unique global market share, prompted Coffee Industry Corporation (CIC) and value chain participants and partners to engage in participatory consultations in regional forums to find solutions. These dialogues appraised the present position of the industry, institutional issues of CIC and the ramifications of diverse factors at each level of the value chain.

CIC engaged the technical assistance of development partners – United Nations Capital Development Fund and independent advisors, who reviewed various reports and past strategies and chronic issues affecting the industry's performance. The contextual appreciation and analysis of critical segments of the market set the platform for the Business Planning workshop in Lae from the 16-19 October 2019 to facilitate the formulation of this Coffee Industry Corporation Strategic Business Plan 2020 - 2024 (hereafter CIC SBP).

This CIC SBP is a pioneer medium-term plan. CIC has crafted a long-term plan, the National Coffee Development Plan 2020 - 2030 to provide an overarching Plan to which this CIC SBP is aligned.

The document starts by outlining the objective and scope of the CIC SBP and briefly points out the various stakeholders in the coffee industry. It then provides the functional roles and responsibilities of the CIC. It follows on with the Vision and Mission Statement and the Core Values of CIC that is to underpin the professional culture of the organization.

The next section reviews the general context of the PNG coffee industry and showing its critical importance to the economy. It also provides the current performance of the coffee industry in terms of production, exports and revenue generation. It progresses to provide the challenges in the industry, and the strengths, weaknesses, opportunities and threats (SWOT) analyses.

The subsequent sections define the strategy under which market, product, competition, institutional, partnership and micro environment, and KOGMA (Key Objectives, Goals, and Measures & Activities) analyses are conducted. Under the KOGMA analyses, six (6) Key Objectives were defined. These form the CIC SBP in the Implementation Framework.

The final section provides the growth strategies to bolster and sustain a vibrant and profitable PNG coffee industry.

## 2.0 OBJECTIVE AND SCOPE

### 2.1 Objective of the Strategy

The CIC SBP and its Implementation Plan were crafted to:

- improve industry performance at all levels of the value chain, from research to consumption, through rehabilitation and production, market access infrastructures, quality standard protocols, marketing (internal and external), processing and promotion;

- facilitate the prioritization of interventions through an Implementation Framework or the Business Plan with activities systematically organized in an inclusive way; and
- integrate dynamic progress measurement markers or monitoring and evaluation (M&E) mechanisms to ensure effective execution of this strategic Implementation Plan are tracking well.

The CIC SBP was designed to enable decision makers and implementers to better plan and coordinate the various practical interventions geared to reviving the industry.

It is also a communication tool with the industry's stakeholders who did not participate in the various workshops in Goroka, Mt Hagen and Lae, in order for them to be aware of the information concerning core activities to be implemented to improve competitiveness of the industry.

This Business Plan applies to all industry stakeholders (Table 1).

Table 1: Types of Stakeholders in PNG's Coffee Industry

| Farmers   | Licensed Processors   | Allied Service Providers  |
|---|---|---|
| Farmer groups or cooperatives<br>Plantations<br>Blockholders<br>Individual coffee farmers<br>Family units | Processors or millers<br>Exporters<br>Roasters or manufacturers | Forwarding agents<br>Roasted coffee distributors<br>Farm input distributors<br>Agro-equipment suppliers<br>Transporters<br>Logistics operators<br>Equipment and chemical suppliers<br>Phytosanitary treatment companies<br>Banks and financial institutions<br>Tax and customs services |
| Academic/research institutions  | State agencies  | Specialized service partners  |
| Extension services<br>Research services   | Specialized government departments, agencies and institutions   | Consultants<br>Technical advisors   |
| Private agro-training institutes and service providers  | Provincial governments and district authorities                 | Quality control companies   |
| Cadetship programs for new recruits   | Local & external universities/ colleges                         | Partners  |
| Postgraduate students (coffee research) and industrial trainee students                                   | Partners - research institutions/ universities                  | Sponsors  |

The main direct beneficiaries of this strategy are the operators of the sector: coffee growers, buyers, processors, exporters and roasters. It sets the path for core State agencies responsible to measure reforms in the sub-sector and to establish its margin of success in growing the national economy and most importantly the impact it makes on the rural beneficiaries' lifestyles.

## 2.2 Scope of the Strategy

The CIC SBP broadly covers the traditional coffee industry value chain: research, production, milling, regulation, internal marketing and export. Under Productive Partnership in Agriculture Project (PPAP) the critical areas of focus are market access infrastructures, smallholder farmer support and expansion of supply base.

Adhering to the International Coffee Organization guidelines, the crafting of the CIC SBP involved participatory approach with coffee value chain participants and collaborators of the PNG coffee sub-sector and attempts to address all aspects relating to production, processing, marketing and consumption including roasted coffee targeting local and sub-regional markets.

Apart from District, Provincial and National Governmental agencies and support services, the estimated beneficiaries, over 2.5 million people are involved in the PNG coffee industry (Table 2).

Table 2: Beneficiaries of Coffee Sector in PNG

| No. | Activity  | Direct Jobs/Households          | Approximate Beneficiaries |
|-----|---|---------------------------------|---------------------------|
| 1   | Production  | 524,000 households              | 2.5 million people        |
| 2   | Processing and distribution                           | 10,000 direct/indirect jobs     | 70,000 people             |
| 3   | Marketing   | 10,000 direct and indirect jobs | 70,000 people             |
| 4   | Quality control and phytosanitary treatment           | 1,000 direct and indirect jobs  | 7,000 people              |
| 5   | Allied services, transport, port handling and transit | 1,000 direct and indirect jobs  | 7,000 people              |

## 3.0 COFFEE INDUSTRY CORPORATION ROLES AND RESPONSIBILITIES

### 3.1 Legislative Framework

The Constitutional, Legislative and Policy Authority Reference are the Coffee Industry Corporation (SPA) Act 1991, NEC Decisions, and Board Directives. Also, Public Service General Orders stipulates that:

- All Government agencies have Corporate Plans with key performance indicators;
- They improve and strengthen procurement and service delivery mechanism; and
- Develop Monitoring and Evaluation (M&E) mechanisms to ensure institutions and corporate bodies become accountable.



The main functional roles and responsibilities are articulated in the CIC Act 1991. It performs its sanctioned core role as Regulator of the critically important economic tree crop. CIC should operate in a vibrant and rapidly changing domestic and global environment in sync with market dynamics and evolving circumstance triggered by the ICT phenomenon that is changing the way businesses are conducted.

The forerunner to CIC was the Coffee Marketing Board which was established in 1964. It then became the Coffee Industry Board (CIB) in 1976. In 1986, the Coffee Research Institute (CRI) was established to carry out scientific research into all aspects of coffee husbandry and processing. The Coffee Development Agency (CDA) was created in 1987 as a result of the incursion of coffee leaf rust. In 1991, the three entities: CIB, CRI and CDA were merged into a single entity called Coffee Industry Corporation Limited as per the Coffee Industry (Statutory Functions & Powers) Act 1991.

### **3.2 The CIC Board**

The Constitution of CIC Part 8(d) (i) prescribes the composition of the CIC Board. The CIC Board is made up of 12 members that comprise:

- Six (6) smallholder association representatives on behalf of the four regions (Momase, Highlands (Eastern Highlands Province, Simbu and Western Highlands Province representatives), New Guinea Islands and Southern);
- Three (3) Government representatives (Departments of Agriculture & Livestock, Treasury and Commerce & Industry);
- One (1) Exporters Council representative;
- One (1) Plantations and Processors Association representative; and
- One (1) Blockholders Association representative.

### **3.3 CIC Functional Structure and Management**

The CIC head office is located in Goroka in the EHP. The current management of the CIC comprises of the Office of the Chief Executive Officer (CEO), which is made up of the CEO and the Secretariat of the Office of the CEO. The latter includes the Company Secretary, Internal Auditor and Projects Office. There are three divisions, namely: Research and Grower Services Division (RGSD), Industry Operations Division (IOD) and Kopi Management Service Ltd (KMSL).

The main research and grower services facilities are based at Aiyura, EHP with sub-stations at Panga in Jiwaka Province and Omuru Research Station in Madang Province. The quality control and export facilities are in Lae, Morobe Province, with extension officers based in 15 of the 17 coffee growing provinces.

### **3.4 Research and Grower Services Division**

The RGSD is mandated to generate coffee innovations, package and disseminate innovations, and facilitate increased and consistent production of quality coffee.

To fulfill its mandate, the RGSD is currently organized into four sections: (i) Coffee Research, (ii) Farmer Training & Extension, (iii) Education & Training and (iv) Scientific Liaison.

### 3.5 Industry Operations Division

The IOD is mandated to perform regulatory functions, compile and publish reports on the domestic and international market trends, conduct market research, and promote PNG coffee at the domestic and international markets.

The IOD has four sections: (i) Industry Regulations & Compliance, (ii) Economics & Marketing, (iii) Human Resource & Administration and (iv) Accounts & Finance.

### 3.6 Kopi Management Services Limited

The KMSL was established in 2016 as a subsidiary company and began operations in 2017 to manage the CIC commercial plantations. Specifically, the plantations that were formerly managed by the RGSD have now been transferred and are being managed by KMSL. Two CIC-owned coffee plantations: one at Aiyura and the other at Panga.



## 4.0 VISION, MISSION AND VALUES

### 4.1 CIC Governance Principles

#### Vision

*CIC facilitate structural changes in the coffee industry to help it reach consistent production of 3 million bags by 2030 generating over K1.5 billion*

#### Mission

*To provide enabling regulatory environment and facilitate industry development through research, extension, information sharing and market development services to bring better financial returns to the coffee value chain actors*

### Values

The core values are timeless principles that guide an institution. They set the norms of conduct for every employee in the entity. For any organisation, its values are deeply held beliefs and expressed through day-to-day behaviour of all. These are the guiding principles that preserve our commitment to excellence and sustain long-term viability forming the architecture. Below are the deeply held beliefs of CIC.

Table 3: CIC Core Values and Commitment

| Core Values                        | Our Commitment   |
|------------------------------------|--|
| Teamwork                           | Promote teamwork by developing internal human capital with competency benchmark to national and international best practices.                  |
| Leadership                         | Achieving results through effective change management and perform CIC's core role as the industry regulator.                                   |
| Professionalism                    | Regulate the coffee industry with honesty and professional ethics and being impartial to all value chain participants.                         |
| Accountability and Good Governance | Best business practice and operates in a robust governance environment.  |
| Innovation & Creativity            | Providing exceptionally high standard of service to stakeholders in the coffee industry.   |
| Corporate Citizen                  | Integrate cross-cutting issues of gender equality, employment, inclusive social justice and HIV/AIDS to form CIC's corporate responsibilities. |

## 4.2 Code of Conduct

Adopt a code of conduct based on fundamental ethical principles and obligations of: respect for law and system of Government; respect for persons; integrity; diligence; economy and efficiency. The code emanates from the Terms of Service (TOS Manual) that governs the CIC.

## 5.0 CONTEXT OF THE INDUSTRY

### 5.1 Contributions to the National Economy

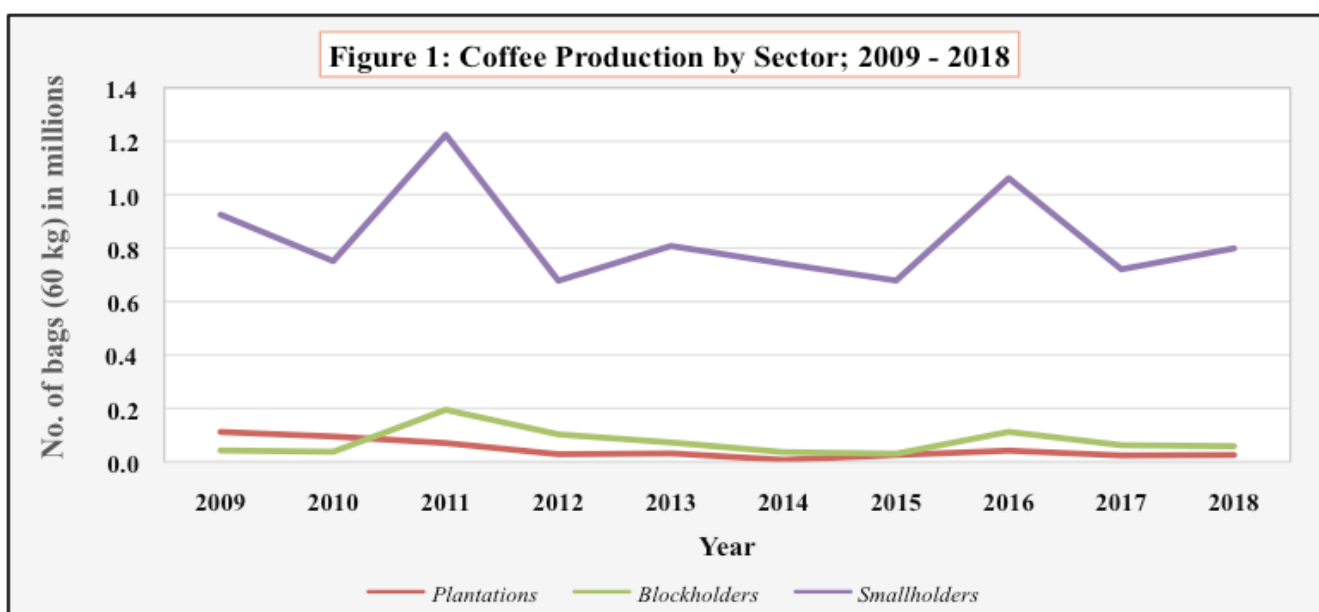
The coffee industry contributes substantially to the PNG economy in three main ways: (a) employment and income, (b) foreign exchange earnings and (c) social welfare.

Coffee is grown in 17 of the 22 provinces in PNG. According to the 2011 National Population Census, 524,400 households are engaged in coffee cultivation and trade to generate income and sustain their livelihoods. In 2018, there were 250 blocks with farm sizes ranging from 5 to 29 hectares (ha), 65 plantations, 25 registered exporters, 12 roasters/manufacturers, 58 licensed dry factories, 33 wet factories and an estimated 6,000 unregistered seasonal roadside buyers. In addition, it is estimated that currently there are about 60,000 micro, small to medium enterprises (MSMEs) in the coffee sub-sector.

### 5.2 Coffee Industry Performance

#### Production

Coffee production in a calendar year by sector from 2009 to 2018 period is depicted in Figure 1. It shows that coffee production peaked in 2011, however, it declined thereafter and remained stagnant until 2016 when production increased significantly to surpass 1 million bags (60 kg green bean bags). It declined again in 2017 to almost the same level as in 2015. Production recovered slightly in 2018. The coffee price rose significantly from 2009 and reached peak in 2011 and decreased and remained low from 2012 to 2015. The production increase in 2011 and 2016 is because of higher prices offered in the market that triggered farmers to bring in coffee.



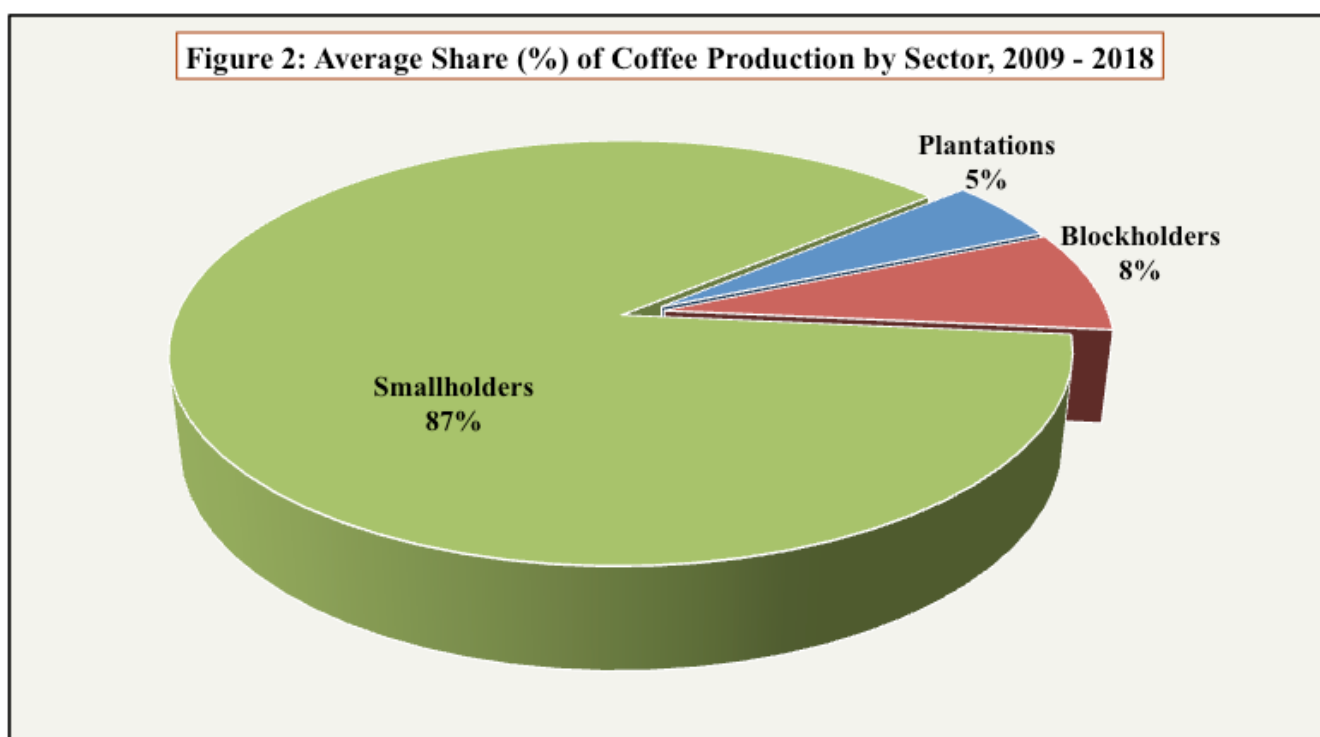
Source: CIC Ltd



Smallholder production has ranged from a low of 600,000 bags (2012 and 2015) to a high of over 1 million bags in 2011 and 2016. Plantation production on the other hand has been on the decline since 2010 from nearly 95,000 bags to 27,000 bags in 2018. Production by blockholders has fluctuated slightly between 2009 and 2017. Production increased to a high of 194,446 bags in 2011 from 42,339 bags in 2010, however, it has declined to 62,210 bags in 2018.

Smallholders have been the dominant coffee producer in recent years (Figures 1 and 2). Their average share of production from 2009 to 2018 is 87%.

There has been a gradual decline in the share of plantation production, declining from about 10% in 2009 to 3% in 2018. On average, the plantation share of production from 2009 to 2018 is 5%. The share of block coffee production has been fluctuating between 4% in 2009 and 13% in 2011. The average share of block production between 2009 and 2018 is 8%.



Source: CIC Ltd

Table 4, depicts coffee production by province from 2009 to 2018. On average, EHP is the leading coffee producing province, producing 45% of the total coffee production in PNG. Next is WHP with 30%, followed by Jiwaka (10%), Morobe (8%) and Simbu (7%)<sup>1</sup>. The remaining coffee producing provinces have relatively lower share of total production.

On a regional basis, the Highlands region is the major producer with 91.8% of production, followed by Momase with about 7.7% and the balance between Southern (0.3%) and New Guinea Islands (0.03%) regions.

<sup>1</sup> Coffee from other neighboring provinces is usually brought to Goroka to get a better price.

## Cost of Production

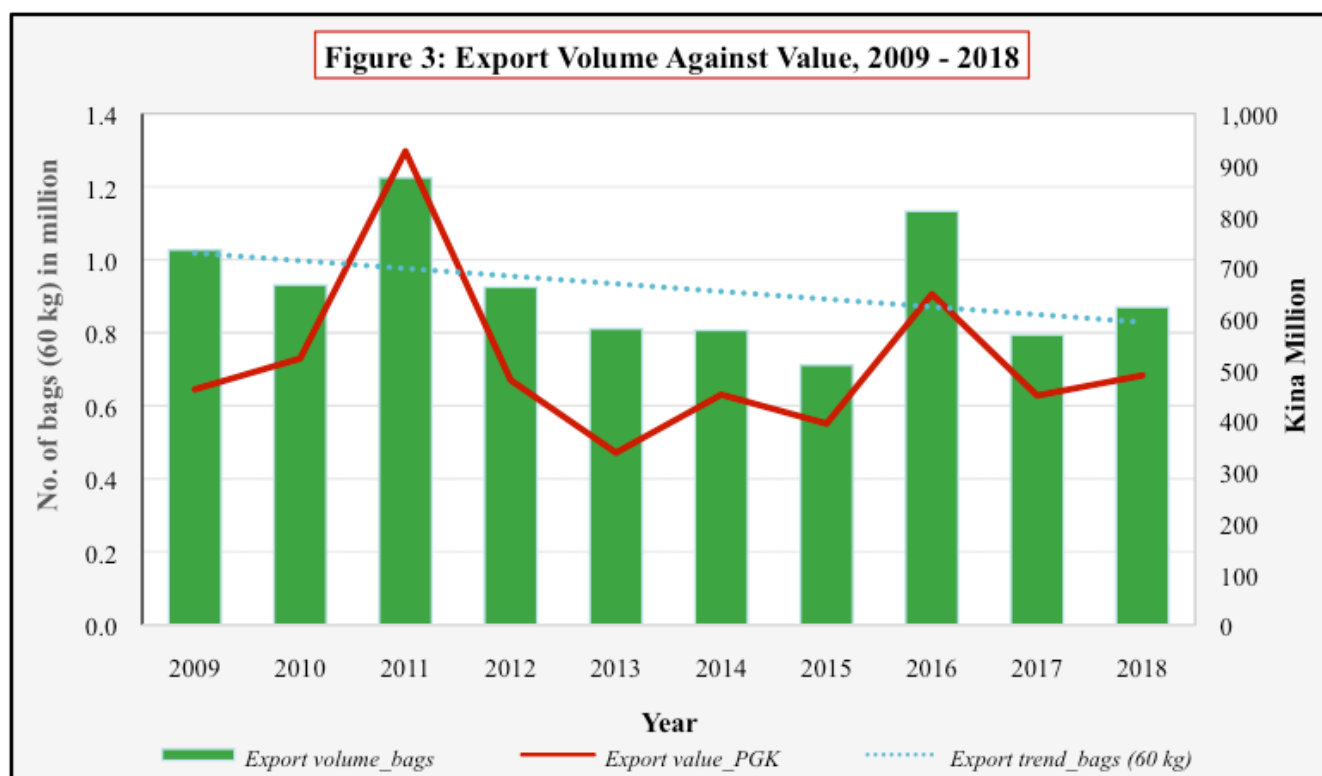
There is a lack of recent studies that estimate the cost of production of plantations, blocks and smallholders in recent years. With increasing emphasis on the use of farm inputs and transport costs, it would be useful to also know the cost of production trends and income levels to estimate the profitability of plantations, blocks and smallholder farms.

## Exports

Total coffee exports from 2009 to 2018 are depicted in Figure 3. Coffee export volumes averaged 929,340 bags during this period. The highest export figure was 1,488,752 bags recorded in 2011, but export volumes experienced a free fall thereafter, reaching a low of 737,831 bags in 2015, and recovered temporarily in 2016 but declined in 2017 with a slight increase in 2018.

## Export Values

Figure 3 depicts the export revenue from coffee since 2009. The value of coffee depends on the volume of exports and price of coffee on the world market. The coffee export revenue rose significantly from 2009 and reached a peak in 2011 due to relatively higher prices that prevailed in the market at the time. Farmers responded positively thus resulting in high returns, however, declined thereafter and stayed depressed for four years (2012 to 2015). Values bounced back in 2016, nevertheless fell back to the 2015 level. On average, the coffee industry generated over K500 million per year in the past 10 years.



Source: CIC Ltd

Table 4: Coffee Production by Province (60 kg gb bags)

| Province           | 2009             | 2010           | 2011             | 2012           | 2013           | 2014           | 2015           | 2016             | 2017           | Average        | Share of Production (%) |
|--------------------|------------------|----------------|------------------|----------------|----------------|----------------|----------------|------------------|----------------|----------------|-------------------------|
| Western Highlands  | 459,160          | 381,072        | 645,312          | 227,719        | 242,818        | 113,886        | 64,728         | 326,796          | 169,362        | 292,317        | 30.2                    |
| Eastern Highlands  | 432,693          | 366,446        | 593,893          | 292,898        | 481,453        | 425,316        | 426,780        | 487,626          | 389,496        | 432,956        | 44.7                    |
| Simbu              | 81,609           | 57,675         | 71,174           | 62,255         | 64,454         | 57,418         | 63,676         | 80,528           | 60,297         | 66,565         | 6.9                     |
| Jiwaka             |                  |                |                  | 101,566        | 58,232         | 66,791         | 102,683        | 176,823          | 90,313         | 99,402         | 10.3                    |
| Enga               | 25,279           | 16,402         | 62,928           | 18,634         | 3,887          | 8,624          | 13,839         | 27,243           | 12,832         | 21,074         | 2.2                     |
| Southern Highlands | 15,923           | 12,300         | 10,867           | 5,255          | 1,779          | 4,646          | 1,409          | 6,048            | 3,430          | 6,851          | 0.7                     |
| Hela               |                  |                |                  | 0              | na             | na             | na             | 0                | 0              | 0              | 0.0                     |
| Morobe             | 53,234           | 39,739         | 91,051           | 95,078         | 54,557         | 100,393        | 51,579         | 99,129           | 73,730         | 73,166         | 7.6                     |
| East Sepik         | 6,012            | 5,076          | 1,350            | 69             | 1,620          | 3,170          | 3,651          | 2,489            | 2,085          | 2,836          | 0.3                     |
| Madang             | 2,541            | 2,388          | 621              | 682            | 808            | 851            | 842            | 960              | 766            | 1,162          | 0.1                     |
| East New Britain   |                  |                |                  |                | 481            | 47             | 350            | 370              | 221            | 294            | 0.0                     |
| Oro                | 873              | 828            | 4,754            | 2,617          | 463            | 2,026          | 1,557          | 2,882            | 1,745          | 1,972          | 0.2                     |
| Central            | 664              | 608            | 512              | 595            | 572            | 422            | 272            | 599              | 446            | 521            | 0.1                     |
| Gulf               | 393              | 362            | 0                | 0              | 62             | 53             | 88             | 51               | 48             | 117            | 0.0                     |
| Milne Bay          | 318              | 287            | 183              | 0              | 413            | 297            | 712            | 405              | 344            | 329            | 0.0                     |
| Others*            | 395              | 383            | 6,107            | 1,681          | Na             | 957            | 1,663          | 3,284            | 1,333          | 1,975          | 0.2                     |
| <b>Total:</b>      | <b>1,079,093</b> | <b>883,567</b> | <b>1,488,752</b> | <b>809,051</b> | <b>911,598</b> | <b>784,896</b> | <b>733,831</b> | <b>1,215,234</b> | <b>806,448</b> | <b>968,052</b> | <b>100</b>              |

Source: CIC Ltd

The major coffee exporters and their market share in 2018 is summarised in Table 5.

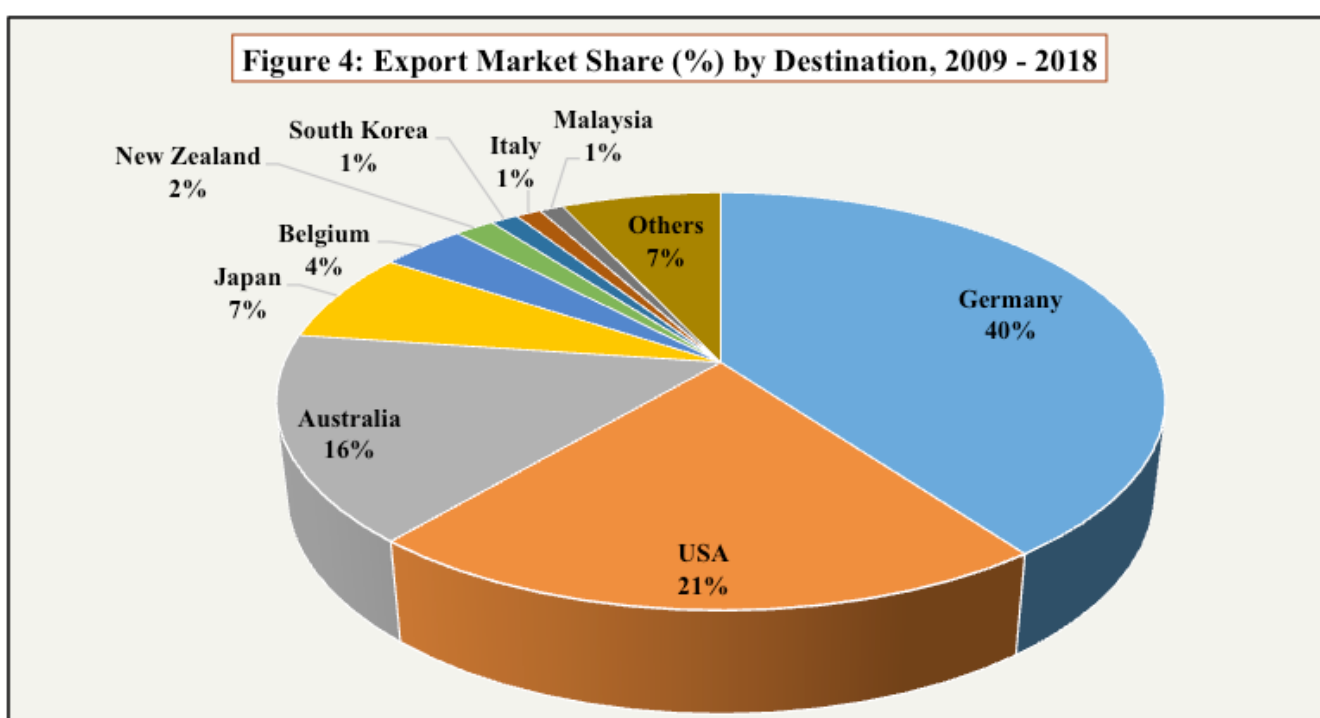
Table 5: Coffee Export Market Share (%) by Major Exporter

| Exporter                      | 2018 (Market Share (%)) |
|-------------------------------|-------------------------|
| PNG Coffee Export             | 15                      |
| New Guinea Coffee Exports     | 21                      |
| Outspan                       | 15                      |
| Monpi                         | 16                      |
| Kongo                         | 9                       |
| Gabiga                        | 4                       |
| Pacific Trading Company       | 5                       |
| Coffee Connections            | 4                       |
| New Guinea Coffee Tea & Spice | 3                       |
| Others                        | 8                       |
| <b>Total</b>                  | <b>100</b>              |

Source: CIC Ltd

### Export Destinations

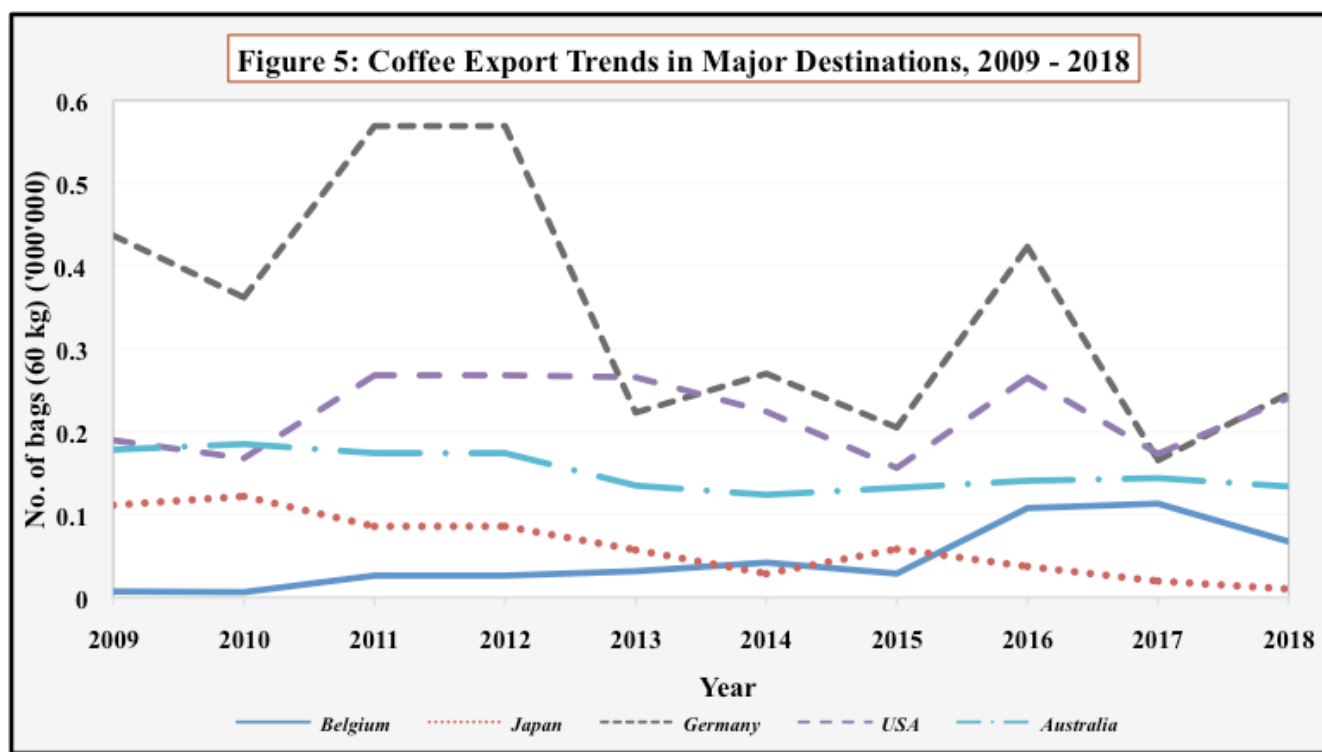
Over 34 countries import PNG coffee. From 2009 to 2018, the leading countries that imported PNG coffee in order of their market share are: Germany (40%), United States of America (USA, 21%), Australia (16%), Japan (7%), Belgium (4%), New Zealand (2%), Italy (1%), Malaysia (1%) and South Korea (1%). These countries imported a total of 93% of PNG's coffee. Furthermore, from Figure 4 it can be seen that the big five buyers of PNG coffee are Germany, USA, Australia, Japan and Belgium. The balance of 7% was exported to the other 24 countries that imported less than 1% of PNG coffee.



Source: CIC Ltd



The five dominant export destinations of PNG coffee are depicted in Figure 5. Imports to Australia and Japan have either remained stagnant or is showing signs of decline over the review period. The exception has been Belgium where export of PNG coffee has been steadily growing since 2009.



Source: CIC Ltd

The USA imports most of PNG's higher-grade coffee. For example, in 2018 it imported 66% of AA grade, 44% of X/AX grade and 27% of Pea Berry (PB) grade coffee. Australia followed closely in the higher end coffee market importing 12% of AA coffees and 29% of X/AX coffees.

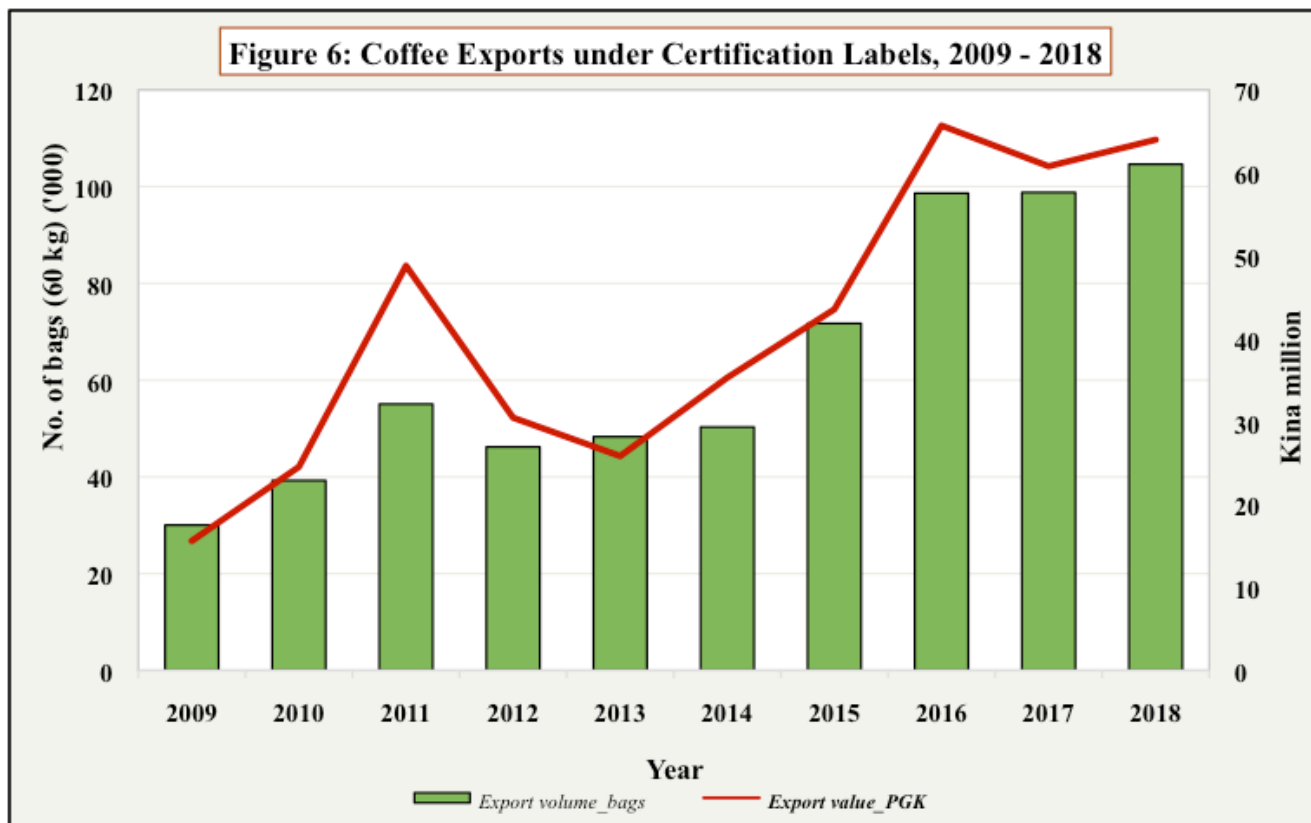
It is also interesting to note that coffees under certification labels have been steadily increasing in general since 2009 as illustrated by Figure 6. In terms of volume, in 2009 the export volume was 30,037 bags. This increased by 74,582 bags (248%) to 104,619 bags in 2018. These increases in export of certified coffee set against the value in export revenue, in 2009 the export value was K15.6 million and in 2018 the export value was nearly K64 million, a massive increase of 310%.

From the trends, the production and exports to specialty coffee market is a potential area of growth for the industry. This implies that CIC may need to employ more resources and effort towards developing this segment of the domestic coffee market and ensuring the producers actually benefit from the increased price.

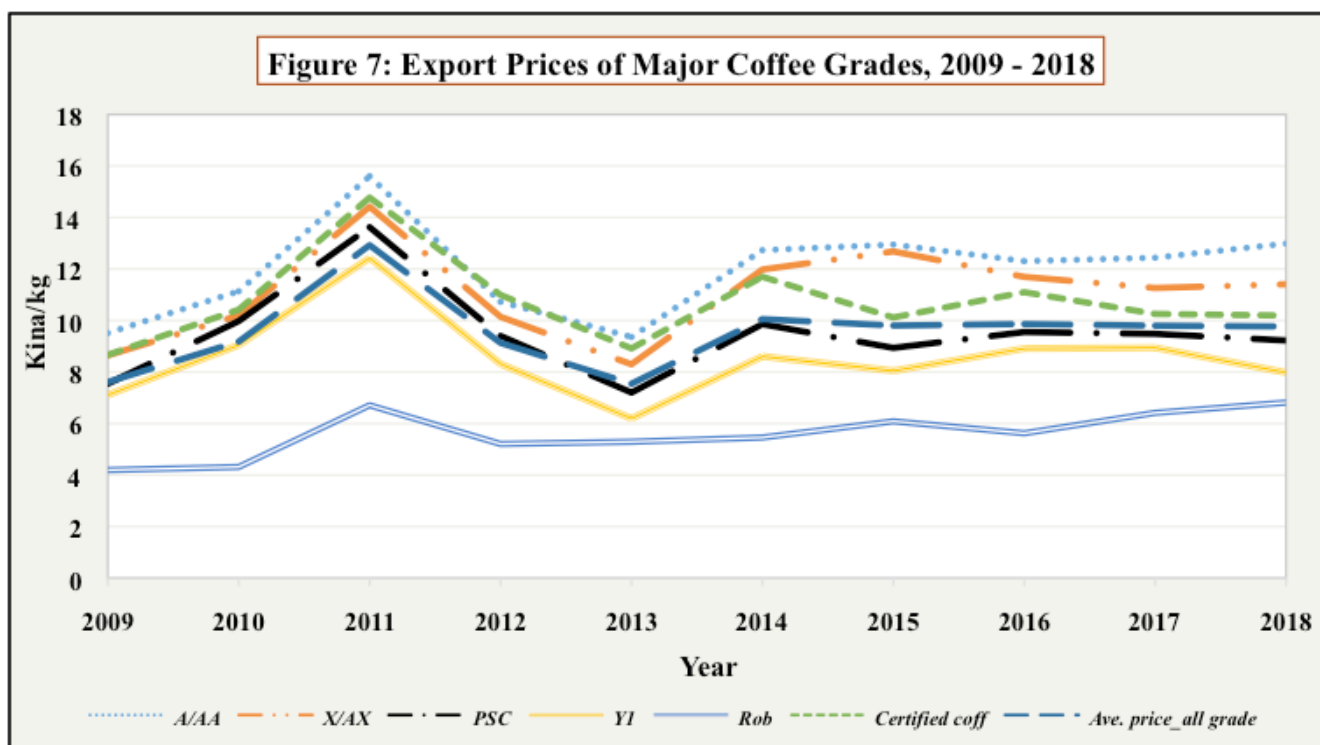
### Coffee Prices

Figure 7 shows the free-on-board (FOB) export prices of the major coffee grades exported from PNG. The FOB price is the price received by exporters. The price of A/AA grade is relatively higher than other grades. This is closely followed by certified coffees and X/AX grades. Slightly below these are PSC and Y1 and Robusta grades.

This coffee export price is an average of the aggregated export prices of various grades of coffee (Figure 7). Prices rose sharply in 2009, reaching a peak in 2011, but declined sharply in 2012 and 2013. Prices recovered slightly somewhat in 2014 and have remained steady, between K8,000 to K10,000 per tonne in the past five years. The domestic price in general reflects the international price movements. Coffee prices shrink as it moves along the value chain.



Source: CIC Ltd



Source: CIC Ltd

### 5.3 Coffee Industry Challenges

#### Coffee Berry Borer

In 2010, coffee berry borer (CBB) was first detected in Yapsie LLG area of Telefomin District in Sandaun Province, PNG, and was successfully eradicated by the CIC and the National Agricultural Quarantine & Inspection Authority. However, in February 2017, CBB was detected in the Banz area, Jiwaka Province and later found in the Asaro Valley of EHP and Madang. The pest's presence in Jiwaka and EHP is very serious because these are the two major coffee growing provinces in PNG, producing a total of about 55% of the total coffee production and these provinces are very well connected by road and air and in close proximity to the other major coffee growing provinces.

The potential impact of CBB in PNG would be of catastrophic proportions when we take into account the whole fabric of rural socio-cultural, political and economic livelihoods mediated by cash income earned from coffee, especially in the Highlands region where more than 90% of the crop is currently produced.

For the rural coffee-dependent households, it will be extremely difficult to bear the economic and social consequences associated with the loss of incomes and employment. If the CBB can cause yield losses of up to 30-40%, the national economy will tend to lose K260 to K280 million out of the K500 million to K700 million generated from exports. Another likely impact would be that buyers will declassify PNG coffee quality to lower standards, thus losing premiums associated with specialty markets and buyers will purchase coffee cheaply.

#### Climate Change

Climate change is also imposing changes in coffee production spaces, which may also lead to socio-economic and political upheavals. Areas that were once conducive to growing coffee are becoming less suitable while regions that used to be cooler and unsuitable for coffee can now grow the crop. The recommended altitudes for coffee growing are changing, and this may continue into the future. The changes in farming spaces will exert pressure on land use; thus, livelihood strategies will have to modify, thereby causing social instability. Consequently, some farmers will be forced to abandon coffee and adopt new cash crops, or will have to migrate, depending on land availability, into new locations. Regions where land access is limited could experience social conflict as a result of migration. Furthermore, climate change is intensifying the incidence of pests and diseases such as CBB and coffee leaf rust and thus negatively affecting coffee production.

#### Cherry Theft

Coffee theft affects the morale of coffee growers and is a disincentive for them to produce coffee. The CIC introduced the Cherry Ban Policy in 2008 to address cherry theft. However, coffee buyers and some processors are not cooperating with the CIC to enforce the policy, and so the cherry ban has been ineffective. Some farmers have also reported itinerant coffee buyers to village court officials and CIC inspectors, but the response to address the problem remains limited and ineffective.

## Low Productivity

PPAP baseline study in 2013 estimated yield of smallholder farmers who are not members of grower groups to be 382 kg gb/ha. A CIC study in 2016 established that the average productivity from two coffee cooperative groups in Morobe Province and EHP attained 743 kg gb/ha<sup>2</sup>. The relatively higher level of productivity was associated with farmers receiving farm inputs from partners, better farm management and level of education of farmers. Thus, potential remains in collective action of smallholders to achieve higher productivity. Also, the productivity of many plantations owned by nationals are even lower at 432 kg gb/ha but have the potential to achieve more than 1,500 kg gb/ha.

The competitiveness of PNG coffee comes from its acclaimed flavour, high acidity content, and low production costs. This is essential to enable the coffee grower to live off their farm even during the times when the market is at low prices. If the level of productivity is not improved, there is a high risk that coffee growers who are victims of current market speculation will withdraw from coffee in favour of other, more profitable crops.

## Competition from Other Crops

Farmers may perceive coffee farming as a waste of time and labour and instead cultivate other cash crops that generate better returns. Many smallholders in high market access areas have a diversity of income opportunities; they can choose to abandon coffee and switch to other more profitable crops like vegetables that have a short cultivation time-span and provide quicker returns than coffee.

## Lack of Partnerships

The lack of productive partnerships among value chain participants have contributed to decrease in production and supply of poor coffee quality to coffee markets. This has led to inconsistencies in supply of quantity and poor-quality coffee to international markets, with farmers receiving low prices.

## Unsustainable Grower Groups

Several challenges relating to poor group leadership persisting in grower groups have contributed to the demise of many cooperatives. Deficiencies in group leadership impeded the build-up of social capital and trust levels in some grower groups. As a result, attempts to establish cooperatives, especially in the PNG Highlands, have been largely unsuccessful.

## Poor Rural Infrastructure

An important factor that has been identified in several reports as contributing to the decline and stagnation of coffee production is poor rural infrastructures. Coffee is grown in rural and remote areas where feeder roads are sometimes impassable or no longer in use. In some cases, bridges have been destroyed by floods thus smallholders walk long distances to access transport.

<sup>2</sup> Sengere, W. R., (2016). *The rise, fall and revival of the Papua New Guinea coffee industry*, Unpublished PhD Thesis, Department of Geography, Curtin University, Perth, WA.



## Land Access

Land shortage constrains coffee production and is a widespread problem among smallholders. Population increase has led to household heads subdividing gardens among their sons. Thus, individual land holdings for coffee are contracting.

On plantations, much of the land which the European planters alienated in the 1950s and 1960s to develop coffee plantations were on battlefields and disputed land posed problems to potential investors as conflicts over ownership continued well after the acquisitions. Land disputes have resulted in the demise of some plantations. A few land disputes were related to the initial land purchases, swamp land which is no man's land but villagers are now laying claims of ownership, and a lack of proper understanding by customary landowners of modern land leases.

## 5.4 Strengths, Weaknesses, Opportunities and Threats

### Strengths

PNG has major strengths for coffee growing, among which are: in production zones, coffee industry has kept its image of being the source of funding which enabled the schooling of many elites and substantially contributed to PNG's development (Table 6). Albeit growing urban drift many growers are prepared to remain in it or re-enter it. This Business Plan is geared to facilitate the implementation of a revival of the coffee industry.

### Weaknesses

The diagnoses carried out within the workshops for the elaboration of the strategy indicates the main weaknesses as shown in Table 6 especially in supply chain linkages among value chain participants and reforms pertaining to regulation is required to ensure chain participants need to partner in production, processing and marketing.

### Opportunities

The growth in the exports of differentiated coffee creates a room for growers to enter this segment of the market and obtain premium prices. Furthermore, rehabilitation of existing trees with new plantings with provision of supply of appropriate tools, materials etc. with relevant trainings as incentives will contribute to increase production including investment in new growth areas as East New Britain.

### Threats

Climate change phenomenon and its impact on coffee farming with increase in incidences of diseases and pests will adversely affect production. Also, lawlessness and land tenure systems are threats to coffee production.

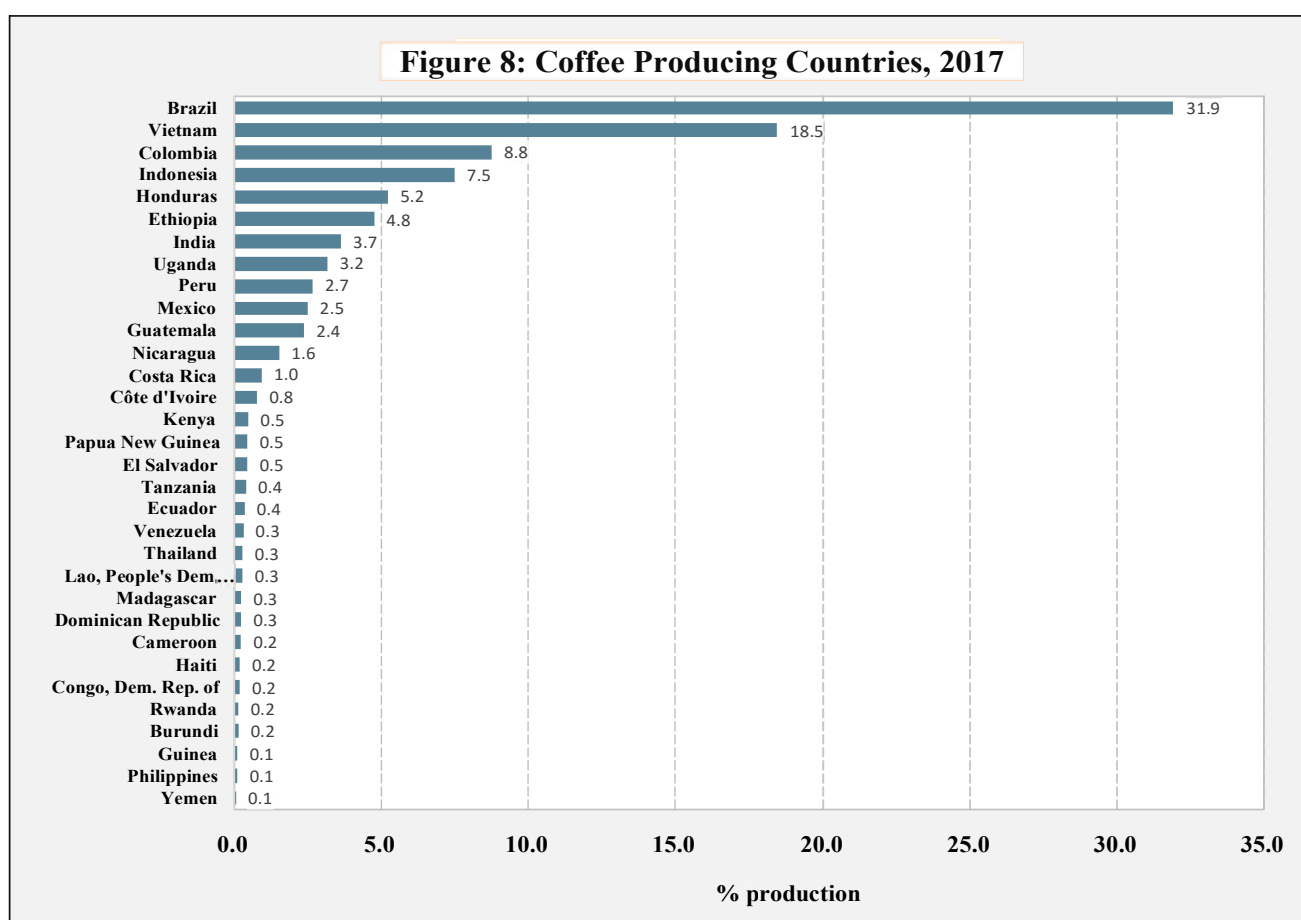
Table 6: The Strengths, Weaknesses, Opportunities and Threats Analyses

| Strengths  | Weaknesses   |
|--|--|
| <ul style="list-style-type: none"> <li>• Regulatory powers which are responsive.</li> <li>• Consistent funding and GoPNG support.</li> <li>• Coffee is central to more than 524,400 households in PNG.</li> <li>• Potential for more high-quality production due to ideal growing conditions and available coffee varieties.</li> <li>• Pristine environment, and diverse cultures and its people make a suitable place for PNG to grow and market coffee.</li> <li>• High yielding coffee varieties.</li> <li>• An intrinsic quality, which markets appreciate.</li> <li>• A well-established R&amp;D facility.</li> <li>• Diversified smallholder production system that spreads risk and reduces danger of abandonment during periods of low prices times.</li> <li>• Diverse industry players along the coffee value chain.</li> </ul> | <ul style="list-style-type: none"> <li>• Outdated CIC Act and Constitution.</li> <li>• Ineffective leadership and ad-hoc business approach.</li> <li>• Poor functional policies and manuals.</li> <li>• Low adoption and utilization of R&amp;D-induced improved technologies.</li> <li>• Absence of coffee buyers (parchment) registration and monitoring.</li> <li>• Lack of mandatory policies for vertically integrated value chain actors to invest in coffee production.</li> <li>• Require working capital for coffee MSME support.</li> <li>• Lack of incentives to produce quality coffee and diversify into the high value market.</li> <li>• Poor business knowledge and skills among farmers.</li> <li>• High production costs due to low yields and high costs of farm inputs.</li> <li>• No steps taken to revive abandoned plantations.</li> <li>• Inadequate infrastructure, especially access roads, good wet mills and storage sheds.</li> </ul> |
| Opportunities  | Threats  |
| <ul style="list-style-type: none"> <li>• Harness value chain linkages with tourism sector.</li> <li>• Growth in exports to differentiated markets.</li> <li>• Private sector investment.</li> <li>• Advantage in production of differentiated coffees for high value markets.</li> <li>• Use of improved coffee varieties to increase yield and improve quality.</li> <li>• Establishment of training programs in all aspects of coffee farming and processing to educate the next generation of coffee farmers.</li> <li>• New areas and regions for coffee expansion and growth.</li> <li>• Unlocking land through the use of Incorporated Land Group.</li> <li>• Market access to Pacific and the Asia region.</li> <li>• Engaging unemployed youths in the community.</li> </ul>   | <ul style="list-style-type: none"> <li>• Spread of CBB infestation to other coffee producing provinces.</li> <li>• Law and order problems.</li> <li>• Declining plantation sector, indirectly affecting smallholder production.</li> <li>• Aging trees, and declining productivity.</li> <li>• Vulnerable to international coffee price fluctuations.</li> <li>• Rising quality standards of markets from competing coffee producing countries.</li> <li>• Land tenure issues inhibit investment in coffee.</li> <li>• Impacts of climate change and natural disasters.</li> <li>• High market access areas are becoming involved in production of other crops at the 'expense of coffee production'.</li> <li>• Rural-urban migration.</li> </ul>   |

## 5.5 Coffee Supply and Demand

### World Supply

The worldwide coffee market is increasingly dependent on three producing countries: Brazil, Vietnam, and Colombia (Figure 8). These three producers represent more than 60% of the total market. If a serious problem occurred in one of these three countries, effects on the market would be immediate. This was the case in 2009 for washed Arabica, due to the reduction of the production volume in Colombia. This created a distortion in the price of all gourmet washed Arabica during the first six-months of 2009.



Source: CIC Reports

### Global Economic Challenges

The growth of demand paused slightly at end of 2008 and early 2009 because of the financial crisis which affected the world economy. On the coffee market, this crisis had a negative impact on the level of consumption of gourmet coffees in certain traditional markets (the United States), and a deceleration of growth in certain new markets (Eastern Europe).

Strong increase of production in Vietnam over approximately the last 20 years, and the production in Brazil, which in 2010 reached 55 to 60 million bags, may result in prospects which, in the short term, seem very unfavorable for the markets. In this context, PNG must target differentiated coffee markets compared to competitor producing countries. Also, countries where production is increasing are those where the growers receive about 80% of the FOB price of the product and there is increase in local consumption of their own coffee.

## 5.6 Coffee Industry Revival and Sustainability

Supported by GoPNG commitment, reflected in resource allocated to the various programs undertaken at various levels of the industry value chain, the stakeholders laid down quantified objectives for the coffee sector for 2020 - 2024. Striving to attain these objectives is linked to the level of commitment of CIC and value chain stakeholders to the Strategic Business Plan, as well as to the capacity of each one to mobilize resources and deliver the expected outcomes within a coordinated framework.

## 5.7 Market Dynamics on Production Behaviour

The pre-1990 coffee value chain could be called grower-driven since producing countries could influence outcomes in the rest of the chain, inter alia, through stock regulation and control - thanks to the pricing mechanism, over the portion of the chain revenue going to the farmer. The coffee value chain has become buyer-driven (by developed countries) after liberalisation. In short, liberalisation has resulted in multinational giants governing and driving the entire chain with the following consequences:

- The grower segment has become fragmented and rudderless;
- Cash-strapped grower cooperatives are struggling as they face formidable competition from the more organized and resourced local affiliates of international traders;
- Coffee quality has deteriorated significantly mostly because of the lack of incentives at farmer or group level to work hard for quality including dysfunctional supply chain; and
- The problem has been the farmer's progressive loss of income to other chain participants in the developed countries, in other words; capital flight.

## 5.8 Certification Schemes

A problem that may hinder production is the complex forms of regulation imposed on poor farmers by way of certification and sustainability programs fostered partly by multinationals controlling the coffee value chain. These schemes place the technical and administrative burden of compliance on poor and often illiterate smallholders. The total coffees sold under these schemes in 2010 were apparently below 5% of global coffee trade. That means certification program has not lifted the vast majority of coffee farmers out of poverty. These certification groups are not reporting to CIC so in this Plan, these certification bodies should report to CIC.

## 5.9 The State and the Farmer

The coffee sector is also a casualty of the major challenges facing the country's agriculture and rural development. The serious and obvious challenges concern the inaccessible farm-to-market rural roads, which bedevil the coffee industry and national agricultural production in general. Unlike the previous initiatives, the CIC SBP flags some real strong points:

- a. Useful lessons of industry experience are drawn from sister Boards and coffee growing countries, the Plan is entirely home-grown, the brainchild of all value chain actors;
- b. The Plan focuses on strengthening regulation, coordination and accountability for results as required by the Minister for Agriculture and Livestock. That means we know who holds the key to success or who is to be blamed for failures; and
- c. Lastly, coffee farmers and their cooperatives are expected to play a fundamental role in the Plan's ground operations.



## 6.0 DEFINING THE STRATEGY

### 6.1 Strategic Direction

The strategic direction for the development of the industry is a reflection of consensus that emerged from dialogues from workshops that involved various industry stakeholders and it aims:

*“To move from a subsistence sector to a professionalized and sustainable sector, economically profitable for stakeholders, and to put PNG back on the world market map.”*

The ambitious CIC SBP revolves around the following strategies:

- a. Increase the volume of production and to improve quality;
- b. Streamline internal marketing and professionalize the operators of the sector;
- c. Find new domestic, regional, niche markets with competitive coffee;
- d. Aligned to NCDR 2020 - 2030;
- e. Strategic alignment to MTDP III;
- f. Sustained program to contain and combat CBB;
- g. Integration of revised PPAP Model e.g. Use the successful PPAP lead partners in the ten coffee growing provinces to increase coverage of number of coffee farmers; and
- h. Integrated Farming System such as apiculture development and intercropping vegetables or other valuable tree crops in coffee farming.

The main target results anticipated over the planned cycle of this Business Plan:

- Increased production through the combined effect of rejuvenated old plantations and new plantation development;
- Young growers enticed into coffee farming;
- Strengthened research, trial findings and inform stakeholders;
- Modernized and strengthened sector information system;
- Professionalized coffee industry operators, through structured aggregation of smallholders;
- Improved centralized wet processing systems which would ensure premium quality and open up new markets and the differentiated coffee markets;
- Establish price subsidy and suitable financing mechanism put in place;
- New international and sub-regional markets conquered; and
- Increased local manufacturing and coffee consumption.

## 7.0 MARKET ANALYSIS

### 7.1 Increase Production and Improve Quality

In the period from 1998 to 2000 PNG's production averaged 1.2 million bags per annum (71,000 tonnes) and PNG share of the global market was 1.1%. In the period from 2012 to 2017 production had declined to an average of 0.78 million bags (47,000 tonnes) per annum, PNG's share of the global market had halved, dropping to 0.5%. There has been an unrelenting decrease from one year to the next since 1999.

Yet the international coffee market prospects seem good in the medium-term. With an annual growth rate of approximately 2%, worldwide coffee consumption was between 450,000 to 500,000 bags in 2015 compared with 130,000 bags in 2008, an increase of 15,000 to 20,000 bags by 2015. The coffee producing countries are positioning themselves in order to benefit from the growth in the market. PNG needs to pre-empt the opportunities offered by the international market. The increase in production and Integrated Farming Systems will alleviate poverty and improve the living conditions of the population but are faced with problems yet to be addressed including, absence of a specific price support policy, poor extension services, outdated technical equipment, difficulties in access to land and property ownership, deteriorated roads and high cost of farm inputs.

In order to increase production volume and improve quality there are issues to address first and they are: facilitate access to quality inputs, support plantation rehabilitation, strengthen research, create incentive programs, promote the purchase of modern and high-performing equipment and strengthen production capacity of farmers (Table 8).

Table 8: Results and Indicators of Progress on Production and Quality Control

| Expected Results  | Indicators of Progress  |
|---|---|
| • Abandoned plantations are rejuvenated.                                  | • Total areas rejuvenated or in planning stage.   |
| • New plantations are developed.  | • New areas created or in planning stage.   |
| • Young farmers enticed into coffee production.                           | • Number of young coffee farmers established.   |
| • Producer access to extension, farm inputs and equipment is made easier. | <ul style="list-style-type: none"> <li>• Appropriate extension approach.</li> <li>• Number of growers who have access to extension services.</li> <li>• Level of ownership by stakeholders of the training topics.</li> <li>• Best practice agricultural manuals on coffee available (production, inputs, phytoprotection, material, equipment).</li> </ul> |
| • Infrastructure is created and/or renovated.                             | <ul style="list-style-type: none"> <li>• Number of storage warehouses, schools, health centres, water sources... built or rehabilitated.</li> <li>• Length of road built or reinstated.</li> </ul>  |
| • Easier access to land and building ownership.                           | <ul style="list-style-type: none"> <li>• Area of allocated land made available to the growers.</li> <li>• Time of delivery of deeds.</li> </ul>   |
| • Strengthened research.  | <ul style="list-style-type: none"> <li>• Number and importance of research results disseminated amongst growers.</li> <li>• Results on soil study.</li> </ul>   |

## 8.0 PRODUCT ANALYSIS

### 8.1 Professionalize Operators and Streamline Internal Markets

State withdrawal from marketing following the liberalization of the coffee sector placed the grower in front of a plethora of buyers who are not very professional. Hence, they go through the production areas to buy coffee, often in dried parchment, further dried and hand-sorted before it is hulled into green bean.

The industry actors deemed that it is necessary to streamline coffee marketing and to professionalize all operators in order to develop supply chain linkages ensuring quality product reaches the market, and to enable the growers to receive a fair and premium price (Table 9).

The objective to streamline internal marketing and professionalize the operators is subdivided into the following six sub-objectives:

- a. Equip the industry with an efficient information system that reinforces the information exchange among key stakeholders and communication system involving the entire value chain to help resuscitate the industry.
- b. Promote quality in the marketing network by adopting national quality standard to meet evolving international market demands, training of Q-graders, equip grower organizations with suitable tools, promote regulatory control, aggregate growers, buyers and processors, strengthen recognition prizes to the best farmers, groups and/or operators, and implement a traceability system for specialty and origin coffees.
- c. Promote emancipation of producer organizations by establishing aggregate producer groups and introduce growers pass-book service with banks, savings and loans schemes with tailored training on financial literacy, coffee quality control training for farmers, education for growers on farm management, post-harvest practices and marketing, and sustainable partnerships between growers and buyers.
- d. Promote commercial best practice principles for aggregate growers to encourage group sales that follow market calendars, grower SMEs, organize market days in production zones and induction on performance of each category of operator in coffee.
- e. Facilitate financing and price support for coffee growing with suitable mechanisms to bolster trade of coffee, e.g. warehouse receipts and warrants, expansion of micro-finance for smallholders in production areas, and set up a credit line or guarantee fund to benefit grower groups.
- f. Facilitate participative approach that favors synergies in the industry with specific professional workshops devoted to: exports, markets, milling, and consumption.

Table 9: Results and Indicators of Progress on Professionalizing the Operators and Streamline Internal Marketing

| Expected Results   | Indicators of Progress  |
|--|---|
| <ul style="list-style-type: none"> <li>Information system in the industry is improved, systemized and operational.</li> </ul>    | <ul style="list-style-type: none"> <li>Number and distribution points and information sources;</li> <li>Number of media involved; and</li> <li>Level of area coverage of disseminated information (number of coffee farmers listening to this information).</li> </ul>  |
| <ul style="list-style-type: none"> <li>Operators of the coffee industry are professionals.</li> </ul>                            | <ul style="list-style-type: none"> <li>Quantity of high-quality products sold through grower groups (co-operatives);</li> <li>Directory of available operators (mapping); and</li> <li>Regular meetings and good quality reports by the various professions.</li> </ul> |
| <ul style="list-style-type: none"> <li>Increase in production of premium quality coffee.</li> </ul>                              | <ul style="list-style-type: none"> <li>Quantity of superior grade coffee produced;</li> <li>Quantity of gourmet coffee exported; and</li> <li>Number of Q-graders trained.</li> </ul>   |
| <ul style="list-style-type: none"> <li>Price support and suitable financing mechanisms are put in place.</li> </ul>              | <ul style="list-style-type: none"> <li>Number of operators benefit from financing;</li> <li>Number of credits received by operators; and</li> <li>A mechanism exists to guarantee credits in favor of agricultural sector.</li> </ul>                                   |
| <ul style="list-style-type: none"> <li>Interventions in the sector are better coordinated and synergies are observed.</li> </ul> | <ul style="list-style-type: none"> <li>Less overlaps observed; and</li> <li>Number of specific professional workshops.</li> </ul>   |

## 9.0 COMPETITION ANALYSIS

### 9.1 Competitive Coffee for New Markets

PNG's economic growth is spurred by development of extractive, and of raw material exports of agricultural origin, including coffee. But the country's subsistence economy is dependent on agriculture as income from cash crops like coffee is vulnerable to global price shocks.

This situation led the Government to introduce a policy of diversification of exports, partners on the one hand, and products to export as fundamental elements, with a priority given to products with strong added value. With this in mind, industry stakeholders agreed that it is to the advantage of the industry value chain to increase local coffee processing, and aim to explore new markets, both for conventional and differentiated coffees.

In order to access these markets and to strengthen the competitiveness of coffee, it is necessary to accelerate export procedures being made easier and to set up Regional Export Offices and promotion of PNG coffee, both at domestic and external fronts (Table 10).

The prioritized objectives under this segment are to:

- Increase domestic processing and consumption of coffee;
- Consolidate traditional markets; and
- Penetrate into new markets in various regions and trade block like APEC.

Table 10: Results and Indicators of Progress on Opening Up New Markets

| Expected Results   | Indicators of Progress  |
|--|---|
| <ul style="list-style-type: none"> <li>New markets are opened up.</li> </ul>                       | <ul style="list-style-type: none"> <li>Knowledge of new coffee markets;</li> <li>Quantity of coffee sent to new destinations; and</li> <li>Quantity of exports for specialty coffee increased.</li> </ul>   |
| <ul style="list-style-type: none"> <li>Local processing and consumption have increased.</li> </ul> | <ul style="list-style-type: none"> <li>Roasting capacity improved and quantity of coffee roasted;</li> <li>Quantity of coffee consumed; and</li> <li>Diversity of coffee products on the market.</li> </ul> |

## 10.0 INSTITUTIONAL ANALYSIS

### 10.1 CIC Structural Reforms

The past Strategic Plans (2008 – 2018; Revised 2013 – 2018) were collectively reviewed and two problems came to the fore: Firstly, the CIC continued to operate on the existing organizational structure that was not aligned to the thematic programs that were identified in the PNG Coffee Industry Strategic Plan 2013 - 2018. Secondly, CIC failed to conduct the program level planning, to develop its business plan. The gist of the new CIC SBP 2020 - 2024 adjustment is to make it robust, pertinent, and easier to implement with structural reforms to CIC (Table 11).

Monitoring and analysing the impact of changes of diversifying stakeholder expectations, demands for quality products, international aid flows, and fragility of economic downturns, dangers of budget cuts and have contingencies to mitigate adverse effects on the industry.





Table 11: CIC Organizational Issues that Require Remedial Actions

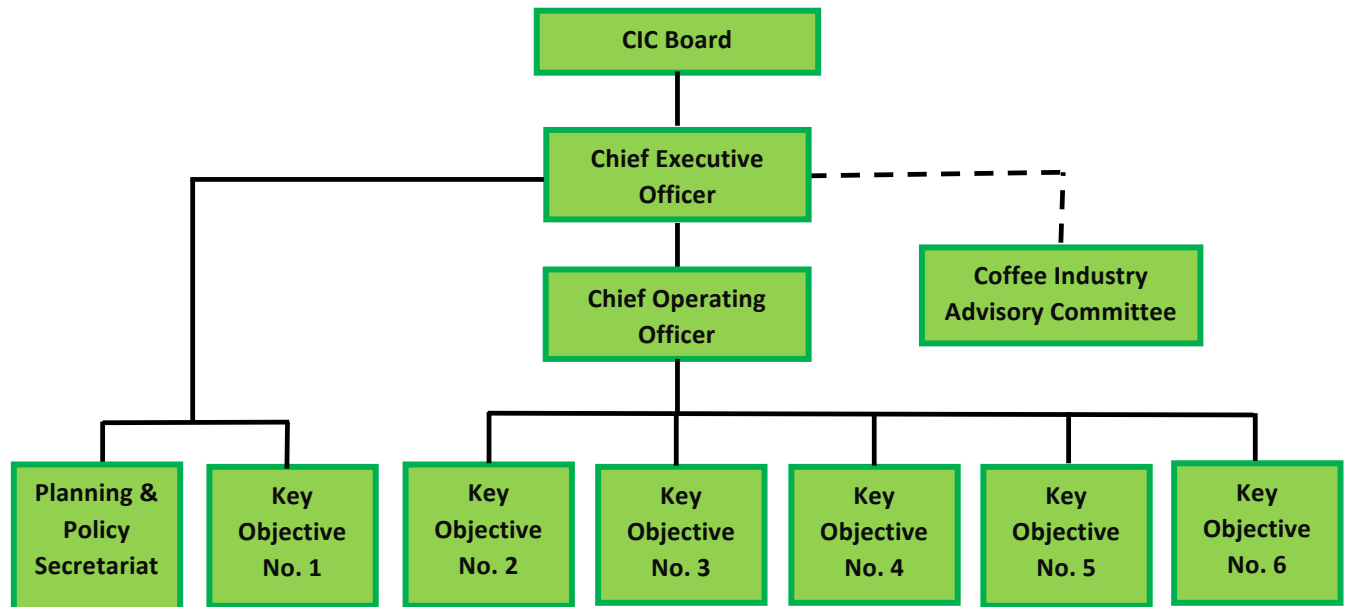
|    | CIC Corporate Organizational Issues                     | Shifts Sought in Outcomes of Key Objectives                               |   |
|----|---|---|---|
|    |   | From  | To  |
| 1  | Outdated CIC Act and administrative policies            | Disjointed regulatory and functional roles                                | Restructured, streamlined and aligned to industry interests and issues        |
| 2  | Organizational climate and attitudes of staff           | Bureaucratic process  | Corporate business orientation  |
| 3  | Management style  | Poor command and control  | Team building and project management mode/PPAP mode of implementation         |
| 4  | Management focus  | Inputs & activities   | Outputs and outcomes<br>Results and deliverables                              |
| 5  | Role of Management, Board and Minister                  | Rule-making and control   | Strategic policy development, program management and coordination             |
| 6  | Work processes of key partner agencies and institutions | Transaction management and ineffective leadership and ad-hoc coordination | Strategic leadership, support, partnership and facilitation                   |
| 7  | Focus of service delivery to industry stakeholders      | National level  | Provincial, District and LLG and ward levels                                  |
| 8  | Capacity (gaps)   | Low capacity production and job displacement                              | Strengthened personnel and institution capability                             |
| 9  | Professionalism   | Poor standards of professionalism and high levels of corruption           | Respect for the rule of law and reduced levels of corruption                  |
| 10 | Products and services                                   | Marginal quality standard of products and services                        | High quality compliant products, modules and services                         |
| 11 | Regional research centres and sub-centres               | Run-down and stagnant   | Rehabilitated and upgraded with improved facilities and staff incentives      |
| 12 | ICT connectivity, poor data system and MIS              | Lack of ICT access and data storage platforms                             | ICT connectivity, e-commerce platforms and accessibility to valid information |
| 13 | Marketing and promotion                                 | Disjointed and ad-hoc state   | Highly structured strategy  |



## 10.2 Proposed CIC Organisational Structure

Emerging complexities in a changing world needs pragmatic leadership that influences internal organisational reforms to meet client demands amidst serious challenges (Figure 9). The CIC SBP is a significant step towards responding to the challenges of identifying quality leaders and up-skilled workforce to manage the coffee industry. The Implementation Framework has streamlined the six (6) Key Objectives to meet the expectations of Government and value chain participants. The Key Objectives from 1 to 6 are outlined in Section 13.

Figure 9: Proposed CIC Structure which is Aligned to the CIC SBP





## 11.0 COLLABORATIVE PARTNERSHIPS

Partnership is defined as two or more parties who are involved in collaborative activities. A wide variety of terms are used for collaborations, which include global networks, cross-sector partnerships, public private partnerships (PPP), multi-stakeholder alliances, and inter-sectoral partnerships. In the PNG coffee industry, partnership is an institutional framework that serves the interests of value chain participants in which individual smallholders, blocks, plantations, farmer groups, processors and exporters cooperate and address issues of mutual interest.

The plantations and their rural coffee mills during the early growth of the local industry partnered with village coffee farmers, which ensured high coffee production and quality as a result PNG coffee was renowned for delivering consistent quantity and premium quality to overseas markets. However, the demise of plantations and their mills have created new opportunities for current coffee value chain participants to engage in innovative supply and market linkages to produce coffee (Table 12).

In the coffee industry, policies like the farmer demand-driven extension which targets grower groups, PPAP and agro-nucleus setups are modeled on collective action and productive partnerships to improve production. Value chain participants can foster relationships to ensure quality coffee is produced and as a consequence, value chain participants are paid premium prices for their product.

Table 12: Expected Results and Indicators of Progress in Partnerships

| Expected Results  | Indicator of Progress  |
|---|--|
| <ul style="list-style-type: none"> <li>Value chain supply linkages.</li> </ul>  | <ul style="list-style-type: none"> <li>Consistency in delivery of quantity and good quality coffee to markets.</li> </ul>  |
| <ul style="list-style-type: none"> <li>New markets are opened up.</li> </ul>  | <ul style="list-style-type: none"> <li>Knowledge of new markets.</li> <li>Quantity of coffee sent to new destinations.</li> </ul>  |
| <ul style="list-style-type: none"> <li>Local processing and consumption have increased.</li> </ul>  | <ul style="list-style-type: none"> <li>Roasting capacity and quantity of coffee roasted.</li> <li>Quantity of coffee consumed.</li> <li>Diversity of coffee products on the market.</li> </ul>   |
| <ul style="list-style-type: none"> <li>Network with community-based organisations, non-government organizations.</li> <li>Greater reach of farmers &amp; households in coffee.</li> <li>Bolster existing partners reach capacity with resources.</li> </ul> | <ul style="list-style-type: none"> <li>Partnership arrangements and Memorandum of Agreements concluded with established community-based organisations, and non-government organizations.</li> <li>Credible lead partners engaged with capacity.</li> </ul> |
| <ul style="list-style-type: none"> <li>Increased reach at grower group/aggregate level.</li> </ul>  | <ul style="list-style-type: none"> <li>Partners reach with cross-cutting issues and economic welfare through coffee production.</li> </ul>   |

## 12.0 MICRO-ENVIRONMENT ANALYSIS

### 12.1 Industry Review Committee

The Coffee Industry Advisory Committee (CIAC, formerly the Coffee Research & Extension Advisory Committee) provides the strategic guidance, directives and technical advice to the CIC Management and the Board on CIC's technical operations enshrined in the CIC SBP and NCDR. These strategies embedded in the two Plans focus on key mandates of CIC and they comprise of research, extension and regulatory activities. All CIC programs and projects are subjected to CIAC for deliberation, succinct vetting, and endorsement for implementation, amendments or termination.

The institutional technical committee, the Project Review Committee which meets quarterly monitors and evaluates performance of key programs and projects of CIC aimed at achieving the CIC strategic objectives consistent with the spirit of the CIC SBP and NCDR. The Project Review Committee also ensures that new projects are screened and ensured they can be presented at CIAC for vetting.

### 12.2 Strategic Alignment to MTDP III

Incumbent Marape-Davies Government has stated its political will and leadership commitment to bolster Agriculture as the “mother of all industries” that sustains over 86% of rural inhabitants. As articulated in MTDP III the Government is committed to “support the development of a sustainable and competitive coffee industry in PNG, which will maximise financial returns to coffee growers and contribute to Government's economic and social policy goals”.

Coffee remains the mainstay of socio-economic sustenance of over 2.5 million direct and indirect beneficiaries. The enormous untapped potential that can be harnessed and developed systematically to strengthen agricultural exports to surpass the K1,827.4 million generated between 2013 and 2016.

The uncontrolled decline of coffee production and export experienced in the past decade, as consequential effect of disorganised farmer groups, poor supply chain linkages and fall in commodity prices can be reversed with radical structural reforms to CIC.

### 12.3 Need for Priority Intervention

This medium-term Business Plan has prioritised and translated the industry strategies in the MTDP III and those deemed highly critical by the CIC Board and streamlined them. The nine (9) strategies espoused in the MTDP III are linked to the Key Objectives of CIC SBP (Table 13).

These inherent issues will be addressed holistically first in order for the CIC SBP to be implemented in a coordinated, synchronised and sustained way to attain GoPNG's ambitious production targets and deliverables (Tables 14). The Government is committed to invest in ensuring deliverables in the MTDP III are achieved (Table 15). Some innovative strategies are proposed to broaden reach and restore market presence of PNG's unique coffee in the domestic, regional and global markets.

Table 13: MTDP III Coffee Strategies and CIC SBP Key Objective Linkages

|   | MTDP III Coffee Sub-Sector Strategies  | CIC Key Objectives # |
|---|--|----------------------|
| 1 | Revive large coffee blocks and plantations   | 5, 3, 4 & 6          |
| 2 | Provide extension/training/business support services to cooperatives and smallholder farmers (SMEs, youth and women) | 5, 4 & 3             |
| 3 | Establish internationally certified coffee mills for cooperatives to attract premium prices and ensure quality       | 1, 3, 5 & 4          |
| 4 | Promote productive public private partnership for extension, research and industry operations                        | 3, 5, 4 & 6          |
| 5 | Promote value adding products and domestic consumption of coffee   | 3, 5, 4 & 1          |
| 6 | Support integrated farming, food security and sustainable livelihood   | 5, 4 & 3             |
| 7 | Defence against pests and diseases of coffee   | 4, 5, 3, 1 & 6       |
| 8 | Support market access infrastructure and service delivery  | 3, 5, 1, 6 & 4       |
| 9 | Promote green energy, digital agriculture/e-marketing in coffee  | 6, 4, 3, 5 & 1       |

Source: MTDP III

Table 14: Government Target Deliverables and Projected Timeline

| Deliverable  | 2018 | 2019 | 2020 | 2021 | 2022  |
|--|------|------|------|------|-------|
| 1. Improvement in access to coffee markets (km)                        | 124  | 266  | 405  | 528  | 628   |
| 2. Coffee export office constructed                                    | 0    | 1    | 1    | 1    | 1     |
| 3. Strategic defense of PNG coffee industry against coffee berry borer | ✓    | ✓    | ✓    | ✓    | ✓     |
| 4. Coffee plantations rehabilitated and developed (ha)                 | 20x5 | 40x5 | 60x5 | 80x5 | 100x5 |
| 5. Coffee adaptability and risk management to climate change           | ✓    | ✓    | ✓    | ✓    | ✓     |

Source: MTDP III

Table 15: MTDP III Investments to CIC and Responsible Key Objective for Implementation

| Deliverable   | Responsible KOs | 2018 (K mil) | 2019 (K mil) | 2020 (K mil) | 2021 (K mil) | 2022 (K mil) | Total (K mil) |
|---|-----------------|--------------|--------------|--------------|--------------|--------------|---------------|
| 1. Coffee access roads program                        | 3 & 5           | 4.00         | 5.00         | 10.00        | 10.00        | 15.00        | 44.00         |
| 2. Coffee industry infrastructure development program | 2               | 4.00         | 10.00        | 10.00        | 10.00        | 10.00        | 44.00         |
| 3. Coffee rehabilitation & development program        | 5               | 4.00         | 20.00        | 10.00        | 10.00        | 0            | 44.00         |
| 4. Strategic defense of coffee industry against CBB   | 4, 5 & 1        | 5.00         | 5.00         | 5.00         | 5.00         | 0            | 20.00         |
| 5. Freight assurance subsidy scheme                   | 5 & 3           | 5.00         | 5.00         | 5.00         | 5.00         | 6.08         | 26.08         |
| 6. Productive partnership for agriculture development | 3 & 5           | 21.25        | 20.00        | 20.00        | 20.00        | 20.00        | 101.25        |

Source: MTDP III

Note: The first number shows which Key Objective of the CIC SBP will implement the project with others providing support.



## 13.0 KEY OBJECTIVES, GOALS, MEASUREMENTS AND ACTIVITY ANALYSIS

The Key Objectives, Goal, Measurements and Activity (KOGMA) analysis and how the incumbent GoPNG's underlying policy imperative for each sector of the national economy to make every effort to "Take Back Our Economy" are briefly presented. This should be read in tandem with the KOGMA operational matrix.

### 13.1 Key Objectives

The six (6) Key Objectives which were conceived through a consultative workshop in Lae, Morobe Province with the industry's stakeholders and other participants and selected for CIC to implement in the life of this Business Plan and in order of priority are:

1. Strengthen regulatory functions in the industry for licensed operators;
2. Realign functional areas in CIC to cater to emerging needs, resources, human talents and organisational capacity development;
3. Foster and actively promote partnerships and marketing;
4. Revise and develop a standardized approach to extension inputs to improve market access, production and productivity;
5. Adopt an approach of intervention through organized farmer groups or at aggregate level; and
6. Develop technology-driven systems and processes for market information collection, analysis and dissemination.

The purpose and aspiration of each Key Objective are briefly outlined. The core programs, specialised Sections and Units of CIC will employ appropriate strategies to address the problems and how they will contribute towards the overall goal of resuscitating the industry and consequently increase production and improve quality through vertical market integration to enhance export revenue. CIC will provide strong leadership by employing viable modalities in close collaboration with all value chain participants, GoPNG and development partners to achieve the set targets.



**Key Objective 1*****Strengthen regulatory functions in the industry for licensed operators***

CIC Act (1991) is out dated and requires review to ensure currency and restore/realign the regulation of the industry to meet changing demands and expectations of value chain participants, development partners and consumer markets. The core role of CIC is to enforce robust regulatory aspects to ensure profitability and efficiency in the coffee value chain. Certification of coffee products and re-distribution of licences to coffee production provinces and regions, quality control measures and establishment of central processing units in new potential growth areas is a key functional role of CIC.

**Key Objective 2*****Realign functional areas in CIC to cater to emerging needs, resources, human talents and organisational capacity development***

This Key Objective will address the crux of CIC's structural, operational and management issues that are both inherent legacies and self-induced through consistent professional negligence, unqualified officers in key positions of command and control, poor discipline and attitude of commitment to service, indecisiveness of management to swiftly deal with disciplinary matters and lacklustre performance; cronyism, continued retention of poor performing officers, complacency and ineptitude to honour Terms of Service. These and other organisational issues are clearly manifested in the coffee industry's poor performance over the past decade. CIC should step up with urgent structural reforms to restore its place in the economy (see Institutional Analysis).

**Key Objective 3*****Foster and actively promote partnerships and marketing***

Coffee industry represents an important segment in the political economy and makes an input to the gross domestic product. The industry needs to connect with strategic partners and be outward looking to establish sustainable and mutually beneficial networks to be able to capture a dominant share of the domestic coffee market with new high demand blends before venturing to external geographical sites for PNG's unique coffee. CIC must strengthen the paradigm of its strategic partnerships and networking to remain relevant and competitive and ensure profitability of industry value chain participants in a dynamic market environment.

**Key Objective 4*****Revise and develop a standardized approach to extension inputs to improve market access, production and productivity***

The proposed review pertains to innovative Research to develop appropriate methodology for extension interventions and extension inputs that will have significant bearing on coffee farmers' capacity to produce coffee and mitigate adverse effects of internal and external factors that influence their behaviour towards farm productivity, production and marketing of product. Emerging problems such as climate change, post-harvest practices, soil nutrition, incidences of pests and diseases, market trends and livelihood priorities of farmers are studied to provide solution for farmers and value chain participants.



**Key Objective 5*****Adopt an approach of intervention through organized farmer groups or at aggregate level***

Meticulous intervention will aim to categorise farmers' groups, communities, family units and how they are structured at grower level, their inputs, risks taken and challenges to access markets. These aggregates will be empowered through improved governance mechanisms, incentivised through appropriate extension modalities and graduate them to SMEs with improved market access and supported with equitable price structure. Also, assess how many SMEs, coffee cooperatives and agro-based associations are engaged in coffee, apiculture, integrated farming system, financial inclusion programs and their margin of success in elevating their economic livelihood and level of contribution to the economy. These grower groups or cooperatives in the value chain are the most critical that deserve heightened attention in terms of benefits to assure sustainability of coffee supply to markets.

**Key Objective 6*****Develop technology-driven systems and processes for market information collection, analysis and dissemination***

The need to establish an efficient information system and data bank on growers and the whole spectrum of the industry value chain is imperative and must be established so as to enable Government and industry players to readily access for planning, policy making, and education and training. CIC is a corporate profit-driven entity competing in a commercial environment and should thrive on adopting technological innovation to allow two-way exchange of information with ICT tools to appreciate the revolutionary transformation taking place in the market place. CIC must have fully endowed ICT infrastructure (servers, networks, etc.) and allied platforms for websites and social media to expand its reach and horizon of information sharing and marketing.



### 13.2 Business Plan, Budget and Production Projections

The CIC SBP is backed up with projected funding for implementation of the six (6) Key Objectives amounting to about K256,987,335 budgeted for the 5-Year Plan cycle (2020 - 2024). Each of the Key Objectives budgets over the 5-Year Plan cycle is shown in Table 16.

Table 16: Strategic Business Plan Key Objectives and Estimated Budget

| Objective No. | Key Objectives   | Cost (PGK)         |
|---------------|--|--------------------|
| 1             | Strengthen regulatory functions in the industry for licensed operators   | 4,675,000          |
| 2             | Realign functional areas in CIC to cater to emerging needs, resources, human talents and organisational capacity development | 37,180,000         |
| 3             | Foster and actively promote partnerships and marketing   | 45,265,000         |
| 4             | Revise and develop a standardized approach to extension inputs to improve market access, production and productivity         | 109,340,000        |
| 5             | Adopt an approach of intervention through organized farmer groups or at aggregate level                                      | 46,814,845         |
| 6             | Develop technology-driven systems and processes for market information collection, analysis and dissemination                | 13,712,490         |
| <b>Total</b>  |  | <b>256,987,335</b> |

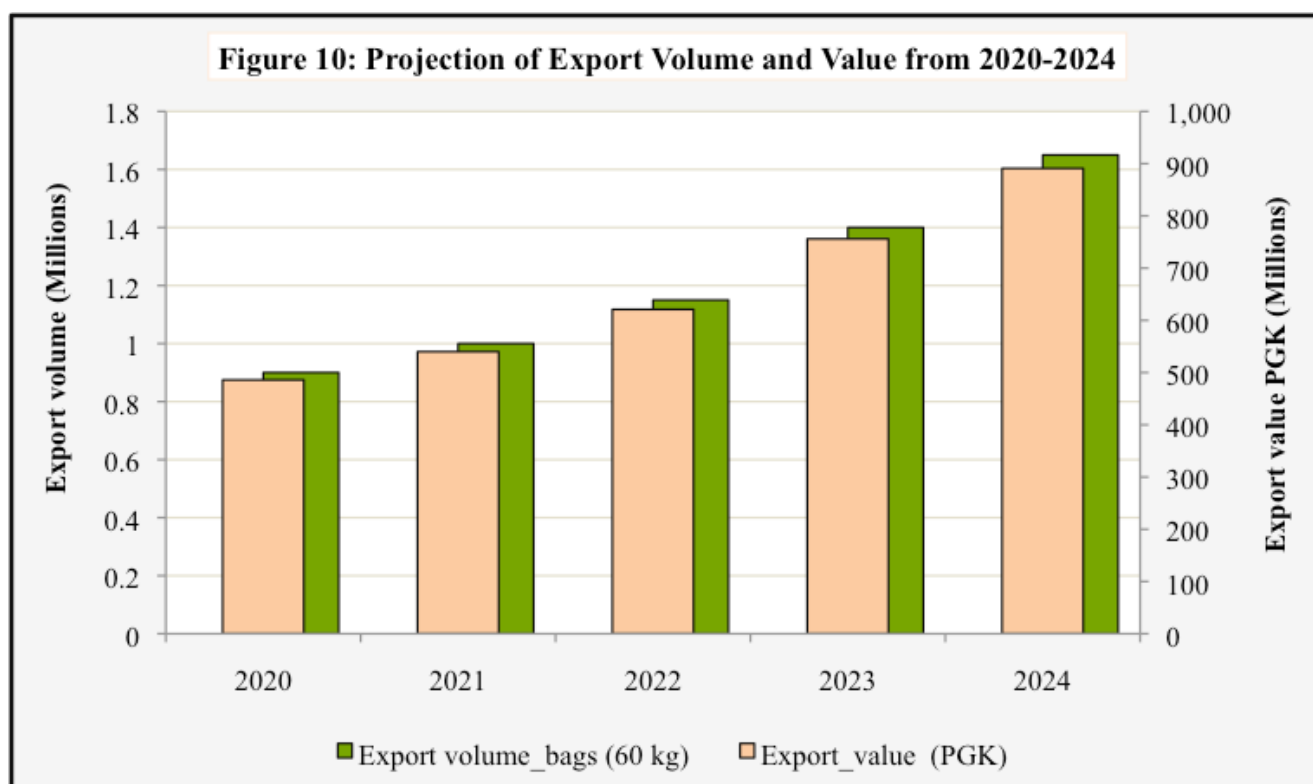
With the above investment, the coffee industry is expected to deliver 1.7 million bags and generate K891 million in foreign exchange earnings in 2024 (Table 17). By 2030, the coffee industry is expected to earn K1.7 billion with an export volume of 3 million bags.

Table 17: Projected Production and Revenue from 2020 - 2030

| Year | Production (60 kg gb bags) | Foreign Exchange Earnings (PGK) |
|------|----------------------------|---------------------------------|
| 2020 | 900,000                    | 486,000,000                     |
| 2021 | 1,000,000                  | 540,000,000                     |
| 2022 | 1,150,000                  | 621,000,000                     |
| 2023 | 1,400,000                  | 756,000,000                     |
| 2024 | 1,650,000                  | 891,000,000                     |
| 2025 | 1,900,000                  | 1,026,000,000                   |
| 2026 | 2,150,000                  | 1,161,000,000                   |
| 2027 | 2,400,000                  | 1,296,000,000                   |
| 2028 | 2,650,000                  | 1,431,000,000                   |
| 2029 | 2,900,000                  | 1,566,000,000                   |
| 2030 | 3,150,000                  | 1,701,000,000                   |

The projections for production and export earnings is based on the strategic intervention of CIC's Key Objectives encapsulated in the CIC SBP including examples of CIC and PPAP interventions that has arrested the decline experienced over the past decade. Under PPAP, aggregating smallholders into structured cooperatives or SMEs is largely attributed to strong leadership at project level and sustained reach to engage growers. In CIC grower groups, farmers have doubled their productivity. Thus, with that degree of commitment the production and export growth will increase steadily when the blocks and plantations are revived under the Papua New Guinea Agriculture Commercialization Diversification and Incorporated Land Group projects that will commence in 2020.

Figure 10 is showing a positive sign of steady growth in export volume and value during the Business Plan cycle from 2020 - 2024.



Source: CIC Records

### 13.3 Leadership: "Take Back PNG"

GoPNG's new overarching policy pillar is succinctly outlined in The Marape Manifesto with its Mantra; "Make PNG the Richest Black Christian Nation". The "Take Back PNG" slogans intent is to incentivise citizens through collective and concerted multi-sectoral efforts to "take back our country's economy" by 2030. A part of that critical challenge is the very ambitious but achievable budget threshold of K15 billion for each economic sector to achieve over the next few years.



Innovative concepts presented in the CIC SBP can play a huge role in the enterprise if its Business Strategies and Key Objectives are kept practicable, coherent and achievable and matched by competent manpower resource, sustained funding envelope and willing value chain participants. CIC shall explore enforceable regulatory amendments to impose, especially on licensed buyers, processors and exporters to pass on due returns on risk, access hardship and sweat equities deserving to coffee farmers.

### **Purpose of Industry Leadership and Priority Setting**

The main functional role and responsibility of CIC should be to provide leadership, coordination, facilitation, management and executive direction, as well as over sighting of monitoring and evaluation of coffee industry response program. These are elaborated under each Key Objectives in the Implementation Framework. Goal setting of CIC is not necessarily the one outlined in the enabling legislation (CIC Act) or official policy statement of Agriculture Minister or espoused in MTDP III. Setting goals is a political process, and often it is intra-organizational political process hidden from public scrutiny. A heightened level of coordinating the processes involved is vital, thus placing empathy on prioritizing coffee industry revival interventions that are designed to meet targets.

The present leadership has lost sight of the noble principle of *'...what you can do for your country'* which is seemingly out of fashion, and being replaced by *'what I can do for myself'*. With rapidly diminishing indigenous social and cultural values, increasing economic hardship and ensuing poverty and the emerging materialistic mind-set of corporate leaders at all levels in every sector, the growing fears of misplaced priorities which compromises peoples' welfare is becoming real.

CIC managers should adopt honest leadership style to address demands of actual industry situation. Essentially the leadership function would start from the highest decision-making level right down to community farmers.

### **13.4 PPAP Integration into CIC Activities**

The modality of agriculture rural development under the PPAP was introduced in PNG and began implementation in 2012. This modality was implemented using the coffee and cocoa sectors in the wake of National Agriculture Development Plan debacle and failure. For the coffee component, CIC is the implementing agency whilst for cocoa is the Cocoa Board. The loan financing for coffee is K123 million over eight-years with GoPNG counter funding of only K5 million received compared to budgeted K11 million. PPAP funding is in three core components:

1. Institutional Strengthening and Industry Coordination - K28.2 million;
2. Productive Partnerships - K61.4 million; and
3. Market Access Infrastructure - K33.4 million.

The PPAP modality is a significant shift away from the current non-productive high cost extension system to a cost-effective modality. This is where lead partners as exporters, processors, cooperative societies, non-government organisations, faith-based organisations are contracted to deliver coffee development in communities they already operating and familiar with. Few significant results attained from this intervention are significant increases in productivity, improved coffee quality achieving higher FOB prices. In fact, in the 2018 National Coffee Cupping Competition, 11 out of the top groups including the top winner are from PPAP farmer groups.



There is now a high demand from other coffee farmers who have not participated in the project who want to be included as they clearly saw the benefits to farmers who participated in this project where coffee rehabilitation tools, pulpers, improved drying facilities, coffee storage sheds and group marketing have been facilitated. This inclusive training aspect also entails cross cutting issues. The project funded 29 lead partners who delivered direct services to 36,000 farmers which constitutes less than 10% of the coffee growing households.

Also, nine (9) coffee economic roads totalling over 50 km were rehabilitated with increased coffee reaching the market. This is translating to stabilization of the fall in coffee production and exports with visible increases in 2018 and 2019. The project funding ends in 2019, CIC must continue funding this modality to increase direct farmer contact of over 150,000 which will certainly stabilize and grow the industry. It costs an average of K2,000 to empower the farmer to remain interested to increase coffee production and improve quality. For rehabilitation of blocks and plantations, K1.6 million was used under this cost-effective modality to rehabilitate 300 ha of coffee. The integration of PPAP modality in the CIC SBP provides a timely opportunity to revive the coffee industry.

### **13.5 Improve Rural Road Network**

Especially in high production and potential production zones, this intervention would benefit the agriculture and rural development sector in general, not only coffee production. There is need to rethink present conventional approaches to this national challenge. Beneficiary communities could be mobilized more systematically and psychologically to help themselves to the point of placing them on a self-reliant track. Road construction and maintenance should be tendered to private contractors to serve hinterland communities with the technical support of Provincial Works and monitored by target District Development Authorities (DDAs). The DDAs should encourage maintaining the road network using community labour on the basis of inter-community competition.



### 13.6 Stable Coffee Farm-gate Prices

This Price Support Schemes already envisioned in this Plan even though the AOP implementation details remain under wraps. It will go a long way in restoring discipline and stability in the domestic half of the coffee value chain. Also, it shall enable farmers to plan their farm operations and expected revenue on a yearly and even biannual basis. Alternatively, farmers and aggregate groups, if necessary, be assisted to access bank credit on predictable repayment terms and supported by local Members of Parliament's surety at selected banks. Indeed, farmers have often wondered why coffee prices are not stable as these movements are dictated externally.

### 13.7 Cooperatives and International Traders Relationships

Farmer groups can effectively articulate and communicate the aggregated concerns of the farmers, efficiently deliver goods and services to farmers, and contribute in multiple ways to implement the CIC SBP activities in target production zones. Provision of inputs, farm credits with accessible rural mills to provide quality control operations will act as incentives for farmer to undertake collective action. That implies reverting to the pre-1970s practice when then thriving rural mills assumed full responsibility for pre-export value-addition processes in order to increase the percentage of the global value chain income going to the farmer.

The CIC, Commerce & Industry Department and provincial Commerce Offices who are responsible for cooperatives should provide effective institutional leadership through mentoring and providing support services to ensure improved governance, and business management in cooperatives. Cooperatives, MSMEs and aggregate groups should be assisted to be competitive in the ever-changing business environment.

In the spirit of corporate social responsibility, international traders and exporters should be required to work with and through farmer groups and develop supply chain linkages, and not to compete with them as at present. This would have the advantage of strengthening the organizational and technological base of the domestic commodity sector, bearing in mind that without such a base, chaos would continue at farmer level and half of the coffee value chain would continue to lose market power and net produce value to the developed countries. Review CIC regulatory framework and tie-down exporters and high-end value chain participants to provide compulsory farmer training levy by policy mechanism for a fixed percentage of earnings towards Farmer Price Support or Producer Sovereign Trust for rainy days.



## 14.0 GROWTH STRATEGY

### 14.1 Strategic Choices

Potential result scenarios can be pursued with optimistic mindset and confidence in the wealth of combined knowledge, experience, and expertise and assured support from GoPNG to revive coffee. Positive results can be anticipated when correct strategic choices are employed. These strategies will reflect positive outcomes if the physical, information and financial flows in the industry are systematically coordinated with value chain participants and development partners.

The CIC SBP has proposed strategies which will ensure the:

- Industry is well-structured and the value chain stakeholders' positions and expectations are explicitly articulated for implementation;
- Value chain participants' aspirations are presented to key strategic partners; GoPNG, support services and development agencies;
- Coffee collection from producing areas is well organized with freight logistics to enable produce to reach processing sites in excellent conditions;
- Product quality is compliant with international standards (traceability, certification and packaging) and the industry develops a policy of diversification of products; and
- Financing mechanisms with acceptable conditions are arranged for stakeholders to access to modernize their operations and to acquire processing units.

During implementation of the CIC SBP 2020 - 2024, CIC will attempt to:

- Organize value chain actors into supply chain linkages to become competitive to achieve the objectives in terms of production, processing and marketing;
- Make the industry become competitive in comparison to other coffee producing countries, restore PNG's unique status, reinforce existing markets and penetrate new markets;
- Adopt innovative marketing and promotion drive and offer diversified quality products such as niche coffee sought after by importers and coffee connoisseurs; and
- Participate in international exhibitions and adopt a suitable Promotion Policy will contribute to its sustained growth and will strengthen its profile globally.





## 14.2 Strategic Statement

Unified commitment by value chain actors to increase productivity and professionalize business approach to enter markets with competitive products to attract premium price and increase the incomes of farmers, create new jobs and spin-offs to keep the industry robust. CIC's growth strategy is three-pronged. This shall be achieved by promoting:

- **Market Penetration:** Establish dominating presence in domestic market share before venturing into external differentiated and high value coffee markets.
- **Geographic Expansion:** CIC will be moving to new geographies only at the end of year two and currently will focus on area saturation approach. This will be done deliberately to: enable CIC to settle into restructured operational and business processes and systems; have Operational Risk Management, M&E and independent Internal Audit System; and enable CIC to recruit highly qualified officers with business acumen.
- **Development of New Products/Services:** CIC's strategy to diversify products for existing market geographies before venturing into newer geographical areas.

## 15.0 STRATEGIC BUSINESS PLAN IMPLEMENTATION FRAMEWORK

The Annexes 1 to 8 provide the actual Business Strategy depicted in the proposed business/expenditure schedules of the core functional programs of CIC. The Key Objectives projected total budget plan over the five-year plan cycle is K256,987,335 (see Table 15).

Annexure 9 is a sample of indicative operational plan, budget for intervention, indicative operational plan and budget for a program or a project. The CIC SBP is designed to deliver in a coordinated and systematic manner on the Key Objectives.

Key components of the CIC SBP comprise of Risk Assessment and Management Framework, and Results Framework. The AOP, Annual Report Matrix and the critical M&E Framework shall be crafted following formal approval of this CIC SBP 2020 - 2024.



## ANNEXES

### Annexure 1: Implementation Framework for Key Objective # 1

| CIC ACTIVATION PLAN JANUARY 2020 - 2024 PROPOSED EXPENDITURE SCHEDULE                     |  |                  |                    |                     |
|---|--|------------------|--------------------|---------------------|
| KOGMA: KEY OBJECTIVES, GOALS, MEASUREMENTS AND ACTIVITIES                                 | Estimate Thematic Annual Budget  | Financing Source | Amount (K)         |                     |
|   |  | GoPNG-PIP        |                    |                     |
|   | PGK4,675,000.00  | CIC-PPAP         |                    |                     |
|   |  | Others           |                    |                     |
| Key Objective # 1: Strengthen regulatory functions in the industry for licensed operators |  |                  |                    |                     |
| Projects  | Outputs/Measures   | Timeline         | Est. cost (Kina)   |                     |
| 1.1 Inspections & Auditing of Licensed Operators  | 1.1.1 All Operators Fully Compliant to Revised RPG&PM (2018)<br>1.1.2 Building Operator's Capacity<br>1.1.3 Migrate Operators Manual Database and License Application to Online System                     | 2020-2021        | 295,000.00         |                     |
| 1.2 Upgrade Export System   | 1.2.1 Online Export System Functioning   |                  | 95,000.00          |                     |
| 1.3 Establish Certified Coffee Monitoring Unit  | 1.3.1 Recruit Manpower<br>1.3.2 Draw up Policies on Certification<br>1.3.3 Partnerships in Certification   | 2020-2021        | 5,000.00           |                     |
| 1.4 Review of CIC Act 1991 & Constitution   | 1.4.1 CIC Act Reviewing  | 2020-2021        | 100,000.00         |                     |
| 1.5 Upgrade Quality Control System  | 1.5.1 Building Capacity of Coffee Labs   | 2020-2024        | 210,000.00         |                     |
| 1.6 Profiling Licensed Operators (including their coffee sources)                         | 1.6.1 Profile Template Developed<br>1.6.2 Equipment Purchased<br>1.6.3 Profiling Uploaded  |                  | 20,000.00          |                     |
| 1.7 Regular Stakeholder Engagement  | 1.7.1 Develop Mutual Agreement   | 2020-2024        | 45,000.00          |                     |
| 1.8 Coordination & Management   | 1.8.1 Monthly Reports<br>1.8.2 Monthly Meetings (brief & debrief)  | 2020-2024        | 30,000.00          |                     |
| 1.9 Post Implementation Report  | 1.9.1 Audit, Acquittals, Evaluate Success Margin & Data to MIS<br>1.9.2 Quarterly Reports (Physical & Financial)<br>1.9.3 Quarterly PIP PSC Meeting<br>1.9.4 Quarterly PSC Review<br>1.9.5 CIAC (Biannual) | 2020-2024        | 50,000.00          |                     |
|   |  | <b>Sub Total</b> | <b>850,000.00</b>  |                     |
| 1.10 Contingency-10%  |  |                  | 85,000.00          |                     |
| <b>Indicative Budget Est. for 2020 Operation</b>  |  |                  | <b>935,000.00</b>  |                     |
| <b>Indicative Budget Est. for 2020 - 2024</b>   |  |                  | <b>Grand Total</b> | <b>4,675,000.00</b> |

## Annexure 2: Implementation Framework for Key Objective # 2

| CIC ACTIVATION PLAN JANUARY 2020 - 2024 PROPOSED EXPENDITURE SCHEDULE   |   |                  |                  |               |
|---|---|------------------|------------------|---------------|
| KOGMA: KEY OBJECTIVES, GOALS, MEASUREMENTS AND ACTIVITIES   | Estimate Thematic Annual Budget   | Financing Source | Amount (K)       |               |
|   |   | GoPNG-PIP        |                  |               |
|   | PGK37,180,000.00  | CIC-PPAP         |                  |               |
|   |   | Others           |                  |               |
| Key Objective # 2: Realign functional areas in CIC to cater to emerging needs, resources, human talents and organisational capacity development |   |                  |                  |               |
| Projects  | Outputs/Measures  | Timeline         | Est. cost (Kina) |               |
| 2.1. Organisational Restructure   | 2.1.1 Review of CICL Organisational<br>2.1.2 Aligning Structured Positions with CIC Business Plan   | 2020-2021        | 2,000,000.00     |               |
| 2.2 Computerised Human Resources Information Systems (CHRIS)  | 2.2.1 Establish CHRIS   | 2020-2021        | 200,000.00       |               |
| 2.3 Improvement of CIC Properties   | 2.3.1 Renovation to CIC Staff Housing<br>2.3.2 Renovation to CIC H/Q Office<br>2.3.3 New Staff Housing Project - Lae  | 2020-2023        | 4,000,000.00     |               |
| 2.4 Terms of Services Manual (TOS)  | 2.4.1 Awareness & Distribution of TOS   | 2020-2021        |                  |               |
| 2.5 Incentive-based Salary Structure  | 2.5.1 Develop Incentive-based Salary Structure  | 2020-2021        | 50,000.00        |               |
| 2.6 Learning & Capacity Development   | 2.6.1 Develop Training Policy   | 2020-2021        | 50,000.00        |               |
| 2.7 Establishment of Regional IRC Offices   | 2.7.1 Establish Regional Office   | 2020-2023        | 100,000.00       |               |
| 2.8 Procurement   | 2.8.1 Establish Centralised Procurement System  | 2020-2024        | 30,000.00        |               |
| 2.9 Coordination & Management   | 2.9.1 Monthly Reports<br>2.9.2 Monthly Meetings (brief & debrief)   | 2020-2024        | 30,000.00        |               |
| 2.10 Post Implementation Report   | 2.10.1 Audit, Acquittals, Evaluate Success Margin & Data to MIS<br>2.10.2 Quarterly Reports (Physical & Financial)<br>2.10.3 Quarterly PIP PSC Meeting<br>2.10.4 Quarterly PSC Review<br>2.10.5 CIAC (Biannual) | 2020-2024        | 50,000.00        |               |
|   |   | Sub-Total        | 6,760,000.00     |               |
| 2.11 Contingency-10%  |   |                  | 676,000.00       |               |
| Indicative Budget Est. for 2020 Operation   |   |                  | Grand Total      | 7,436,000.00  |
| Indicative Budget Est. for 2020 - 2024  |   |                  | Grand Total      | 37,180,000.00 |

## Annexure 3: Implementation Framework for Key Objective # 3

| CIC ACTIVATION PLAN JANUARY 2020 - 2024 PROPOSED EXPENDITURE SCHEDULE                                       |  |             |                  |            |
|---|--|-------------|------------------|------------|
| KOGMA: KEY OBJECTIVES, GOALS, MEASUREMENTS AND ACTIVITIES   | Estimate Thematic Annual Budget  |             | Financing Source | Amount (K) |
|   |  |             | GoPNG-PIP        |            |
|   | PGK45,265,000.00   |             | CIC-PPAP         |            |
|   |  |             | Others           |            |
|   |  |             |                  |            |
| Key Objective # 3: Foster and actively promote partnerships and marketing                                   |  |             |                  |            |
| Projects  | Outputs/Measures   | Timeline    | Est. cost (Kina) |            |
| 3.1 Plantation Rehabilitation   | 3.1.1 Facilitate Funding (several donors)<br>3.1.2 Facilitate Partnership (five rundown plantations)<br>3.1.3 Facilitate Development of M&E  | 2020-2024   | 1,600,000.00     |            |
| 3.2 Logistics/Transport & ICT   | 3.2.1 Vehicle<br>3.2.2 Office Equipment and Accessories  | 2020-2021   | 200,000.00       |            |
| 3.3 Develop Zuguru into a Single Origin Coffee Plantation   | 3.3.1 Resolve Land Dispute with DAL<br>3.3.2 Facilitate Zuguru Single Origin Coffee Development<br>3.3.3 Facilitate Climate Change Projects at Zuguru Farm<br>3.3.4 Facilitate Value Adding through Integration of Economic Crops into Coffee Farming System | 2020-2024   | 750,000.00       |            |
| 3.4 Factory Refurbishment and Construction  | 3.4.1 Facilitate MOA with Coffee Growing Districts for Development of Coffee Market Infrastructures  | 2020-2024   | 3,000,000.00     |            |
| 3.5 Facilitate Market Access  | 3.5.1 Facilitate MOA with Coffee Growing Districts for Freightling of Coffee to Nearest Markets<br>3.5.2 National Coffee Cupping Competition<br>3.5.3 Coffee Attaché in Overseas Missions  | 2020-2024   | 1,800,000.00     |            |
| 3.6 Promote Stakeholder Development for Internal Coffee Consumption and Marketing through High Value Coffee | 3.6.1 Facilitate and Promote Grower Groups and SME Coffee Sales of High Value Coffee to Specialty Markets  | 2020-2024   | 700,000.00       |            |
| 3.7 Coordination & Management   | 3.7.1 Monthly Reports<br>3.7.2 Monthly Meetings (brief & debrief)  |             | 30,000.00        |            |
| 3.8 Post Implementation Report  | 3.8.1 Audit, Acquittals, Evaluate Success Margin & Data to MIS<br>3.8.2 Quarterly Reports (Physical & Financial)<br>3.8.3 Quarterly PIP PSC Meeting<br>3.8.4 Quarterly PSC Review<br>3.8.5 CIAC (Biannually)   | 2020-2024   | 50,000.00        |            |
| 3.9 Contingency (10%)   |  | Sub-Total   | 8,230,000.00     |            |
|   |  |             | 823,000.00       |            |
|   |  | Grand Total | 9,053,000.00     |            |
| Indicative Budget Est for 2020 Operation  |  | Grand Total | 45,265,000.00    |            |

## Annexure 4: Implementation Framework for Key Objective # 4

| CIC ACTIVATION PLAN JANUARY 2020 - 2024 PROPOSED EXPENDITURE SCHEDULE   |   |                  |                  |  |
|---|---|------------------|------------------|--|
| KOGMA: KEY OBJECTIVES, GOALS, MEASUREMENTS AND ACTIVITIES   | Estimate Thematic Annual Budget   | Financing Source | Amount (K)       |  |
|   |   | GoPNG-PIP        |                  |  |
|   | PGK109,340,000.00   | CIC-PPAP         |                  |  |
|   |   | Others           |                  |  |
|   |   |                  |                  |  |
| Key Objective # 4: Revise and develop a standardized approach to extension inputs to improve market access, production and productivity |   |                  |                  |  |
| Projects  | Outputs/Measures  | Timeline         | Est. cost (Kina) |  |
| 4.1 Research Capacity Building  | 4.1.1 Lead Coordinators Designated & Recruitment<br>4.1.2 Farmer Group Awareness<br>4.1.3 Partner Awareness<br>4.1.4 Extension Awareness  | 2020-2024        | 300,000.00       |  |
| 4.2 Grower Group Resources Mobilizations  | 4.2.1 Mass Propagation of Elite Arabica and Robusta Plantlets<br>4.2.2 Climate Smart Plantation Research & Development<br>4.2.3 ILG Coffee Development Projects<br>4.2.4 CLR Control (with KO 5)<br>4.2.5 CBB Control with Military Support (with KO 5)<br>4.2.6 Expand Profitable Coffee-based Farming Systems<br>4.2.7 Up-scaling Energy, Huller and Mini Dry Factories (with KO 5)<br>4.2.8 Economic Analyses of Projects and Program Interventions  | 2020-2024        | 12,000,000.00    |  |
| 4.3 Grower Traceability Program   | 4.3.1 Develop Traceability System for PNG Coffee Industry (KO 1)<br>4.3.2 National Grower Family Profiling (with KO 5).<br>4.3.3 National Plantation Profile<br>4.3.4 National Grower Weather Profiling (with KO 5)<br>4.3.5 National Grower Land & Environment Profiling (with KO 5)<br>4.3.6 National Growers Soil Profile (with KO 5)<br>4.3.7 National Coffee based Farming Systems Profile<br>4.3.8 National Growers Cup Profile (with KO 3)<br>4.3.9 National Plantation Cup Profiling<br>4.3.10 National Ethnic & Cultural Profile<br>4.3.11 National Origin Profiling<br>4.3.12 National Origin Patenting | 2020-2024        | 7,000,000.00     |  |



|   |   |             |                |
|---|---|-------------|----------------|
| 4.4 Grower Group Management                       | 4.4.1 Develop Grower Group Management Systems Project<br>4.4.2 Grower QC & Corrective Action Systems<br>4.4.3 Develop and Support Strategic Management Systems  | 2020-2024   | 500,000.00     |
| 4.5 ACIAR Livelihood Project                      | 4.5.1 Socio Economic Survey<br>4.5.2 NRM Intercropping<br>4.5.3 NRM Demucilager   | 2020-2022   |                |
| 4.6 ACIAR Women Entrepreneurship                  | 4.6.1 Interview Women Entrepreneurs<br>4.6.2 Village Savings & Loans Association  | 2020-2021   |                |
| 4.7 ACIAR Improving the Honey Bee Industry in PNG | 4.7.1 Re-organise and Strengthen the <i>Isten Hailens Bikipas Asosiesen</i><br>4.7.2 Provide Training in Bee Keeping<br>4.7.3 Strengthen the Honey Processing and Marketing System                              | 2020-2024   |                |
| 4.8 ACIAR Project Admin                           | 4.8.1 Operational Logistics<br>4.8.2 Vehicle Management<br>4.8.3 Project Meetings   | 2020-2024   |                |
| 4.9 Coordination & Management                     | 4.9.1 Monthly Reports<br>4.9.2 Monthly Meetings (brief & debrief)   | 2020-2024   | 30,000.00      |
| 4.10 Post Implementation Report                   | 4.10.1 Audit, Acquittals, Evaluate Success Margin & Data to MIS<br>4.10.2 Quarterly Reports (Physical & Financial)<br>4.10.3 Quarterly PIP PSC Meeting<br>4.10.4 Quarterly PSC Review<br>4.10.5 CIAC (Biannual) | 2020-2024   | 50,000.00      |
|   |   | Sub-Total   | 19,880,000.00  |
| 4.11 Contingency-10%                              |   |             | 1,988,000.00   |
|   | Indicative Budget Est for 2020 Operations   | Grand Total | 21,868,000.00  |
|   | Indicative Budget Est for 2020 - 2024   | Grand Total | 109,340,000.00 |

## Annexure 5: Implementation Framework for Key Objective # 5

| CIC ACTIVATION PLAN JANUARY 2020 - 2024 PROPOSED EXPENDITURE SCHEDULE                                      |   |           |                  |               |
|--|---|-----------|------------------|---------------|
| KOGMA: KEY OBJECTIVES, GOALS, MEASUREMENTS AND ACTIVITIES  | Estimate Thematic Annual Budget   |           | Financing Source | Amount (K)    |
|  |   |           | GoPNG-PIP        |               |
|  | PGK46,814,845.00  |           | CIC-PPAP         |               |
|  |   |           | Others           |               |
|  |   |           |                  |               |
| Key Objective # 5: Adopt an approach of intervention through organized farmer groups or at aggregate level |   |           |                  |               |
| Projects   | Outputs/Measures  | Timeline  | Est. cost (Kina) |               |
| 5.1 Empower & Capacitate Growers   | 5.1.1. Gender Inclusive Organized and Cohesive Grower Groups<br>5.1.2. Participatory Appraisal & SWOT Analysis<br>5.1.3. Facilitate and Establish a Vibrant and Functional Governance and Management Systems in Groups<br>5.1.4. Supervise and Coordinate<br>5.1.5. Publish Report  | 2020-2024 | 1,147,310.00     |               |
| 5.2 Optimise Scale of Production   | 5.2.1. Identify/Establish and Strengthen Partnerships (KO 3)<br>5.2.2. Access Credit Financing and Support Grants<br>5.2.3. Rehabilitate Poorly Managed Smallholder, Block and Plantation Coffee (KOs 4 & 3)<br>5.2.4. Growers Access Good Planting Materials   | 2020-2024 | 2,340,230.00     |               |
| 5.3 Coffee Freighting  | 5.3.1. Freighting Project is Managed Efficiently<br>5.3.2. Identify and Establish Alliances with Transport Companies<br>5.3.3. Implement Quality Control Systems and Traceability Standards (KOs 4, 3 & 1)<br>5.3.4. Growers Supply Certified Coffee to Specialty Markets (KOs 4, 3 & 1)<br>5.3.5. Coordinate and Manage Actual Freighting of Coffee. | 2020-2024 | 2,340,230.00     |               |
| 5.4 Education & Training   | 5.4.1 Competency Portfolio & Assessment Framework<br>5.4.2 Educated Young Coffee Farmers & School Coffee Production<br>5.4.3 Registered Coffee Training School for Out scaling to Partners  | 2020-2024 | 2,550,000.00     |               |
| 5.5 Coordination & Management  | 5.5.1 Monthly Reports<br>5.5.2 Monthly Meetings (brief & debrief)   | 2020-2024 | 30,000.00        |               |
| 5.6 Post Implementation Report   | 5.6.1 Audit, Acquittals, Evaluate Success Margin & Data to MIS<br>5.6.2 Quarterly Reports (Physical & Financial)<br>5.6.3 Quarterly PIP PSC Meeting<br>5.6.4 Quarterly PSC Review<br>5.6.5 CIAC (Biannually)  | 2020-2024 | 50,000.00        |               |
|  |   | Sub-Total | 8,511,790.00     |               |
| 5.7 Contingencies (10%)  |   |           | 851,179.00       |               |
| Indicative Budget Est for 2020 Operations  |   |           | Grand Total      | 9,362,969.00  |
| Indicative Budget Est for 2020 - 2024  |   |           | Grand Total      | 46,814,845.00 |

## Annexure 6: Implementation Framework for Key Objective # 6

| CIC ACTIVATION PLAN JANUARY 2020 - 2024 PROPOSED EXPENDITURE SCHEDULE  |  |                  |                  |  |
|--|--|------------------|------------------|--|
| KOGMA: KEY OBJECTIVES, GOALS, MEASUREMENTS AND ACTIVITIES  | Estimate Thematic Annual Budget  | Financing Source | Amount (K)       |  |
|  |  | GoPNG-PIP        |                  |  |
|  | PGK13,272,490.00   | CIC-PPAP         |                  |  |
|  |  | Others           |                  |  |
|  |  |                  |                  |  |
| Key Objective # 6: Develop technology-driven systems and processes for market information collection, analysis and dissemination |  |                  |                  |  |
| Projects   | Outputs/Measures   | Timeline         | Est. cost (Kina) |  |
| 6.1 Management Information System (ICT)  | 6.1.1 Review of ICT in CIC<br>6.1.2 ICT Policy<br>6.1.3 Systems Upgrade (ICT)<br>6.1.4 Develop & Manage CIC Databases<br>6.1.5 Develop Technical Capacities<br>6.1.6 New Lae Office, ICT Needs<br>6.1.7 ICT Map/Network<br>6.1.8 ICT Annual Bills                    | 2020-2024        | 1,943,180.08     |  |
| 6.2 Publications & Information Sharing   | 6.2.1 Publication Manual - Policy<br>6.2.2 Communication Protocol Policy<br>6.2.3 PNG Coffee Journal<br>6.2.4 Extension Materials<br>6.2.5 Coffee Report<br>6.2.6 Coffee Discussion Paper<br>6.2.7 PRAP Reports<br>6.2.8 Thesis/Dissertation<br>6.2.9 CIC Newsletter | 2020-2024        | 390,000.00       |  |
| 6.3 Information Service  | 6.3.1 Digital Library System<br>6.3.2 Library Management   | 2020-2024        | 80,000.00        |  |
| 6.4 Coordination & Management  | 6.4.1 Monthly Reports<br>6.4.2 Monthly Meetings (brief & debrief)  | 2020-2024        | 30,000.00        |  |
| 6.5 Post Implementation Report   | 6.5.1 Audit, Acquittals, Evaluate Success Margin & Data to MIS<br>6.5.2 Quarterly Reports (Physical & Financial)<br>6.5.3 Quarterly PIP PSC Meeting<br>6.5.4 Quarterly PSC Review<br>6.5.5 CIAC (Biannual)   | 2020-2024        | 50,000.00        |  |
|  |  | Sub-Total        | 2,413,180.08     |  |
| 6.6 Contingencies (10%)  |  |                  | 241,318.00       |  |
|  | Indicative Budget Est for 2020 Operations  | Grand Total      | 2,742,498.09     |  |
|  | Indicative Budget Est for 2020 - 2024  | Grand Total      | 13,712,490.44    |  |

## Annexure 7: Strategic Business Plan Inherent Risks that May Affect Implementation

| Risk Assessment and Management  |   |  |   |  |   |
|---|---|--|---|--|---|
| Implementation Risks  | Strategies  | Risk Owner(s)  | Consequence(s)<br>(catastrophic, major, moderate, minor, insignificant) | Likelihood<br>(almost certain, likely, possible, unlikely, rare) | Control Effectiveness<br>(strong, moderate, weak, uncontrollable) |
| Negative Mindsets of our People - Coffee Growers                                  | <ul style="list-style-type: none"> <li>Active engagement of the populace in unlocking land for coffee development</li> <li>Training of next generation of farmers</li> <li>Zero tolerance &amp; stiff penalty licensed operators</li> </ul> | Farmers<br><br>Young farmers<br>CIC  | Major<br><br>Major<br>Catastrophic                                      | Likely<br><br>Likely<br>Likely                                   | Strong<br><br>Strong<br>Strong                                    |
| Weak political, CIC Board & Management Leadership and No Will Power to Discipline | <ul style="list-style-type: none"> <li>Review out dated CIC Act</li> <li>Regular induction of leaders</li> <li>Qualification for political leader</li> </ul>  | CIC, DAL<br>CIC<br>Coffee Industry   | Major<br>Major<br>Major   | Almost certain<br>Almost certain<br>Possible                     | Moderate<br>Strong<br>Moderate                                    |
| Poor Governance & Ineffective Management  | <ul style="list-style-type: none"> <li>Reforms &amp; restructure CIC &amp; Board</li> <li>Code of conduct/performance</li> <li>Implement review recommendations</li> </ul>  | CIC Board, CIC<br>CIC Board, CIC<br>CIC Board, CIC                                 | Major<br>Major<br>Major   | Almost certain<br>Likely<br>Likely                               | Strong<br>Moderate<br>Moderate                                    |
| Poor Extension Services   | <ul style="list-style-type: none"> <li>Provide extension through grower groups</li> <li>Full funding of capacity up-scaling</li> </ul>  | CIC<br>CIC   | Major<br>Major  | Likely<br>Likely   | Strong<br>Strong  |
| Lack of Research Activities   | <ul style="list-style-type: none"> <li>Dedicated funds for research</li> <li>Incentives for researchers</li> </ul>  | CIC<br>CIC   | Major<br>Major  | Almost certain<br>Almost certain                                 | Strong<br>Strong  |
| No Standard of Moral Obligation   | <ul style="list-style-type: none"> <li>Compulsory induction</li> <li>Outsource CIC recruitment process</li> <li>Improve CIC employment conditions at service delivery level</li> </ul>  | CIC<br>CIC, HR Agencies<br>CIC   | Major<br>Major<br>Catastrophic  | Likely<br>Likely<br>Almost certain                               | Moderate<br>Moderate<br>Strong                                    |
| Lack of Rapid Growth Potential for Coffee Development                             | <ul style="list-style-type: none"> <li>Establishment of nucleus estate coffee projects</li> <li>Establish groups marketing system for the growers</li> <li>Establish growth centres</li> </ul>  | CIC, Plantations, Blocks<br>CIC, Grower groups, Exporters<br>CIC, Provincial Govts | Major<br><br>Moderate<br>Moderate                                       | Almost certain<br><br>Likely<br>Likely                           | Strong<br><br>Moderate<br>Moderate                                |



| Risk Associated with Policy and Operational Implementation   |   |
|--|---|
| Increased Spending on New Infrastructure Undermines Efforts to Improve Service Delivery                    | Brief all leaders on the causes of poor performance of the coffee industry and the importance of funding maintenance of existing assets rather than constructing new ones.  |
| Limited Understanding Amongst Key Stakeholders of Causes of Poor Service Delivery and Appropriate Remedies | Brief all key stakeholders on causes of service decline and the appropriate responses: individual briefings for all Ministers; seminars for interested Members of Parliament; workshops for Department Heads and key department staff.  |
| Limited Accountability for Implementation  | Clear implementation plans agreed with relevant Department Heads, Ministers and approved by NEC.  |
| Inadequate Resourcing of Implementation  | Alert CACC, NPC and NEC to issue. Submit revised work plan in light of under-resourcing.  |
| Limited Interest in Difficult Long-term Reforms like "Right-sizing"  | Clearly communicate the consequences of a failure to act. Consider a more phased approach: "right-size" agencies one at a time.   |
| Poor Coordination of Reforms   | Ensure all reforms are situated within the PSR strategy-NEC approval vital. Vision Development Centre mapping exercise to describe total reform picture and identify overlaps.<br>PSR must be linked to MTDP III.<br>Communicate Development Vision Centre mandate to other groups charged with developing reforms.<br>Meet regularly with key groups (e.g. MTDP III Team, SDS PMU, Transitional Oversight Team/PSRAG, CACC, etc.). |
| Limited Donor Interest and Support   | Explain the centrality of this strategy to the GoPNG reform and development efforts. Ad hoc stand-alone projects/programs running parallel to others-unsustainable. Lack of integration and streamlining of donor programs-band aid syndrome.   |
| Linkage with Lower Tiers not Clearly Defined   | Need to establish clear linkage with lower tiers as presently hazy.<br>Implementation issues and challenges are spiralling and overwhelming administrative capacity to effectively deliver.<br>Minimise the inherent chronic weaknesses and flaws in delivery chain.  |
| Inadequate Public Awareness and Advocacy for MDG/SDG   | Prudent to delay wholesale localisation and utilisation of SDG targets and indicators unless planning for dismal performance or failure.<br>Involve lower tiers through genuine partnership rather than lumping SDG on them now.<br>Consider proposed area focused SDG pilot provinces/districts (model) to trial; appraise margin of success and lessons learned before increased replication roll-out.                            |

## Annexure 8: Strategic Business Plan Results Framework

Strategic Business Plan Outcome Result: Please refer to the outcome results statement in MTDP III Implementation Framework for 2018 - 2022

| Summary of Results   | Target/Indicator(s)  | Means of Verifications  | Key Assumptions  | Risks Analysis  | Mitigating Strategies/ Measures and Key Actions   |
|--|--|---|--|---|---|
| <b>Program Purpose/Objective: To Support the Small Producers in Target Districts through the Establishment of Sustainable Livelihoods of Targeted Villages by 2022.</b>  |  |   |  |   |   |
| <b>Project Output:</b><br>Support the Implementation of Community-based Coffee Production and Livelihood Initiatives   | <b>Target:</b><br>At least 120 families, of which 20% are women, young farmers in pilot communities undertaking industry-based eco-enterprise, initiatives.<br><br><b>Indicators:</b><br>Number of families (men and women) benefited from village-based sustainable industry initiatives.<br><br>Number of direct and indirect beneficiaries (men and women) from training and livelihood assistance. | Project progress, end of project report, monitoring reports, community baseline and end-line surveys.   | The proponent, communities and other partners are committed to continue to promote for sustainable livelihoods from coffee industry and farming systems. | Competing economic development in their family units or locality hampers community participation. | Intensify and complement support for biodiversity conservation, climate change adaptation to be able to provide more technical and financial assistance to pilot communities.<br><br>More involvement of national and local leaders in the promotion of sustainable livelihoods in rural areas. |
| Local Human and Other Productive Resources.<br>Capacity Building Activities on Skills Development for Agro-SME/CC-Coffee – Apiculture-based Incomes.<br>Provision of Technical and Financial Assistance to Support the Implementation KO's of Livelihood Projects. |  | Project progress, end of project report, monitoring reports, community baseline and end-line surveys.<br><br>Project reports, lead partners, training reports, monitoring reports, Interviews with beneficiaries. |  |   | Selection criteria for other project partners and beneficiaries shall be based on their commitment, capacity and experience that can add value, contribute expertise, match funds and share risks.  |

Annexure 9: Indicative Operational Plan and Budget for Intervention Program or Projects [SAMPLE]

| Project Output/s   | Main Activities  | Responsible Partners | Target Completion Date | Proposed Project Budget (PGK)   |             |                   |                |
|--|--|----------------------|------------------------|---|-------------|-------------------|----------------|
|  |  |                      |                        | Detailed Budget Assumption**  | Budget Code | Local Counterpart | Amount Request |
| Improved Skills in 3 Villages/Communities to Implement Coffee –Integrated Farming System-based Projects. | Update and publish training manual on coffee –integrated farming systems in vernacular language. |                      | June 2020              | Professional fee at K3,500 for 15-days work effort Lay-outting, packaging and publication cost @ 150 per manual x 100 copies. |             | 3,500             | 0              |
|  | Conduct Training of Trainers (TOT) on coffee –integrated farming systems.                        |                      | Aug 2020               |   |             | 2,000             | 2,000          |
|  | Conduct series of village-level hands-on training for farmers.                                   |                      | June 2022              |   |             | 10,000            | 47,060         |
| Support the Implementation of Community Initiatives on Sustainable Livelihood                            | Establishment of six pilot or demonstration farm on sustainable coffee.                          |                      | Dec 2022               |   |             | 7,000             | 200,000        |
|  | Meeting and monitoring costs to support the establishment of livelihood initiatives.             |                      | Dec 2022               |   |             | 28,000            | 50,000         |
| Support to Daily Operation of Project  | Salaries of project supervisor and 4 staff.  |                      | Dec 2022               |   |             | 169,200           | 0              |
|  | Office rent.   |                      | Dec 2022               |   |             | 6,000             | 0              |
|  |  |                      |                        | Total Project Cost  |             |                   |                |
| Equivalent Amount in US Dollars (Exchange rate effective as of (date): US\$1 = 2.62 PGK)                 |  |                      |                        |   |             |                   |                |

\*\* For example, the budget assumption for a rollout of TOT training should ascertain the types and number of training events including the number of participants as well as cost estimates based on the latest budget/expenditure for a similar activity. It is estimated that a budget of K 57,060 may be required to target 10 households for agro industry, coffee- and 5 households for bee-keeping initiatives based on detailed costing. Note that unit rates used below are anecdotal:

- Professional fee for facilitator (2,000 per training, 2 training (agro SME/Cooperative and apiculture) event for 3 villages; K12,000 total).
- Food (K50 for a full day meal x 2.5 days for each training event x 18 participants and training team with a budget of K2,250 per training event; K2,250 x 6 training events for all 3 villages will amount to K13,500).
- Accommodation for training team members and participants (K120 Kina for 2-night stay x 18 participants x 6 training events or a grand total of K12,960).
- Bus return fare (K100 per participant x 6 training event; K600 total).
- Plane and bus fare for facilitator (K500 per ticket and K100 for bus fare x 3 team members x 6 training events; K10,800 total).
- Meeting venue/conference hire (K200 per day x 2.5 days x 6 training events or a total of K3,000).
- Hire of projector and other equipment (K100 per day x 2 days x 6 training events; K1,200 total).
- Workshop materials (K500 per training event x 6 training event; K3,000 total).
- Prescribed rates of your organization on food, accommodation, travel and incidental expenses for staff and beneficiaries alike must be attached.

