



ANNEX

of the Commission Decision on the Annual Action Programme 2018 in favour of Papua New Guinea

Action Document for Support to Rural Entrepreneurship, Investment and Trade in Papua New Guinea (STREIT PNG)

1. Title/basic act/ CRIS number	Support to Rural Entrepreneurship, Investment and Trade in Papua New Guinea (STREIT PNG) CRIS number: FED/2018/039-995 financed under European Development Fund			
2. Zone benefiting from the action/location	Papua New Guinea The action shall be carried out at the following location: Selected areas in the MOMASE region (Sepik, Morobe and Madang Provinces)			
3. Programming document	PNG-EU National Indicative Programme 2014-2020			
4. Sector of concentration/ thematic area	FS1: Rural Entrepreneurship, Investment and Trade		DEV. Aid: YES	
5. Amounts concerned	Total estimated cost: EUR 85.3 million Total amount of EDF contribution EUR 85 million This action is co-financed in joint co-financing by: Food and Agricultural Organisation (FAO) for an amount of EUR 300,000			
6. Aid modality(ies) and implementation modality(ies)	Project Modality Direct Management: procurement of services Indirect Management with International Organisations			
7 a) DAC code(s)	31120 Agriculture Development, 312 (%tbc), 313 (%tbc), 22040 Communication Technologies			
b) Main Delivery Channel	FAO 41301			
8. Markers (from CRIS DAC form)	General policy objective	Not targeted	Significant objective	Main objective
	Participation development/good governance	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

	Aid to environment	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Gender equality (including Women In Development)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Trade Development	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Reproductive, Maternal, New born and child health	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	RIO Convention markers	Not targeted	Significant objective	Main objective
	Biological diversity	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Combat desertification	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Climate change mitigation	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Climate change adaptation	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9. Global Public Goods and Challenges (GPGC) thematic flagships	The action will contribute to 1. Environment and climate change, 2. Sustainable energy and 3. Food and nutrition security and sustainable agriculture			
10. SDGs	Main SDG Goal(s) 1; 2; 5; 7; 8; 9; 13; 15; 17 Secondary SDG Goal(s) 4;12			

SUMMARY

Based on the development priorities of Papua New Guinea, the Action aims at improving sustainable and inclusive economic development and job creation in the MOMASE¹ region, with a specific focus on women, youth and climate change. The Action will enable ‘hard components’ (transport infrastructure, energy access) to be connected with ‘soft components’ such as financing, training, market access, trade and other value chain support services for commodities, facilitated by the sustainable implementation of digital technologies, services and solutions, under a conducive business environment in order to foster and stimulate climate-resilient rural development activities.

With a view to spurring rural entrepreneurship, investment and trade whilst promoting a safe and sustainable environment, the Action is fully in line with the priorities of the new European Consensus on Development and will contribute to the achievement of Agenda 2030. In particular, the following Sustainable Development Goals (SDGs) will be targeted: 1 (ending poverty), 2 (food security, improved nutrition and sustainable agriculture), 4 (inclusive and equitable quality education), 5 (gender equality and empowerment), 7 (affordable, reliable, sustainable energy), 8 (inclusive and sustainable economic growth), 9 (resilient infrastructure), 12 (sustainable consumption and production), 13 (climate change), 15 (sustainable use of terrestrial ecosystems, forest) and 17 (Global Partnership for Sustainable Development). The broad scope of SDG coverage is due to the integrated nature of the objectives of this Action that aim to foster economically, socially and environmentally sustainable development in an integrated and holistic way.

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MOMASE stands for the three provinces of Morobe, Madang and Sepik

The Action will be built around four mutually reinforcing pillars: i) business enabling environment; ii) support services, key for the development of value chains; iii) climate-proof physical infrastructure (including transport, telecommunication and renewable energy) and iv) community engagement, in particular of women and youth. The general objective of the Action is to increase sustainable and inclusive economic development of rural areas. The specific objectives (SO) of the action are:

SO1: Increased economic return from three selected value chains in the selected regions.

SO2: Strengthened, climate resilient and more efficient value chain enablers.

The geographical scope of the action will initially be focused on the East Sepik and Sandaun provinces. After the mid-term review of the programme, cocoa value chain development activities will be considered for expansion to the neighbouring provinces of Morobe and Madang for those activities that require heavier localised investment. The Action could also include a scope for expansion to the regional and/or national level when possible. Throughout the Action, particular attention will be paid to community engagement, in particular of women and youth who are the most vulnerable part of the population.

For the implementation of the Action over 5 years it is envisaged to enter into a PAGoDA co-delegation agreement with FAO as lead organisation.

1 CONTEXT

1.1 Sector/Country/Regional context/Thematic area

Background

Papua New Guinea (PNG) is a low middle-income country and the largest economy among the Pacific Island Countries and Territories (PICTs). PNG has a population of 7.2 million² people recorded in the last census in 2011 and is growing at a rate of 3.1%. 73% of the population is under the age of 35 and 36% under the age of 15.

PNG has been the fastest growing economy in the PICTs. Until 2015, the growth of GDP averaged 6% per year, reaching a per-capita level of US\$ 2,399 (PPP basis) in 2014. However, economic growth is largely dependent on the non-renewable mineral sector (mining, oil and gas), with resource rents accounting for 29% of GDP. This places PNG in the top 10 most resource-dependent economies and makes it vulnerable to climate change and external economic shocks. Recently a combination of declines in key commodity prices and the fallout of the El Niño event have caused a considerable economic slowdown (GDP growth projected to decelerate to 3% and 4.3% in 2016 and 2017, respectively). As regards impacts of climate change, according to the ND GAIN Index³, PNG is the 21st most vulnerable country and the 39th least-prepared country in the world. Its ranking in that index has steadily decreased since 1995. Innovation and education efforts in climate change adaptation are deemed critical areas to revert this trend and to build adaptive capacity.

Rural areas, where 85% of the population resides, have not benefitted from the past economic growth. About 97% of the total land is held under customary tenure. 27% of this land is arable, of which only about 8% is cultivated (i.e. less than 2% of total land mass). Essential

² Today's population could be in the vicinity of 10 million. A new population census is foreseen for 2020.

³ The ND-GAIN Country Index, a project of the University of Notre Dame Global Adaptation Index (ND-GAIN), summarizes a country's vulnerability to climate change and other global challenges in combination with its readiness to improve resilience.

infrastructure (rural roads, wharves and jetties and digital services) have not received the appropriate attention from either Government or the private sector since PNG's independence. Most of the rural population do not have access to any source of electricity.

Agriculture is the predominant source of livelihood in PNG. It accounts for more than 65% of the total labour force and 27% of GDP. It provides employment for over 82% of the rural population, however there is little downstream processing and poor participation of smallholder producers in value chains and other productive economic activities. Agriculture is dominated by subsistence production and 55% of the population active in subsistence agriculture are women, employing 70.3% of the female rural population. In rural sector the labour force participation rate for female aged between 10-14 years and 20-24 years is slightly higher than their male counterparts. In general, women are more likely to be unemployed than men and young people are twice as likely to be unemployed on average.⁴ Gender Based Violence (GBV) is very high in PNG, where more than half of PNG women have been subjected to sexual violence at least once during their lives⁵.

1.1.1 Public Policy Assessment and EU Policy Framework

Public Policy Assessment

PNG's development policy priorities are focused on improving economic and social development, prosperity and livelihoods. They are laid down in two key strategic documents: (i) *Vision 2050*; and (ii) *Papua New Guinea Development Strategic Plan* (PNGDSP) 2010-2030. The PNGDSP aims for a prosperous middle-income country by 2030 and puts forward the concept of economic corridors as an implementing strategy based on strategic investments in transport, utilities, education and health and incentives for businesses; it also identifies climate change has a cross-cutting development challenge. A paradigm shift from an economy currently dominated by the non-renewable sector to a more diversified economy is further elaborated in the national *Strategy for Responsible Sustainable Development for Papua New Guinea* (StaRS 2nd edition). With priority placed on sustainable agriculture, fisheries and tourism, StaRS sets out a green growth strategy and calls for the integration of economic, social, climate and environmental objectives.

PNG has embarked on incorporating the Agenda 2030 and developing the indicators to monitor the implementation of the SDGs. Achieving SDGs will involve a broader scope of strategic partners than in the past, more specifically the private sector. In particular, the process needs to involve women and young people as clearly indicated in the Agenda 2030.

Following the 2017 general election, the coalition partners agreed policy orientations for the new Government. A number of priorities that are stipulated in the Alotau Accord II and the 100-day plan are relevant for the current Action, e.g. diversification of the economy with special focus on non-mineral sector, e-commerce, sharing arrangement for coastal fisheries provinces, increased access to finance for small farmers, gender equality and economic empowerment of women etc.

In April 2018 PNG embarked on the definition of the Medium Term Development Plan III 2018-2022. It is expected that the document will be finalised mid 2018 following national consultation. This planning document will be aligned with the current legislature both in time and orientation, incorporating the objectives stated in both the Alotau Accords II and the 100-day plan. Emphasis in the initial high level discussion has been maintained on the importance

⁴ Framework for the National Employment Policy PNG – draft 2017

⁵ PNG National Strategy on Gender Based Violence 2016-2025.

of the agricultural sector to contribute to growth whilst balancing the risks associated with the extractive sectors. The holistic approach of the Action means that a very wide scope of policies needs to be considered. The proposed Action will support the achievement of some of the objectives of several national policies.

- The National Agriculture Development Plan 2007-2016 promotes food security, income generation and poverty alleviation. A new plan is being developed by Department of Agriculture and Livestock, supported by FAO
- Department of Agriculture Strategic and Corporate Plan 2013-2017
- The draft PNG E-agriculture Strategy, currently being developed with support from the FAO
- The Cocoa Industry Strategic Plan 2016-2025
- The Fisheries Management (Amendment) Act 2015 and the Fisheries Management Regulation (Amendment) 2016. These reflect PNG's strong engagement to fight IUU over the past few years and include as well specific chapters on the in-shore reef fishery. A new tuna management plan has been defined and is being implemented
- The National Trade Policy 2017-2030 that aims at driving PNG's efforts in achieving its global trade integration and expansion goals
- The National Nutrition Policy 2016-2026
- A National Food Security policy is currently being developed with support from FAO
- The National Electricity Roll-Out Plan (NEROP) provides a roadmap for achieving the strategic targets of 70% nationwide electrification by 2030 and 100% by 2050.
- A 20-year National Transport Strategy (2013), linked to a rolling 5-year investment plan, seeks to establish a transportation network that links all districts
- PNG National Road Network Strategy (NRNS) 2018-2040 that highlights the essential nature of road maintenance in the specific PNG environment and economic context
- The Small and Medium Enterprise Policy (SME) and Master Plan 2016-2030 set a target of 500,000 SMEs by 2030 (up from the current 49,500) and a creation of 2 million jobs. The development of this policy received significant support from the International Labour Organisation (ILO)
- A National Employment Policy is under preparation with support from ILO.
- The National Financial Inclusion Strategy 2017-2025 provides the strategic framework for coordinating, advocating and sustaining efforts in partnership with all stakeholders to achieve the provision of access but also the use of financial services to improve the standard of living in PNG
- The current Papua New Guinea National Strategy to Prevent and Respond to Gender Based Violence 2016-2025 aims to build partnerships at all levels. The strategy proposes capacity building and economic empowerment of women to address gender based violence
- The Climate Change Management Act provides the regulatory framework to “promote and manage climate-compatible development through climate change mitigation and

adaptation activities”, spearheaded by the Climate Change and Development Authority (CCDA).

- PNG’s Nationally Determined Contribution (NDC) to the Paris Agreement. PNG’s NDC states that the primary mitigation effort of PNG lies in reducing emissions from land use change and forestry, and it sets a target of 100% renewable energy for PNG by 2030, contingent on funding being made available. On adaptation, it highlights 9 main hazards for the country, including coastal and inland flooding, crop failures due to droughts and inland frosts and landslides.
- Based on a decentralised political system, separate service investment programmes have been established since 2013 at Provincial, District and Local Government level (PSIP, DSIP, and LLGSIP). These Programmes aim at ensuring the provision of minimum service delivery standards through basic facilities and activities for essential services such as health, education, law and justice, quality water and sanitation, transport, communication and rural electrification.

EU policy framework

The National Indicative Programme (NIP) for the period 2014-2020 (11 EDF) indicates that the EU will support country reforms in areas that have a strong multiplier effect. It also states that interventions in the transport and energy system shall be designed to pose minimal environmental impacts and be resilient to extreme climatic events (e.g. flooding, land-slides, strong winds). While the *Agenda 2030 for Sustainable Development* provides a new reference point, the NIP has remained highly relevant and is fully aligned with the new priorities, including by ensuring inclusivity of rural areas. The proposed intervention is aligned with the 2016 joint communication on *A renewed partnership with the countries of Africa, the Caribbean and the Pacific* that defines the path for a political partnership with ACP countries on the basis of the Agenda 2030. The intervention will specifically address the following specific priorities: 1 - Good governance, human rights and gender; 2 - Inclusive sustainable growth; and 5 – Protect the environment and fight climate change through focusing on sustainable management of natural resources.

Based on the *New European Consensus on Development*, attention will be given to the proposed priorities of the EU response to the new global challenges and the Agenda 2030: gender equality and empowerment of women, youth, sustainable energy and climate change. The proposed action directly supports the *EU Gender Action Plan 2016-2020*, and in particular the thematic priority of economic, social and cultural rights to assist women of all ages have decent work, have equal access to financial services and productive resources including land, trade and entrepreneurial opportunities.

In the context of the 3rd High Level Political Dialogue between the EU and PNG under Article 8 of the Cotonou Agreement which was held in Brussels on 1 June 2018, according to the Joint Conclusions (final agreed version to be issued shortly) "Parties agreed on the need to effectively advance the finalisation and preparation of programmes under the National Indicative Programme following the Mid-Term Review and in line with PNG Government priorities as stated in the new Medium Term Development Plan III 2018-2022. This notably includes the largest EU-contribution towards PNG's development efforts, the EUR 85 million programme "Support to Rural, Entrepreneurship, Investment and Trade in PNG". Under this programme, supporting the value chains of cocoa, vanilla and fisheries in East Sepik and Sandaun provinces was highlighted".

The proposed activities (in particular on value chains) will enable PNG to effectively gain from market access opportunities for a wider range of products in the context of *EPA implementation*. Lastly, in line with the Staff Working Document *Digital4Development: mainstreaming digital technologies and services into EU Development Policy* the digital actions proposed will be aligned to the four priority areas: i. Promote access to affordable and secure broadband connectivity and to digital infrastructure, including the necessary regulatory reforms ii. Promote digital literacy and skills iii. Foster digital entrepreneurship and job creation and iv. Promote the use of digital technologies as an enabler for sustainable development.

1.1.2 Stakeholder analysis

Beneficiaries

The main beneficiaries of the proposed action are small and medium scale rural entrepreneurs, especially cocoa and vanilla smallholders, coastal fishing communities and members of the inland (riverine/aquaculture) fisheries value chain, as well as local MSMEs, located in the MOMASE region of PNG. The initial stage of the action will be focused on the East Sepik and the Sandaun Provincial subdivisions with the possibility of expansion to the provinces of Morobe and Madang for those activities that require heavier localised investment. Rural women's groups and youth will be specifically targeted; however, the entire population of the targeted geographic areas is foreseen to ultimately benefit from the Action. While the actions in support of value chains development will be necessarily localised, national level activities are also foreseen e.g. digital services and solutions, access to finance for beneficiaries.

Government stakeholders

During both the identification and the formulation stages extensive consultation with the following stakeholders has been carried out, including field visits by the EU and partner government departments such as Department of National Planning and Monitoring (DNPM), DAL, and NAO led national fora/workshops, multiple technical stakeholder consultations and bilateral meetings:

- Department of Agriculture and Livestock (DAL), including Commodity Boards (Cocoa Board, Cocoa & Coconut Institute, Spice Industry Board, Kokonas Industri Koperesen, Fresh Produce Development Agency, Oil Palm Industry Corporation, Coffee Industry Corporation, and Livestock Development Corporation)
- National Fisheries Authority (NFA)
- National Agriculture Quarantine and Inspection Authority (NAQIA), mandated to certify agricultural, fisheries, and livestock commodities
- National Agricultural Research Institute (NARI)
- Conservation and Environmental Protection Authority (CEPA)
- Climate Change and Development Authority (CCDA)
- Department of Commerce and Industry
- Department of Community Development, responsible for women, gender and community engagement and empowerment
- Department of Works
- Department of Transport and Infrastructure
- Department of Petroleum and Energy

- Department of Provincial and Local Government Affairs (DPLGA), ensuring the link between the national and provincial/local government levels
- Department of Education
- Department of Communication and Information (DCI)
- Investment Promotion Authority (IPA), responsible for business registration
- Independent Consumer and Competition Commission (ICCC), which enforces competition, fair trade and consumer protection regulations
- Intellectual Property Office (IPO)
- National Institute of Standards and Industrial Technology (NISIT)
- National Information & Communications Technology Authority (NICTA)
- PNG Customs
- PNG Power Limited, State Owned Enterprise (SOE)
- Bank of PNG and CEFI (the Centre for Excellence in Financial Inclusion) mandated to coordinate the implementation of the Financial Inclusion Strategy 2016-2020
- National Youth Development Authority, mandated for youth affairs
- Provincial governments of the MOMASE Region, primarily of East Sepik and Sandaun, including agriculture, gender, fisheries, cocoa board, department of works.
- District Governments of the implementation areas initially Wewak, Yangoru-Saussia, Maprik, Ambunti-Dreikikir, Wosera-Gawi, Angoram and Nuku and Aitape-Lumi. Further districts will be engaged during implementation.
- Sepik Rural Technology College

The Action has been developed and will be implemented in close consultation with the Government of PNG, mainly the Department of Agriculture and other line ministries, semi-state/autonomous bodies such as the Cocoa Board, National Fisheries Authority, NICTA and Provincial and district authorities. Support will also be considered to National Institutions such as the Sepik Rural Technology College for trainings and/or research activities under the project.

Private sector and NSAs

Several non-governmental/private sector institutions have been consulted and will need to be considered, especially for activities related to creating a business friendly climate: Commercial Financial Institutions (banks and micro-banks), the National Development Bank (NDB), local SME organisations, the Business Council of PNG representing business organisations, traders and exporters, Women in Agriculture (NGO), the Institute of National Affairs (INA), the National Council of Women and faith-based organisations.

Development Partners and International Organisations

Development partners active in PNG are Australia, New Zealand, Japan, International Organisations (UN Agencies) and International Financing Institutions (ADB, IFC, WBG, EIB). All have been consulted at the various stages of identification and formulation to ensure synergies and minimise the occurrence of gaps and overlaps in the respective support provided to PNG.

1.1.3 *Priority areas for support/problem analysis*

The Action is focused on a targeted geographical area and a limited number of value chains in order to ensure maximum impact. The economic potential of several provinces of PNG were analysed ahead of selection, also considering the previous, current and planned assistance by Development Partners.

In line with the PNG Cocoa Industry Strategic Plan 2016-2025 and national development strategies⁶, the cocoa-growing areas⁷ of the MOMASE region were identified in consultation with stakeholders and through dialogue with the NAO. In particular, the choice is justified by:

- Development needs of Sepik as one of the poorest regions in PNG. To date the Sepiks have not been the beneficiary of any large scale support from Government or any Development Partners unlike other provinces of the MOMASE region.

- Some areas in Sepik and Sandaun have an alarming malnutrition problem; the region scores second highest in PNG for stunting (over 45%), severe stunting and underweight children in PNG.⁸ There is also a strong link with water and sanitation issues.

- Excellent agro-ecological potential for development of existing crops, especially in the Torricelli foothills (including cocoa, vanilla, coffee, as well as traditional food-crops and new cash crops such as Eaglewood (or agarwood) produced in PNG with the local Thymelaecaeae tree *Gyrinops ledermannii* or Galip nut – *Canarium indicum*).

- An existing road network (national Highway, ring roads and feeder roads), albeit in need of maintenance and repair, connecting the producing areas to the market and trade centre of Maprik and the provincial capital of Wewak which has an international harbour, a gateway for export of goods, a tuna fish cannery and a diesel power plant. Apart from these two urban centres, there is no electrical power supply. Madang and Morobe Provinces have well developed road network linking one another and they benefit partially from one of the three electricity grids in PNG (the Ramu grid).

- The ongoing WBG-EU programme Producers Partnership in Agriculture Project (PPAP) is developing activities in the Morobe, Madang, and some Highland provinces supporting cocoa and coffee small holder's development.

-Important existing Value chains in the Region:

Cocoa: The development of the cocoa production and cocoa industry is being strongly promoted by the Government of PNG. Whilst East Sepik and Sandaun only contributed a total of 10% of PNG cocoa production in 2006, the level reached 33.5% in 2014. Cocoa in this area is a commodity that has the potential to become much more important in terms of both production and economic returns (for producers, fermentries, traders and exporters). Smallholder production systems are prominent rather than large plantation, which bodes well for a more inclusive economic participation of smallholders, including women.

⁶ The proposed intervention area encompasses three of the economic corridors identified in the PNG Development Strategic Plan 2010-2030: Border Corridor (Sandaun Province), Enga-Sepiks Corridor (Enga and East & West Sepik Provinces) and the Momase corridor (Madang, East and West Sepik Provinces).

⁷ The term 'cocoa-growing/producing areas' is used loosely to describe the agro-ecological zone that is favourable for the cultivation of cocoa but also vanilla, which grows in similar conditions.

⁸ Short changed: The Human and Economic Cost of Child Undernutrition in Papua New Guinea, Save The Children, June 2017

One of the major limitations to the engagement of smallholders and production potential is the widespread infestation of cocoa pod borer or CPB (*Conopomorpha cramerella*). The CPB significantly reduces the productivity of the majority of available cultivars. However, whilst CPB tolerant cocoa cultivars have been developed these are not widely available in the Sepiks. In addition, smoke taint (caused by use of wood burning for drying), lack of suitable storage methods and facilities for cocoa result in lower grading and lower prices for smallholders. Poor knowledge and market information and market access (including available and affordable digital solutions, local roads), lack of quality certification and traceability also limit the level and benefit for value chain stakeholders to engage in the cocoa value chain and benefit from increased trade. Currently over 90% of the cocoa beans produced in PNG are exported without any value-addition.

Weak institutional capacity, low level of resources and presence at producer level is also limiting the full engagement of smallholders in sustainable cocoa production. Low levels of financial literacy as well as limited access to finance are commonly reported in the selected action areas.

A Value Chain for Development (VC4D) mission on the cocoa value chain took place in April 2018. It provided good insight into key value chain limitations which supported the development of refined outcomes and related activities. The experts have identified two main types of subsistence-oriented cocoa producers: depending on whether they are trading dry or wet beans.

Cocoa is vulnerable to droughts, one of the impacts recognised in PNG's NDC. Climate-smart agricultural practices tailored to adapt to drought will be prioritised: e.g. water-saving measures, producing and applying compost (this helps improve soil characteristics and resilience to dry seasons) or planting appropriate shade trees to help minimize heat stress and potential damage.

Vanilla: With recent and current world market price, vanilla is a very attractive cash crop in the favourable areas of the MOMASE Region, and in the Sepiks in particular; its high unit value and non-perishability (when cured) makes it particularly attractive for remote locations. PNG vanilla production peaked at 1,000 tonnes in 2003 & 2004, but then shrank and by 2016 PNG was the 5th producer in the World with 502 tonnes (FAOSTAT). One of the reasons was the poorly organised value chain and also poor quality management for continued market access by traders/exporters and price volatility. The bulk of vanilla trade is reported to be through informal channels, often with export overland and by sea to the adjacent Provinces of Indonesia from which it is exported to international markets.

The largest vanilla producing provinces of East Sepik/Sandaun are reported to contribute between 50 and 70% of PNG total production. Vanilla fits well into sustainable PNG agricultural systems in relation to time competition with food crops. Whilst vanilla provides significant cash return once a year, and cocoa provides a regular income for smallholders, the bulk of farm families also have food gardens managed by the women for household consumption and local markets. With current prices and high market demand, producers in PNG and in the Sepiks in particular are now intensively increasing their vanilla production. Projected on-going high market demand, highly suited agro-ecological conditions in PNG and existing basic know-how constitute favourable conditions for its further development.

Vanilla is a good complementary crop for diversification and for its attractiveness for women and youth whose role is important in vanilla production, particularly in pollination. However specific technical knowledge and skills for pollination and vine management are needed to

ensure good levels of production, timely harvesting, processing, curing, storage, quality management and sustainable national and international market access, competitiveness and trade. There is a significant gap in knowledge and understanding of the traders and industry requirements in terms of vanilla size, colour, level of curing and water content at smallholder level resulting in lower pricing. Poor quality, lack of traceability and certification systems also limits participation in international markets and trade.

At local level, insecurity on poor provincial and district roads, poses a significant risk to producers, traders and processors for transportation of vanilla to markets. Women and youth are particularly vulnerable⁹ to these kinds of threats which include farm level theft and armed robbery during transportation. Lack of banks, unavailability and affordability of mobile banking (e.g. e-wallets) and access to savings, loans and local microfinance institutions further exacerbates this security risk and endangers farm families. Bank requirements for collateral and even national identification cards also limit smallholder, agripreneurs and MSMEs' access to a range of banking and other services.

Fisheries: support is planned for the development of the fishery value chain (in-shore, aquaculture and riverine) on the basis of fisheries managed at sustainable levels, for improved incomes and household food security and improved market access and trade, including through increased adoption of ICT for capacity development and enhanced market access. Fish is an important part of the daily diet as well as a reliable source of regular income for smallholders and fisher folk. In the traditional system fish was traded for sago (as flour/starch) between the riverine/coastal and inland areas. The National Fisheries Authority (NFA) is getting engaged in the area through the Coastal Fisheries Management and Development Project (CFMDP). The NFA has initiated as well the deployment of In-shore Fish Aggregating Devices (IFAD) in the East Sepik Province to improve food security, income generation and alleviate poverty.

Riverine: The Sepik River system is one of the most important waterways in the country. It is a rich source of fish (including river prawns/crayfish) and constitutes an essential transport and market route for riverine communities as well as inland ones. In the MOMASE region, fishing is mainly practiced by women using local canoes some with small outboard engines and basic fishing equipment. Fish are mostly marketed fresh but also smoked/dried and traded or exchanged for sago. Poor management of fishery resources, quality of fish stocks, basic fishing practices, poor/unsafe equipment and storage, losses due to poor processing are some of the major challenges to the sustainable development of the riverine fisheries value chain.

Aquaculture: is a widely practiced activity, mostly by men, albeit at small scale throughout MOMASE. Current knowledge and practices in terms of water supply management, breeding stock, fish pond/capture management, feeding and lack of storage, processing and marketing opportunities are some of the major challenges to the sustainable development of the aquaculture value chain.

In shore/reef fishery: the activity is widely practiced along the coastal areas of MOMASE. Fishing is carried out by men, using mainly local outrigger canoes, some with small outboard motors and basic fishing nets and lines for both pelagic and high value benthic species. Fish are mostly marketed fresh, particularly tuna directly to the local cannery in Wewak, Madang and Lae. Fish is also smoked/dried and traded but there is very limited value addition to the fish catch. Lack of sustainable management of fishery resources, basic fishing practices, poor/unsafe equipment (e.g. GPS, mobile phone and radio communication), lack of

⁹ Because sexual violence is often occurring at time of robberies.

availability of reliable and ideally digital weather forecasting and warning systems, low yield for fishing efforts, landing sites/jetties/wharves and storage/cold chain and losses due to poor handling and processing are some of the major challenges to the sustainable development of the inshore/reef fisheries value chain.

PNG shares the vulnerabilities of its Pacific neighbours for its coastal and low-lying areas. Particularly for inshore/reef fishery, nature-based solutions to increase coastal resilience to sea level rise and to protect fish nursery areas will be considered (e.g. restoration of mangroves or other coastal ecosystems).

Missions by expert teams supported through the Value Chain for Development (VC4D) are going to take place to carry out analysis of the vanilla and possibly the fishery value chain. Data collected will contribute to confirming existing assessments and establishing the baselines of this Action.

2 RISKS AND ASSUMPTIONS

Risks	Risk Level	Mitigating Measures
Weak institutional capacities and unclear coordination mechanisms at different levels in Government	High	Engage with relevant national, de-centralised levels of government (provincial, district and ward level) and other stakeholders in a partnership building process.
Delays in implementation of the project	High	Robust project planning and design for PNG conditions. Effective and timely project management and coordination.
Subsistence producers are not responsive and do not transition to market-oriented operations	Medium	The project will consult with communities to better target and engage value chain stakeholders. In addition, there will be improved infrastructure for market access that is adapted to climate change vulnerabilities.
Insecurity	Medium	Applicable security protocols to be applied by the implementing partners
Land tenure system may hinder value chain development to meet market demands (eg. Drying facility for cocoa)	Low	Beneficiaries will be customary landowners from the targeted communities or already have access to land.
Assumptions		
Political will to develop and implement legislation and regulations		
Political stability at provincial, district and ward level		

3 LESSONS LEARNT, COMPLEMENTARITY AND CROSS-CUTTING ISSUES

3.1 Lessons learnt

The EU has been engaged in the rural sector throughout the past 40 years. Either through direct support under EDF financing or through other instruments such as STABEX, which delivered several small scale useful contributions in the rural sector and reinforced some Institutions such as National Agricultural Research Institution (NARI). The EU has acquired credibility in the sector and this is recognised by the Government of PNG.

The latest interventions took place under 10 EDF: Rural Economic Development (RED) 1 and 2, for a total amount of EUR 41.5 million. Overall both stages of RED have faced several implementation issues:

Under RED 1, the contribution to the "Productive Partnership in Agriculture Project" (PPAP) implemented by the World Bank with financial support from IFAD has faced teething issues and local institutional delays, leading to a slower rate of implementation in the early stages. Focusing on cocoa and coffee and using a novel approach to the engagement with smallholder farmers it is now in full implementation and it is achieving great success. The PPAP is now starting to establish cocoa partnership in the MOMASE region, which includes the proposed areas of intervention.

The implementation modalities of RED 2, with two major components under delegated implementation to ADB and UNCDF, have provided lessons evidenced in the conclusions of the mid-term review (MTR) of RED 2 that have been integrated in the design of the current Action. The agreement between all stakeholders, which leads to achieving the objective of the Action (and not merely contribute to increasing the scope of other partners' projects) is paramount.

A lack of overall project management and coordination, as well as timing issues in the establishment of the various commitments under the Financing Agreement occurred. As a result, there was a risk identified that one component would not complement the efforts made in another.

The MTR of RED2 provided small valuable lessons regarding the need to have a more focussed geographic implementation area in order to optimise impact. This lesson has also been recently confirmed from the WBG led PPAP supervisory mission in April 2018.

Based on these lessons, and guidance received from the Quality Support Group (QSG1) the current Action is focused on a defined geographic area and value chains. The selection of a sole and recognised technical lead agency, such as FAO, is recommended to effectively manage, coordinate and ensure timely delivery of the Action.

Past experience demonstrates that in order to ensure an inclusive impact of the project it is important to ensure that all the groups are specifically targeted (women, youth) with due consideration to possible negative effects. In the case of fisheries, women are favoured for employment in tuna factories whereas the offshore fishing activities are rather a male dominated sector. Women have expanded their traditional roles from catching and preparation to include post-harvest, distribution and marketing activities, and they have often done this by relying on traditional community networks. The formal economy now offers them

employment opportunities that can bring in more cash. Problems can arise however when, by providing cheap labour in processing plants, they are absent from subsistence strategies, or when they are over-burdened with responsibilities from both their formal employment and traditional responsibilities.

As women continue to dominate the processing sector of the industry, special attention must be paid to ensuring that conditions for decent employment are in place as well as to the specific needs of women as multitasking members of their communities: as mothers, wives and fishmongers, matriarchs and homemakers. Safeguards to protect their health, including through the promotion of child care facilities, labour saving technologies and social protection mechanisms can facilitate their continued contribution to the industry and open other opportunities in value added processing and other shore-based enterprises.

3.2 Complementarity, synergy and donor coordination

The PNG Development Cooperation Policy (2015) lays the foundation of a more strategic and coordinated partnership with a broader range of Development Partners (DP), including NGOs and the Private Sector, in order to achieve the localised SDGs. The highest level of coordination is the Development Partners High Level Forum (HLF). It meets every two years under the leadership of the Department of National Planning and Monitoring which is the national donor coordination agency and hosts the NAO Support Unit as well.

A monthly Development Partners Roundtable allows for regular exchange of information. Sectoral coordination fora exist but they only function to a varying degree. Transport is coordinated by the public-sector driven Transport Sector Monitoring and Implementation Committee (TSMIC). In the energy sector coordination is assured by the Department of Petroleum and Energy and PNG Power, but is limited. No such mechanism exists for rural development, however on the occasion of the recent first Pacific Agricultural Week organised in Vanuatu, the basis of a Rural Development Sector Working Group have been laid, which will certainly be catalysed by the current action.

Consultations with DP highlighted the following:

- **New Zealand Aid (NZAID)** is implementing a number of rural electrification projects across a number of provinces – including East Sepik. NZ has expressed desire to work closely with the EU in rolling out some energy components, by sharing its knowledge and contacts in the sector, successful approaches, costings, and implementation and management models. NZ is also in a good position to undertake detailed scoping and design of potential projects, with mechanisms and contractors already in-country. The EU and NZ have committed to support renewable energy at the regional Pacific level.
- **Japan International Cooperation Agency (JICA)** is involved in rehabilitating feeder roads, bridges, sea ports and airports, as well as in the energy sector. JICA currently works in the Morobe region (on one of the three existing electricity grids of PNG) and the provinces of West New Britain and East Sepik.
- **Australia (DFAT)** is involved in road construction, maintenance of national roads through the Transport Support Sector Program (TSSP), a 15-20-year commitment initiated in 2007. Amongst the six national priority roads the Sepik Highway shall benefit from maintenance and rehabilitation. Australia also supports a maritime safety project focusing on small crafts. Australia supports the agriculture sector through the Australia Centre for International Agriculture Research (ACIAR) research program in PNG. This program aims

at improvements in food supply, food access and rural incomes for rural communities. DFAT has also contemplated options in renewable energy.

- **International Fund for Agricultural Development (IFAD)** has recently approved a US\$ 50 million programme for the Highlands region. The “Market for village farmers” programme focuses on the fresh produce value chain and aims to improve the livelihoods of farming households in target provinces by transitioning subsistence farmers to market-oriented production and farming as a business. It contains a specific component on galip nut (*Canarium indicum*), a local edible nut that could represent a niche-market opportunity for PNG. IFAD is a contributor and partner to the PPAP implemented by the World Bank.
- **International Labour Organisation (ILO)** has a community-based enterprise development programme (C-BED) in PNG and in the Solomon Islands. ILO is providing support to activities of the PNG Small and Medium Enterprise Corporation (SME Corp) and is instrumental in the development of a National Employment Policy prioritising youth employment and gender inequality. ILO has extensive worldwide experience on SME development programmes: Know About Business (KAB), Start and Improve Your Own Business (SIYOB), Women's Entrepreneurship Development (ILO-WED) and Local Economic Development through Empowerment (LEED). It also has experience in supporting pro-poor Value Chain Development.
- **Food and Agriculture Organisation (FAO)**: In PNG, the FAO has been providing technical and policy advice to the agricultural sector by supporting the formulation of key agricultural plans and policies, such as the National Agriculture Development Plan. Most recently, FAO has provided technical support to the PNG Department of Agriculture and Livestock in drafting the PNG Food Security Policy Framework and the PNG E-agriculture Strategy. FAO has plans to facilitate the implementation of these policies through pilot programmes/interventions at the field level. In support of the Forestry Sector, FAO is implementing the EU funded "National Forestry Inventory" project and is supporting the development of the PNG Timber Legality Verification System building on PNG's Decision Support System supported by Australia and the National Timber Legality Standard supported by ITTO and TNC.
- **International Trade Centre (ITC)** is currently implementing in "Women in Trade" in PNG, focusing on developing local and international market access and opportunities for women engaged in the knitting of 'bilum bags'. ITC has strengths in market and export promotion.
- **United Nations Development Fund (UNDP)** is involved in biodiversity conservation, climate change and renewable energy. UNDP is the principal partner of the Government in relation to SDGs and Agenda 2030.
- **United Nation Capital Development Fund (UNCDF)**'s mandate is to unlock private and public resources, at domestic level, to reduce poverty and support local economic development. This is achieved through two main channels: financial inclusion and localised investments. Under 10 EDF UNCDF is implementing the second component of the Rural Economic Development 2 (RED 2) project focusing on financial inclusion in the Highlands region (7 rural provinces). UNCDF is implementing globally the Inclusive and Equitable Local Development (IELD) programme and based on experience acquired in PNG on women's economic empowerment.

- **UN Women/UNDP/UNCDF** has designed the Inclusive and Equitable Local Development (IELD) programme to promote women's entrepreneurship and labour force participation. The programme will build effective public private partnerships to improve women's access to services, markets and infrastructure.
- **UN International Children's Emergency Fund (UNICEF)** is interested in expanding our recent WaSH partnership to their other sector of engagement in PNG: community engagement and empowerment for entrepreneurship. With EU funding support UNICEF will address access to water in schools and health centre in one entire district in Morobe.
- **USAID** carried out a study to assess key legal, regulatory and institutional issues impacting the production, efficiency and opportunities in the agricultural sector.
- **European Investment Bank (EIB)** is interested in exploring blending opportunities with the EDF interventions. Specific areas of interest are in support to enhancing access to finance for the rural sector. The Centre for Excellence in Financial Inclusion (CEFI) is managing a Risk Sharing Facility (RSF) and the EIB explored potential complementary support and additionality to the existing RSF. EIB also explored potential support to the Institute of Banking and Business Management (IBBM). IBBM is a recognised provider of cost-effective training in administrative finance, banking, commerce, supervisory and management skills since 1965. Other sectors of interest for the EIB are: renewable energy, value chain upgrading and infrastructure. EIB has signed in 2016 a EUR 50 million loan with the Government of PNG for rural bridges. Areas of interest are similar to those of the Action and it is recommended that the implementing partners and EU Delegation continue to explore the inclusion of blending operations in complementarity to this Action. These efforts will be pursued with investment resources currently available in the Regional Indicative programme (through the national investment window).
- **World Bank Group (WBG)** focuses on energy, rural roads, agriculture and health. WBG is rehabilitating rural roads in the coastal provinces of Central, Milne Bay and Madang through the "Roads Maintenance and Rehabilitation Project" (RMRP). In agriculture, WBG is implementing the 10th EDF "Productive Partnerships in Agriculture Programme" (PPAP), aiming at improving the livelihoods of smallholder cocoa and coffee producers. The WBG has announced in April 2018 its intention to continue to support cocoa and coffee, which will complement our project. WBG is currently implementing a US\$ 21.9 million "SME Access to Finance Project" in PNG with Bank of South Pacific (BSP) to facilitate access to sustainable credit and to contribute to incremental growth of mainly urban MSME employment and income. WBG also has a Multi-Donor Trust Fund which is leveraging development partners' and Bank's country programmes, for eg. on youth inclusion and infrastructure. WBG has an energy management experience under the PNG Energy Sector Development project and the National Electrification Rollout Plan.
- **Asian Development Bank (ADB)** focuses on transport, energy, health, water and other urban infrastructure and services and public sector management. They are active in road infrastructure in the Highlands with EU contribution under the 10th EDF. ADB is also addressing the improvement of electricity transmission lines in Bougainville and implementing the "Smallholder Support Service Pilot Project" to increase access of smallholder households to improved agricultural support services. It has a programme in financial inclusion implemented with the Bank of PNG.

3.3 Cross-cutting issues

Gender and Youth¹⁰

The Action will include enhancing opportunities for women and youth in entrepreneurship, job creation, training, improved access to livelihoods-related information services through improved digital solution delivery and improved rural-urban linkages. This is in line with the specific country situation and fully aligned with Agenda 2030, the new European Consensus on Development and the four pivotal areas of the EU Gender Action Plan II 2016-2020¹¹.

Deep-rooted discriminatory norms in PNG mean that women face a number of constraints that need to be overcome in order for this project to succeed. Although women play an important role in agriculture, including in the cocoa, vanilla and fishery value chains, their work is often under-valued and unpaid. Despite non-discriminatory legislation, men make important decisions around land use and land management. Women's lack of access to collateral means they cannot access financial loans and even though micro-credit initiatives have been established, these have not been successful for female entrepreneurs as they normally use their loans to meet household expenses. Women are less educated and less literate than men and this limits their ability to engage at higher levels of value chains, upgrade their skills, or access ICT for marketing. Social norms dictate that men make important decisions at all levels, and even though women are beginning to take on more leadership roles, the notion of the 'big man leadership' means that leaders are generally expected to be men. Women's multiple roles mean they have limited time to engage in additional activities. And finally, PNG has extremely high levels of violence against women, which have been connected to household level conflict over negotiation for resources.

The project will attempt to break down these constraints through an explicit focus on women's empowerment as well as integration of gender equality across the Action. More specifically the project will use a multi-pronged approach including but not limited to: 1) creation of an enabling environment for gender equality; 2) mainstreaming of gender equality throughout the Action; 3) designing and implementing women-targeted interventions; and 4) continuous monitoring and feedback loop to allow improvement and adjustment as needed.

The creation of an enabling environment will entail sensitizing project staff, key counterparts and project beneficiaries on the benefits of gender equality. Key gender champions will also be identified among clan, community and religious leaders and community youth who can support the dissemination of gender equality and equity messages at different levels and venues. The project will proactively seek for opportunities to change perceptions and behaviours that discriminate against women including in relation to access to resources (e.g. land, inputs) and opportunities (e.g. education, trainings), intra-household division of labour and better distribution of care work. To ensure sensitivity to existing social norms, the project will seek to engage husbands and wives together in value chain activities, while also supporting the formation of women's groups to promote the active participation of women.

Through gender mainstreaming, the project will ensure that all activities include both women and men as beneficiaries, setting minimum quotas for women as needed, and monitoring progress through gender-sensitive indicators. This will also entail ensuring gender balance in project staffing at different levels.

¹⁰ Also two distinct groupings, women and youth are addressed under the same heading, because both groups will be the object of added attention in the development of targeted activities. Youth includes young women.

¹¹ Gender Equality and Women's Empowerment: Transforming the Lives of Girls and Women through EU External Relations 2016-2020, Joint Staff Working Document 21/09/2015

Finally, based on the identification of key leverage points and potential for gender transformative action, the project will design specific activities that target women and women's groups and promote their socio-economic empowerment. Examples include: improvement of market facilities and road infrastructure; provision of gender-responsive labour saving technologies (e.g. solar powered pumps, solar dryer, grinders, improved cooking stoves, etc); financial literacy and capacity development on selected agricultural activities along the selected value chains; awareness raising and access to ICT for improved access to information and markets; establishment of a small grant facility for women's income-generating activities and entrepreneurship; women's group formation, leadership training and empowerment.

At the onset of project implementation a gender and vulnerability analyses will be conducted to detect the existing gender gaps and constraints and identify leverage points for change in the specific context of the project locations and interventions. The information needed and data relevant to gender equality and women's empowerment will be also identified through the gender analysis and will contribute to establishing a gender disaggregated baseline. Based on the analysis, the gender strategy and action plan for the project will be formulated.

The project will collect and maintain sex and age disaggregated and gender-sensitive data for all project activities and promote its systematic use. The data will be included in quarterly and annual reports. Based on yearly gender analysis, further activities might be designed to support women farmers' empowerment and entrepreneurship and increase the number of women beneficiaries. The Gender Specialist in the project team will be actively involved in performance monitoring activities and work closely with the Monitoring and Evaluation (M&E) Specialist to ensure the inclusion of gender-sensitive indicators in activity plans.

The Project will showcase successes of women farmers and entrepreneurs through case studies. Women's voices will be captured in documentary shootings so to inspire other women. The Project will also showcase stories of changed gender relations including for instance men (fathers, brothers, husbands, religious/community leaders, government, market intermediaries etc.) who support women in their process of empowerment.

Environment and Climate Change

PNG is well-endowed with bio-diversity and natural resources. It has 15% of the world's flora and fauna, 15% of the world's tuna stocks, some of the world's richest marine biodiversity and is home to some of the world's rarest and endangered flora and fauna. There are concerns of unsustainable exploitation of the natural resources, but PNG has been an active party to the Paris Agreement. Deforestation and land degradation, due to large-scale logging and unsustainable agriculture practices through a proliferation of palm oil plantations, are found to contribute to more than 90% of greenhouse gas emissions in PNG. It is noticeably critical in the Sandaun province.

The Action intends to support the Government in its endeavours to foster sustainable development by discouraging unsustainable agriculture and land use by providing alternative economically attractive and sustainable options (cocoa, vanilla, fisheries). With the aim to promote and enhance sinks of Green House Gases, the Action will specifically avoid the conversion of land use from primary or secondary forest for the production of cocoa or vanilla and, more generally, will help mitigate agro-forestry emissions, as well as improve their measurement.

The Action will contribute to climate change adaptation also through the promotion of climate-smart agricultural practices attuned to specific regional and local climate impacts, providing rural population with enhanced capacity to face slow-onset and extreme climate-related events (e.g. linked to El Niño/La Niña): education, training and public awareness on basic climate adaptation concepts adoption of climate-resilient varieties, diversification and new agricultural systems through an easier access to information and cultivars, promotion of climate proofing of essential transport and renewable energy infrastructures and maintaining the focus on the integration of climate change adaptation into national policy, plans and programmes. The Action will benefit from the experience gained in the food security sector by NARI who is implementing an EU-funded project "Strengthening food production capacity and the resilience to drought of vulnerable communities".

The enhanced availability of renewable energy will not only cut the country's emissions but also allow for decentralised electricity sources without recourse to fuel supplies, cutting down processing costs in the mid to long term and, in general, leading to a better processing of cocoa, vanilla and other local food staples such as sago, an important food item that can be stored for long period if properly processed, dried and packaged. Energy efficiency will also be promoted by the Action, for example through the use of higher energy efficiency stoves.

Digital services

An increasing number of Papuans are embracing the digital age, particularly the younger generation, and mobile phones in particular are becoming a more important source of social interaction. The major telecom/mobile operators in PNG include Digicel, Bmobile (Vodafone), and Telikom PNG. Since 2017 most mobile providers are offering 4G LTE services. While prices have dropped as result they are still considered high by international standards.

The connectivity issue and related costs are important for a conducive agriculture value chain development and with the recent agreement to connect to the Australian telecoms grid, significant increases in the speed and quality of connectivity are expected as well as cost reductions for digital consumers by 2019.

PNG's mobile market has enormous growth potential. However, this growth could be inhibited by the latent difficulties within the current market, including the high cost of deploying and maintaining digital infrastructure, the relatively low income base among potential subscribers, and the geographical dispersal of the population.

Through improved digital services and information, the agriculture and enterprise environment will be enhanced eg. with the availability of early warning systems (for weather or adverse climate events) to foster better preparedness in case of occurrence of severe natural disasters. Digital options are included in the descriptions of scope of actions for each of the value chains identified. Coverage of digital networks could also profit from renewable electricity generation supported by the Action.

Food security and Nutrition

PNG is facing a malnutrition crisis according to a June 2017 report by Save the Children¹². One in two children in PNG are stunted (48.2% in 2016¹³) a rate that is more than double the global average (23.8% in 2016). Over half a million children in PNG will never reach their

¹² *Short Changed: the Human and Economic Cost of Child Undernutrition in Papua New Guinea* – Save the Children June 2017.

¹³ According to the PNG Household Income and Expenditure Survey 20 HIES 2009-2010

full growth potential at a cost to PNG economy of up to 8.45% of GDP (\$USD 1.5 billion) per annum. Whilst the causes are encompassing more than simply nutrition, inadequate intake of healthy food is an immediate cause and access to good quality animal protein is limited and critical.

The 2015-2016 El Niño events highlighted the vulnerability of PNG in terms of food security. The World Food Programme (WFP) carried out emergency operations covering 268,000 people. As limited information proved a constraint to a coordinated and appropriate crisis response, WFP initiated a **mobile Vulnerability Analysis and Mapping (mVAM)** on a rolling basis, covering around 3,700 people in all provinces.

The Action will positively affect food and nutrition security through supporting sustainable access to a valuable source of sustainable protein from fisheries as well as increased income from cocoa, vanilla and fishery to ensure and enriched and diversified food basket for farm families with an emphasis on women. This is planned through the proactive engagement of women and youth, including in VC activities but also in enhancing food gardens, local markets and trade, as well as promoting the use of labour saving devices for reduced drudgery, particularly for women and youth who are traditionally tasked to gather fire wood. Where possible, intervention for improved nutrition will link to water, sanitation and hygiene (WaSH) initiatives such as those implemented through a EUR 21.3 million project with UNICEF (targeting schools and health centres in selected rural areas) to achieve further synergies. The EU has already committed to support the implementation of the national WaSH policy 2015-2030.

The Action will also help to address the severe child malnutrition. Stunting is not only the result of poor access to food; it is a combined result of inadequate intake of food and diseases. Poor water, sanitation and hygiene (WaSH) conditions exacerbate the problem and linkages with current and future WaSH programmes will be explored, eg. in partnership with UNICEF.

4 DESCRIPTION OF THE ACTION

4.1 Objectives/results

The **Overall Objective** of the Action is to increase sustainable and inclusive economic development of rural areas.

The **Specific Objectives** are:

SO1: Increased economic return from three selected value chains

With the following results:

Output 1.1: Increased sustainable production and inclusiveness of the Cocoa value chain

Output 1.2: Increased sustainable production and inclusiveness of the Vanilla value chain

Output 1.3: Increased sustainable production and inclusiveness of the Fishery value chain (coastal, riverine and aquaculture)

SO2: Strengthened, climate resilient and more efficient value chain enablers.

With the following results:

Output 2.1: Conducive business, trade, policy and regulatory environment for sustainable rural agripreneurs and MSMEs established

Output 2.2: Value chain support services strengthened and resilient to climate change impacts

Output 2.3: Increased production of, and access to renewable energy systems

Output 2.4: Improved and climate-proof rural transport infrastructure

The geographical scope of the action will initially be focused on the East Sepik and Sandaun provinces. After the mid-term review of the programme, cocoa value chain development activities will be considered for expansion to the neighbouring provinces of Morobe and Madang for those activities that require heavier localised investment.

4.2 This programme is relevant for the Agenda 2030. It contributes primarily to the progressive achievement of SDG Goals 1 (ending poverty), 2 (food security, improved nutrition and sustainable agriculture), 4 (inclusive and equitable quality education), 5 (gender equality and empowerment), 7 (affordable, reliable, sustainable energy), 8 (inclusive and sustainable economic growth), 9 (resilient infrastructure), 12 (sustainable consumption and production), 13 (climate change), 15 (sustainable use of terrestrial ecosystems, forest) and 17 (Global Partnership for Sustainable Development). This does not imply a commitment by the country benefiting from this programme. Main activities

In parallel with the final stages of adoption of the Decision close engagement and EU support will continue with the DNPM, DAL, NFA and other institutional partners through the Value Chain for Development (VC4D) initiative as well as the TAF (Technical Assistance Facility) under ElectriFI to collect further data and information relevant to the Action.

In view of the recognised scarcity of data, and especially related to rural areas, a comprehensive baseline survey will be undertaken during the Inception phase in Year 1 to update the logframe and refine targets and indicators of the Action. Women and youth will be prioritised as beneficiaries with set targets and specific resources will be set aside to ensure their fullest engagement and benefit from Action activities. The updated and detailed logframe will be presented to the Project Steering Committee co-chaired by NAO and EU for review and approval.

SO1: Increased economic return from three selected value chains

Output 1.1: Increased sustainable production and inclusiveness of the Cocoa value chain

Activities under this component will identify and alleviate the limitations to the expression of the full and inclusive potential of the Cocoa Value chain in the region of intervention. Developing new cocoa plantation in areas currently under primary/secondary forest will not be considered for environmental and climate change reasons. Hence the focus will be on the rehabilitation and improvement of existing cocoa plantations only, and notably with a view to adapt agricultural methods to climate change impacts in the region.

Activities under the Action will promote high quality production and increase of revenue through the adoption of improved and certified sustainable practices along the value chain. Farm families and other value chain stakeholders will be the main target of support. In line with the findings of the VC4D cocoa value chain analysis, specific attention will be paid to the 'subsistence-oriented wet beans producers and rather than a 'silo' promotion of cash crop cultivation, an approach favouring integrated production of food and commercial agriculture by farmers will be favoured as a guarantee of a healthy and sustainable basis for rural development in PNG.

It is foreseen that availability of Cocoa Pod Borer tolerant planting material will be an essential component of the action, together with improved management of cocoa plots to make them impervious to drought or other climate-related risks. In addition the Action will promote and develop improved drying and storage of beans to ensure the enhanced quality and eliminate smoke tainting. The provision of improved solar driers to reduce smoke taint appears to be showing very promising results under the ongoing WBG-EU-IFAD project (PPAP). This may be linked/contribute to the increased availability and utilisation of renewable energy through the second component of this project.

The option of enhancing local fermentries/drying technology and of improving market linkages between producers, traders and exporters will be explored. This can represent as well an option to develop a better access to finance as well as improved agribusiness opportunities for local agripreneurs and MSMEs. The Action will also promote increased transparency in terms of market pricing and transactions, facilitated by digital services, including through enhanced knowledge of market demand and quality requirements to optimise returns and market access for a range of VC stakeholders (smallholder farm families, local agripreneurs and MSMEs, traders and exporters. Activities are also foreseen to improve local value addition and facilitate the development of certification of enhanced cocoa quality eg. Fairtrade, Organic and Geographic Indication and Territorial Development.

Gender issues will be considered as well to ensure a fair participation of women in the benefit of increased cocoa production whilst preventing an increase of the burden of women compare to men.

The Action will strengthen industry and market coordination and capacity at Provincial and National level with the Cocoa Board and reinforce links between farm families and local agribusiness for improved access to market, technologies and services (eg. through digital services and solutions).

Activities under this component are linked to component two on VC support services development including Provincial level investments and National issues on access to finance, improved transport, and increased access to renewable energy, ICT and national policy and strategy development and dialogue.

Activities will be further detailed in the future **PAGoDA (Indirect Management – Delegation Agreement)** with **FAO** that will be developed in parallel to the adoption of this Action.

Output 1.2: Increased sustainable production and inclusiveness of the Vanilla value chain

The approach for this value chain will follow and complement the support provided for the cocoa VC. It is likely that some of the same groups of farm families and VC stakeholders are involved in both VCs.

A VC4D analysis of the vanilla VC is foreseen for the second part of 2018. The results of this analysis will further inform the development of the detailed activities by FAO.

Output 1.3: Increased sustainable production and inclusiveness of the Fishery value chain (coastal, riverine and aquaculture)

Whilst the overall approach and activities for this value chain will be similar to the one adopted for the other ones, the fisheries VC itself is more complex since the production is a highly perishable product.

Support for fisheries VC development will aim mainly at sustainably increasing productivity and profitability. Fish consumption will be promoted as a local sustainable source of protein. For inland and riverine support will include a larger component for improved household food security and nutrition.

Sustainable community based management of the existing fisheries will be a driving objective. Options identified for the development of the VC in coastal areas includes the use of improved traditional fishing techniques and equipment as well as use of Inshore Fish Aggregating Devices (IFADs), a proven way to increase food security, income generation and alleviate poverty. IFADs appear to also reduce the pressure on benthic fish stocks.

Development of the Fisheries VC will include investments in improved fishing techniques, better handling, processing, storage, marketing and trade as well as essential transport infrastructure such as jetties, landing sites, roads and wharves. Similarly to the other selected VC, activities will include increased transparency in terms of market pricing and transactions including through enhanced knowledge of market demand and quality requirements to optimise returns and market access for a range of VC stakeholders (smallholder farm families, local agripreneurs and MSMEs, traders and exporters. Activities are also foreseen to improve local value addition and facilitate the development of certification of enhanced fish quality e.g. Fairtrade, Organic and Geographic Indication and Territorial Development. The market opportunities that the border with Indonesia represents will be considered as well for fishermen to maximise this export/trade potential. The protection of nursery areas in coastal areas, including mangrove protection and restoration and coral reef protection, may also gain from best practice exchange with other countries in the region, e.g. Indonesia and the other countries of the Coral Triangle Initiative (PNG is a member of the latter)¹⁴.

Specifically for Fisheries, activities will include improved production, direct marketing chains, cold chain, improved traditional curing of fisheries products (drying, smoking, packaging). Activities related to this component will constitute a possible field of experimentation for research and innovation activities. Sustainable management of fisheries and aquaculture will be a driving objective of the activities.

The Action will support options for enhanced fish rearing and aquaculture (in ponds or in cages) as well as enhanced availability of fish breeding stocks and fingerlings of good food value species. Specific efforts will be dedicated to the development of improved access to sustainable feed sources for fish production. The fish-poultry-feed production integrated farming approach developed by NARI will be explored and capacity building activities will be carried out.

All activities under this component will be carried out in close collaboration with the National Fisheries Authorities at Provincial level mainly, including through joint planning and possible co-financing.

SO2: Strengthened, climate resilient and more efficient value chain enablers.

Output 2.1: Conducive business, trade, policy and regulatory environment for sustainable rural agripreneurs and MSMEs established

The Action will support the creation and enhancement of a climate, gender and age sensitive enabling environment (comprised of legislation, regulations and quality public services adapted to local climate projections) for MSME activity and improving the ease and cost of

¹⁴ <http://www.coraltriangleinitiative.org/>

doing business in PNG aiming amongst others at maximising the opportunities offered to PNG through the Economic Partnership Agreement (EPA) with the EU. This will link with a variety of ongoing partners' initiative e.g. ADB and WBG/IFC but will focus on agriculture VC stakeholder needs e.g. licensing, registration, taxation, quality service provision and improved access to national and international markets.

Support is also envisaged for enhanced and consultative national policy and strategy dialogue and development. Hence provision of specialised assistance is envisaged to contribute to (but not limited to): a new and updated National Agriculture Development Plan, the rollout of the new e-agriculture strategy, National Food Security policy, trade and investment in agricultural VC, extension service provision, including through digitalisation of training materials, quarantine regulations, fisheries management, labour related legislation, including when related to women and youth, MSME development, financial inclusion and access to capital, sustainable utilisation of PNG natural resources, PNG's Climate Change Management Act and implementation of PNG's Nationally Determined Contribution under the Paris Agreement. This will include support for the development of relevant enabling legislation.

Potential synergies with other EU instruments and initiatives and blending platforms such as AgriFI, ElectriFI which may be complementary for the creation of an enabling environment for VC stakeholders will be proactively explored as well as collaboration with other Development Partners. Similarly other development partners' initiative that could provide positive synergies will be considered through the consultative processes of Development Partners' regular meetings and Project Steering Committees.

Output 2.2: Value chain support services strengthened and resilient to climate change impacts

(i) Financial inclusion, mainly access to finance and financial literacy

Activities are planned to improve VC stakeholders understanding of basic financing and enterprise development. This will include both at household level on calculating production costs and labour requirements and at agripreneurs and MSMEs level on profitability. Women and youth will be specifically targeted and funds set aside, including for women trainers, to ensure their participation and benefit from dedicated resources for sustainable VC development.

The Action will support awareness raising and engagement with local Financial Institutions (FIs) to encourage the provision of an expanded range of inclusive saving, loan, banking, payment services and facilities in the target area. This may include through intermediary VC stakeholders eg. exporters/buyers/traders. Activities may also include the development of a Risk Sharing Facility (RSF) dedicated to 'agripreneurs' and rural MSMEs, and integrating climate change-related risks for PNG's economy in general and specific relevant sectors in particular. Options for larger risk sharing could include collaboration with the PNG Investment Window Facility.

(ii) Enabling the use of digital solutions for improved service provision in the rural areas

A comprehensive approach will ensure that rural population is benefiting from a well-developed range of support services through digital solutions. Activities will therefore include the expansion of the coverage of telecommunications, improved availability, speed and affordability of telecom and banking services and facilities. Access to knowledge products related to financial literacy, livelihoods, value addition and market information, better

household nutrition and education and other related solutions will be made available through enhanced digital solution provision. Support is also envisaged to engage information and communication technology for enhancing access by VC stakeholders to improved production practices and knowledge, early warning systems for weather and disaster, local and international market and trade information as well as competitive enterprise development. Links to key databases and information systems related to enabling services, including access to high-resolution Geographic Information System (GIS) based maps will be developed. This will enable better visualisation, analysis and interpretation of key data and improved understanding of climate projections per region and development patterns and trends for national strategy and policy makers.

At national level the Action will support and advise the NICTA in modernising and upgrading the country standards and infrastructure for enhancing the roll out of the e-agriculture strategy. This may include public private partnerships with telco and banking service providers. Options for collaboration and leverage through blended financing from EU (e.g. Pacific Investment and PNG Investment Window Facilities) and International Financial Institutions will be actively explored.

(iii) Increased capacity for business and entrepreneurship

To address specifically entrepreneurship and the necessary business acumen, the Action will support capacity development activities related to: (i) development and delivery of tailor made trainings for enterprise development (for both men and women), small (agricultural) business creation, profitability analysis, innovation, value-addition and management, preparation of business plans and bankable proposals for agripreneurs and MSMEs (ii) Knowledge Centres using a one-stop shop approach to access to information/finance on enterprise set-up and development and may include (iii) the establishment of business incubators.

Output 2.3: Increased production of, and access to renewable energy systems

The Action will support the provision of renewable energy for household and enterprise level activities related to VC development. Solar and hydro energy are the most likely candidates for support (but not excluding biomass or coconut oil if they do not imply indirect land-use change). Major applications identified include the use of solar dryers and renewable energy sources for value addition including the drying of cocoa, the controlled drying of vanilla to optimise quality and the drying, preservation and storage of fish and fish products. Establishment of a sustainable cold chain and controlled/modified atmosphere storage will be examined with an emphasis on improved efficiency to enhance market access. The action will also support the development of capacity and applicable technologies for renewable energy systems, linked to enhanced access to and quality of digital knowledge and services primarily at the Sepik Rural Technology College. In a later stage other relevant training institution may be considered.

Specific support is planned for women and youth to apply renewable energy systems in the reduction of drudgery e.g. solar powered pumps for enhanced water access and suitable low-cost technologies for improving efficiency of household, market and enterprise level energy requirements (including for enhanced uptake of digital tools and establishment of new service providers e.g. for the village level charging of mobile phones and radio and GPS, powering the Resource Centres, battery banks). Some resources will be allocated in support of renewable energy systems in public facilities such as schools and health centres to promote awareness of sustainable and renewable energy.

An expert mission from the Technical Assistance Facility (TAF) of ElectriFI is foreseen for the second part of 2018. The results of this analysis will further inform the development of the detailed activities by FAO.

Output 2.4: Improved and climate-proof transport infrastructure

Linked with the VC activities planned in the first component, the Action will support the rehabilitation, climate-proofing (e.g. against landslides or floods), maintenance and upgrading of existing so called 'ring roads', branching from National Highways under the responsibility of the State. Support will focus on feeder roads, leading to these 'ring roads' will be supported under the District Service Improvement Programme (DSIP). Selection of the feeder roads will be done according to those prioritised for improving market access and accessibility for the selected value chains.

As per the most recent guidance of the Department of Works to guarantee sustainability provision is foreseen to engage in community-based maintenance rather than focusing on one-off action with specialised companies. Communities will be trained to carry-out routine maintenance, with high involvement of women and youth.

Support from the Action is also foreseen for jetties, landing sites and wharves. The feasibility for air cargo transport facilities can also be considered. Selection of these activities/investment will be done according to those prioritised for improving market access and trade for the selected value chains.

Options for collaboration and leverage through blended financing from EU (eg. Pacific Investment and PNG Investment Window Facilities) and International Financial Institutions will be actively explored.

4.3 Intervention logic

The intervention logic is based on a holistic approach to rural development in order to maximise the impact of the Action in the area of action, focused initially on Sepik Provinces (Sandaun and East Sepik). After the mid-term review of the action, value chain development activities will be considered for expansion to neighbouring Provinces of the MOMASE region.

The Overall Objective of the Action is to increase sustainable and inclusive economic development of rural areas. This will be achieved through a combination of two integrated outcomes: (1) increasing the economic returns and opportunities from three selected value chains (cocoa, vanilla, fishery) while in parallel (2) strengthening and improving the efficiency of value chain enablers including the business environment and supporting sustainable, climate proof transport and energy infrastructure development.

Under outcome 1, major outputs will include increased volume, value and improved quality of cocoa, vanilla, fisheries products, more value addition and an increased number of people and enterprises engaging in and benefiting from improved value chain development. Benefits planned include both income increases and enhanced food security and nutrition at household level.

Under outcome 2, major outputs planned include an increased number of people employed and agripreneurs and MSMEs engaged in the selected Value Chains benefiting from reduced transaction costs and time, improved access to finance, increased availability and usage of digital tools and services. Increased availability of renewable energy, improved energy

efficiency and access to rehabilitated roads, jetties, landing sites, wharves and lower transport costs are also planned.

Target beneficiaries will include a range of Value chain stakeholders including farm families, their organisations, local agripreneurs and MSMEs. Women and youth will be prioritised as beneficiaries with set targets and specific resources to be set aside to ensure their fullest engagement and benefit from Action activities.

Planning for sustainability and ongoing and future climate change impacts was a key factor in the intervention logic. The target beneficiaries will receive a range of direct and indirect benefits which will motivate them to continue their engagement in the three value chains after the completion of the Action and learn to integrate climate projections and adaptation in their operations. Direct benefits include increased income for producers, traders, agripreneurs and local MSMEs and enhanced adaptive capacity to climate change, as well as food security and nutrition. Indirect benefits include an improved policy, regulatory, business and digital environment. Based on lessons learned from previous EU funded programmes, substantive community engagement in Action planning and implementation is foreseen including throughout the 12 months inception phase. To ensure effective management, coordination and ensure timely delivery of such a large and integrated Action, a single and recognised technical lead agency, such as FAO, is required.

Complementary blending actions will be considered under the national investment window of the Pacific Regional Indicative Programme.

The Government of PNG will have the lead role in oversight for effective project implementation together with the EU Delegation. Coordination with the provincial, district and ward level counterparts of Department of Agriculture and Livestock and other VC engaged Ministries, parastatals (e.g. Cocoa Board) as well as NSA and the private sector will be critically important for impact. To this effect cross-ministerial multi-sectoral Project Steering Committee will be established to guide implementation. The project will also engage participation and linkage with the future Agriculture and Fisheries Development Partner's Group whose creation is currently being discussed in PNG.

5 IMPLEMENTATION

5.1 Financing agreement

In order to implement this action, it is foreseen to conclude a financing agreement with the partner country, referred to in Article 17 of Annex IV to the ACP-EU Partnership Agreement.

5.2 Indicative implementation period

The indicative operational implementation period of this action, during which the activities described in section 4.2 will be carried out and the corresponding contracts and agreements implemented, is 60 months from the date of entry into force of the financing agreement.

Extensions of the implementation period may be agreed by the Commission's authorising officer responsible by amending this decision and the relevant contracts and agreements; such amendments to this decision constitute non-substantial amendment in the sense of Article 9(4) of Regulation (EU) No 322/2015.

5.3 Implementation of the budget support component

N/A

5.4 Implementation modalities

Both in indirect and direct management, the Commission will ensure that the EU appropriate rules and procedures for providing financing to third parties are respected, including review procedures, where appropriate, and compliance of the action with EU restrictive measures affecting the respective countries of operation¹⁵.

5.4.1.1 Procurement (direct management)

Subject in generic terms, if possible	Type (works, supplies, services)	Indicative number of contracts	Indicative trimester of launch of the procedure
Mid-term review	Services	1	10 th
Final Evaluation	Services	1	19 th
Audit	Services	1	20 th

5.4.1.2 Indirect management with an international organisation

A part of this action may be implemented in indirect management with the Food and Agriculture Organisation (FAO). This implementation entails all activities under outcome 1 and 2 as well as the overall coordination and management for all components of the Action. This implementation is justified because FAO is the duly mandated international organisation, with global experience and expertise in the development of inclusive and efficient agricultural and food systems that encompasses all the domains of the Action. Further, FAO has already established a strong relationship based on trust and confidence with the Government of PNG and more specifically the Department of Agriculture and Livestock (DAL).

The entrusted entity would carry out the following budget-implementation tasks: Provide coordination of the project, enter into partnership through contractual arrangement (grants, service, work, supply) with both international and local partners for the implementation of the respective components. This could include and may not be limited to, due to the inclusive approach that will be developed: UN family entities, and local partners, local banks and micro-banks, local telecommunication companies, local NGOs and CBOs and faith-based organisations, private companies, including communication specialised ones.

The selection of the international and local partners will be finalised during the inception phase of the Action.

5.4.1.3 Changes from indirect to direct management mode due to exceptional circumstances

The acceptance by the entrusted entity identified above can be considered as certain and there is no viable second option consisting in direct management neither via calls for proposals, grant: neither direct award nor procurement. If negotiations with the above-mentioned entity fail, the action has to be redesigned.

5.5 Scope of geographical eligibility for procurement and grants

The geographical eligibility in terms of place of establishment for participating in procurement and grant award procedures and in terms of origin of supplies purchased as

¹⁵ https://eeas.europa.eu/sites/eeas/files/restrictive_measures-2017-04-26-clean.pdf

established in the basic act and set out in the relevant contractual documents shall apply, subject to the following provisions.

The Commission's authorising officer responsible may extend the geographical eligibility in accordance with Article 22(1)(b) of Annex IV to the ACP-EU Partnership Agreement on the basis of urgency or of unavailability of products and services in the markets of the countries concerned, or in other duly substantiated cases where the eligibility rules would make the realisation of this action impossible or exceedingly difficult.

5.6 Indicative budget

	EU contribution (amount in EUR million)	Indicative third party contribution (amount in EUR million)
5.4.1.2. – Indirect management with Food and Agricultural Organisation (FAO)	81.3	0.3
5.9 – Evaluation	0.5	N.A.
5.10 - Audit	0.2	N/A
Contingencies ¹⁶	3	N/A
Totals	85	0.3

5.7 Organisational set-up and responsibilities

A programme Steering Committee (PSC) shall be set up to oversee and validate the overall direction and policy for the implementation of the STREIT PNG programme. It will be made up for example of representatives of the beneficiary institutions/entities concerned (Department of Agriculture and Livestock (DAL), Cocoa Board, Spices Board, National Fisheries Authority (NFA), DCI/NICTA, National Authorising Officer (NAO) in the Ministry of National Planning and Monitoring, Provincial Authorities, the EU Delegation and FAO¹⁷.

The NAO and the EU Delegation will jointly co-chair the PSC.

The FAO will be responsible for the PSC secretariat.

Other participants, including relevant government institutions, development partners, value chain stakeholders, civil society, beneficiaries and private sector involved in the sector(s) may be invited as well on observer status depending on the specific issues arising on the agenda.

The PSC will meet twice a year. Ad hoc meetings can be called if necessary. The PSC will be responsible for reviewing overall progress and achievements as measured against planned outcomes and outputs as well as considering priorities and general principles for the Action. It will specifically advise the programme management team on lessons and opportunities for

¹⁶ Consider that contracts where no financing agreement is concluded, contingencies have to be covered by individual and legal commitments by 31 December of N+1.

¹⁷ The composition and terms of reference of the PSC will be finalised during the inception.

replication of successes in other areas of the country; leveraging strategic and/or financing opportunities, if any; ascertaining the results and impact of the Action.

For the overall implementation of the Action, FAO will set-up a Programme Implementation Management Unit (PIMU). This unit will be established with the overall responsibility of coordinating, managing and implementing the projects activities as described in this document and in the future PAGoDA (Indirect Management – Delegation Agreement) that will be signed at the earliest after signature of the respective Financing Agreement.

The FAO PIMU, with the responsibility of full and final delivery of the Action objectives and results, will establish offices in the region of implementation.

Further the FAO PIMU and its regional offices may be located within the premises of a provincial agriculture authority or a relevant national institution so as to promote and foster closer collaboration and more effective implementation.

The FAO PIMU will organise at least quarterly meetings at regional level to quickly address possible bottlenecks and ensure a smooth implementation of the support.

Each beneficiary institution will nominate a focal point to attend those meetings, where the NAO and the EU Delegation will attend as observers.

5.8 Performance monitoring and reporting

The day-to-day technical and financial monitoring of the implementation of this action will be a continuous process and part of the implementing partner's responsibilities. To this aim, the implementing partner shall establish a permanent internal, technical and financial monitoring system for the action and elaborate regular progress reports (not less than annual) and final reports. Every report shall provide an accurate account of implementation of the action, difficulties encountered, changes introduced, as well as the degree of achievement of its results (outputs and direct outcomes) as measured by corresponding indicators, using as reference the logframe matrix. The report shall also include gender-specific analysis and report on the implementation of the project gender action plan and suggest corrective/additional measures as relevant. The report shall be laid out in such a way as to allow monitoring of the means envisaged and employed and of the budget details for the action. The final report, narrative and financial, will cover the entire period of the action implementation.

The Commission may undertake additional project monitoring visits both through its own staff and through independent consultants recruited directly by the Commission for independent monitoring reviews (or recruited by the responsible agent contracted by the Commission for implementing such reviews).

Access to statistics and data in general is problematic in PNG. Only a very limited range of statistics is available and their reliability is often questioned when cross checking references. PNG is scoring 38 out of 100 in the World Bank's appraisal of statistical capacities (last score available in 2013). There are even questions about assessing accurately the total population. The Government is fully aware about the related limitations it poses on its own planning and budgeting process. As a result the Government has launched in June 2018 the first ever *PNG Strategy for the Development of Statistics 2018-2027*.

In this framework, the current logframe and related indicators have been developed on the occasion of several workshops, with the objective to reflect the future monitoring of activities, results and objectives of the Action. As availability of data is virtually non-existent, the

setting of baselines and targets is extremely difficult prior to the formal launch of the project. It should not however prevent the selection of specific indicators, some of them relevant SDG indicators for which the country is likely to develop a monitoring system. It is therefore foreseen that during the inception phase of the project, the missing data will be collected through baseline survey(s) organised by specialised experts from the implementing partner and or collaboration form various stakeholders. The formal finalisation of the logframe will then take place on the occasion of a validation workshop where all stakeholders will be invited to participate. Mid-term and end-line surveys will be organised as well to contribute to the monitoring and evaluation of the Action.

On the national side, preparation is starting, with support of UNFPA, for the next population census, foreseen to take place in 2020 at an estimated cost of over USD 100 million. Likewise a new Household Income and Expenditure Survey may take place in 2019. These surveys will inform the current logframe that may be adapted in return.

5.9 Evaluation

Having regard to the importance and nature of the action, a mid-term and final evaluation will be carried out for this action or its components via independent consultants contracted by the Commission.

An ex-post evaluation will be carried out for this action or its components via independent consultants contracted by the Commission.

In view of the novel and integrated approach of the Action, a mid-term evaluation will be carried out for learning purposes, in particular with respect to considering its possible extension to adjoining parts of the MOMASE region with current or complementary funding, including from other development partners.

The final evaluation will be carried out for accountability and learning purposes at various levels, taking into account in particular the fact that a large amount of support is dedicated to a targeted area and thus that significant impact is expected at the overall objective level.

The ex-post evaluation will be carried out in order to further assess the impact of the Action. Since the most significant value chain supported is cocoa, a tree crop that starts bearing fruits only 5 years after its planting, the duration of the project will not allow for a full assessment of the impact of the project on this specific value chain. Further, it is not possible to assess the full impact of the project on stunting, since the international indicator is: *Prevalence of stunting (height for age <-2 standard deviation from the median of the World health Organisation child growth standards) among children under 5 years of age (SDG 2.2.2)*.

The Commission shall inform the implementing partner at least 3 months in advance of the dates foreseen for the ex-post evaluation mission. The implementing partners shall collaborate efficiently and effectively with the evaluation experts, and inter alia provide them with all necessary information and documentation, as well as access to the project premises and activities.

The evaluation reports shall be shared with the partner country and other key stakeholders. The implementing partner and the Commission shall analyse the conclusions and recommendations of the evaluations and, where appropriate, in agreement with the partner country, jointly decide on the follow-up actions to be taken and any adjustments necessary, including, if indicated, the reorientation of the project.

Indicatively, two contracts for evaluation services shall be concluded under a framework contract in trimesters 10 and 20 respectively.

The contract for the ex-post evaluation, if indeed deemed necessary, will be contracted 7 years after the start of the Action and it shall be covered by another measure constituting a financing decision.

5.10 Audit

Without prejudice to the obligations applicable to contracts concluded for the implementation of this action, the Commission may, on the basis of a risk assessment, contract independent audits or expenditure verification assignments for one or several contracts or agreements.

Indicatively, one contract for audit services shall be concluded under a framework contract 62 months after the start of the Action.

5.11 Communication and visibility

Communication and visibility of the EU is a legal obligation for all external actions funded by the EU.

This action shall contain communication and visibility measures which shall be based on a specific Communication and Visibility Plan of the Action, to be elaborated at the start of implementation.

In terms of legal obligations on communication and visibility, the measures shall be implemented by the Commission, the partner country, contractors, grant beneficiaries and/or entrusted entities. Appropriate contractual obligations shall be included in, respectively, the financing agreement, procurement and grant contracts, and delegation agreements.

The Communication and Visibility Manual for European Union External Action shall be used to establish the Communication and Visibility Plan of the Action and the appropriate contractual obligations.

APPENDIX - INDICATIVE LOGFRAME MATRIX (FOR PROJECT MODALITY) ¹⁸

The activities, the expected outputs and all the indicators, targets and baselines included in the logframe matrix are indicative and may be updated during the implementation of the action, no amendment being required to the financing decision. When it is not possible to determine the outputs of an action at formulation stage, intermediary outcomes should be presented and the outputs defined during inception of the overall programme and its components. The indicative logframe matrix will evolve during the lifetime of the action: new lines will be added for including the activities as well as new columns for intermediary targets (milestones) for the output and outcome indicators whenever it is relevant for monitoring and reporting purposes. Note also that indicators should be disaggregated by sex whenever relevant.

	Results chain	Indicators ¹⁹	Baselines (incl. reference year)	Targets (incl. reference year)	Sources and means of verification	Assumptions
Overall objective: Impact	To increase sustainable and inclusive economic development of rural areas	OO1 - Proportion of the population living below \$1.90 (PPP) per day by sex, age, employment status and geographical location (urban/rural) (SDG 1.1.1, EURFL1T1)**	TBD in inception phase	(2024) TBD in inception phase	HIES	
		OO2 - Prevalence of stunting (moderate and severe) in children aged below five years (EURFL1T9)	66% in 2010 for PNG, 70% for MOMASE ²⁰	Reduction of x% from baseline	WHO	
		OO3 - Renewable energy (excluding biomass) as a proportion of total energy production (SDG 7.2.1, EURFL1T12) (Region+ PNG)*	TBD in inception phase	Increase of the value TBD by x%	Dedicated baseline and end line survey	
Specific objective(SO1: Increased economic return from three selected value chain	SO 1.1 Annual value of cocoa/vanilla/fishery products produced in the project area	TBD in inception phase	Increase of x% from baseline	Dedicated baseline and end line survey.	Price of high end quality cocoa and vanilla remains at current level at least. Local market price of fisheries

¹⁸

Mark indicators aligned with the relevant programming document mark with '*' and indicators aligned to the EU Results Framework with '**'.

¹⁹ When not specified statistics and data will relate to the areas of intervention of the Action within the MOMASE region

²⁰ Short Changed: the Human and Economic Cost of Child Undernutrition in Papua New Guinea – Save the Children June 2017

	SO2: Strengthened, climate resilient and more efficient value chain enablers	SO 1.2 Number of people engaged in the focused value chains (before/after; disaggregated by sex, age and positioning in the value chain)	TBD in inception phase	Increase of x% from baseline	HIES	produces in the Sepiks remains at current level.
		SO 1.3 Annual net income reported by participants of the cocoa/vanilla and fishery products value chains, disaggregated by sex and age	TBD in inception phase	Improvement from baseline study	HIES	No major climatic or natural disasters hits the areas of implementation of the Action
		SO 2.1 Number of people employed by MSMEs disaggregated by sex and age*	TBD in inception phase	Increase of x% from baseline	Dedicated baseline and end line survey.	Rural development remains a priority for PNG
		SO 2.2 Number of value chains stakeholders benefiting from improved access to value chain related financing disaggregated by sex and age*	TBD in inception phase	Increase of x% from baseline	Dedicated baseline and end line survey.	
		SO 2.3 Usage (number, range, frequency/intensity) of ICT tools and services (knowledge and market information), disaggregated by sex and age	TBD in inception phase	Increase of x% from baseline	Dedicated baseline and end line survey.	
		SO 2.4 Amount / Percentage of renewable energy (excluding biomass that may induce land-use change) used by VC related agripreneurs and MSMEs in the project area as part of their total energy consumption*	TBD in inception phase	Increase of x% from baseline	Dedicated baseline and end line survey.	
		SO 2.5 Number of people/households who live within 2 km of all-season roads rehabilitated with project support and sustainably maintained (SDG 9.1.1)	TBD in inception phase	Increase of x% from baseline	Dedicated baseline and end line survey.	
Outputs	Output 1.1: Increased sustainable production and inclusiveness of the Cocoa value chain	O 1.1.1 Number and proportion of family farmers producing cocoa using sustainable and/or climate-smart management practices supported by the project disaggregated by sex and age groups	TBD in inception phase	Increase of x% from baseline	Dedicated baseline and end line survey.	No new serious pest and disease threat for cocoa is developing in the area of intervention

	Output 1.2: Increased sustainable production and inclusiveness of the Vanilla value chain	O 1.1.2 Profitability of cocoa of smallholder farmers producing cocoa using sustainable and/or climate-smart management practices supported by the project disaggregated by sex and age groups	TBD in inception phase	Increase of x% from baseline	Dedicated baseline and end line survey.	No serious pest and disease threat for vanilla is developing in the area of intervention
		O 1.1.3 Proportion of women in managerial positions for cocoa based activities	TBD in inception phase	Increase of x% from baseline	Dedicated baseline and end line survey.	
		O 1.2.1 Number and proportion of smallholder farmers producing vanilla using sustainable management practices supported by the project disaggregated by sex and age groups	TBD in inception phase	Increase of x% from baseline	Dedicated baseline and end line survey.	
		O 1.2.2 Area under vanilla where sustainable and/or climate-smart management practices are applied in proportion to total areas under vanilla in the implementation area	TBD in inception phase	Increase of x% from baseline	Dedicated baseline and end line survey.	
		O 1.2.3 Proportion of women in managerial positions for vanilla based activities	TBD in inception phase	Increase of x% from baseline	Dedicated baseline and end line survey.	
	Output 1.3: Increased sustainable production and inclusiveness of the Fishery value chain (coastal, riverine and aquaculture)	O 1.3.1 Number and proportion of smallholder fishers producing fishery products using sustainable management practices (e.g. in accordance with Maximum Sustainable Yields or other fish stock sustainability indicators) supported by the project disaggregated by sex and age groups	TBD in inception phase	Increase of x% from baseline	Dedicated baseline and end line survey.	No serious disease outbreak for fishery livestock is developing in the area of intervention. No climatic disaster is affecting the industry.
		O 1.3.2 Number and outreach of productive smallholder fishery partnerships established	TBD in inception phase	Increase of x% from baseline	Dedicated baseline and end line survey.	
		O 1.3.3 Number of quality control system for fishery products and value chain processors and traders established and operational	TBD in inception phase	Increase of x% from baseline	Dedicated baseline and end line survey.	
	Output 2.1:					National Government and Provincial and district authorities remain engaged

	Conducive business, policy and regulatory environment for sustainable rural agripreneurs and MSMEs established	O 2.1.1 Provincial Platform for Public Private Sector dialogue on sustainable and inclusive cocoa, vanilla and fisheries development established and functional.	Non existent	Existence	Dedicated baseline and end line survey.	in the various processes envisaged.
		O 2.1.2 E-agriculture and climate-smart strategy implemented in the project area	Non existent	Existence	Dedicated baseline and end line survey.	
		O 2.1.3 Availability and accessibility of financial products and services for VC stakeholders	TBD in inception phase	Increase of x% from baseline	Dedicated baseline and end line survey.	
	Output 2.2: Value chain support services strengthened and resilient to climate change impacts	O 2.2.1 Number of MSME and agriculture specific financial products developed and available to rural population	TBD in inception phase	Increase of x% from baseline	Dedicated baseline and end line survey.	Financial Institutions remain engaged and willing to venture in novel areas
		O 2.2.2 Enrolment/uptake by Region residents (disaggregated by sex and age) of project-supported MSME-focused training initiatives (financial/business/management/ICT)*	TBD in inception phase	Increase of x% from baseline	Dedicated baseline and end line survey.	
		O 2.2.3 Number of relevant ICT mobile applications available to MSME and value-chain stakeholders (weather forecast, extension services, market information, value chain specific, financial etc.)	TBD in inception phase	Increase of x% from baseline	Dedicated baseline and end line survey.	Beneficiary population will remain interested and engaged in upgrading their skills and in adopting new technologies
		O 2.3.1 Number of renewable energy generation facilities (except biomass) in operation in the project area established with project support	TBD in inception phase	Increase of x% from baseline	Dedicated baseline and end line survey.	
		O 2.3.2 Annual amount of electricity (in KW) generated from renewable energy sources established with project support in the project area *, **	TBD in inception phase	Increase of x% from baseline	Dedicated baseline and end line survey.	
	Output 2.3 Increased production of, and access to renewable energy systems					Cost of renewable energy systems (solar, minihydro) remains competitive

	Output 2.4: Improved and climate-proof rural transport infrastructure	O 2.3.3 Number (/proportion) of MSMEs in the project area having access to project-supported renewable energy systems (except biomass)	TBD in inception phase	Increase of x% from baseline	Dedicated baseline and end line survey.	The Department of Works and the local districts remain engaged for road assessment and road improvement with communities
		O 2.4.1 Number and length of rural roads and other access ways rehabilitated under the project *,**	TBD in inception phase	Increase of x% from baseline	Dedicated baseline and end line survey.	
		O 2.4.2 Number and total length of rural roads maintained under community-based management agreements in the project area, disaggregated by women and youth.	TBD in inception phase	Increase of x% from baseline	Dedicated baseline and end line survey.	
		O 2.4.3 – Income earned by communities from community-based road management and maintenance agreements in the project area, disaggregated by sex and age.	TBD in inception phase	Increase of x% from baseline	Dedicated baseline and end line survey.	
		O 2.4.4 – Number of length of rural roads and other access ways where climate change projections have been integrated in the project.	TBD in inception phase	Increase of x% from baseline	Dedicated baseline and end line survey.	