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List of Acronyms

| | |
|--------|---|
| ACEDP | Alternative Crop Extension and Development Program |
| ACIAR | Australian Centre for International Agricultural Research |
| ADB TA | Asian Development Bank Technical Assistance |
| AIGF | Agricultural Innovations Grant Facility |
| AoA | Agreement on Agriculture |
| APEC | Asia-Pacific Economic Cooperation |
| ARO | Area of Research Opportunities |
| BPNG | Bank of PNG |
| CA | Collaborating Agencies |
| CCI | Cocoa and Coconut Institute |
| CIC | Coffee Industry Corporation |
| CBO | Community-based Organization |
| CO | Commodity Organization |
| CRMF | Christian Radio Missionary Fellowship |
| CSIRO | Commonwealth Scientific I Research Organization |
| DIS | Delivered in store |
| DOC | Day-old chicks |
| DPLGA | Department of Provincial and Local Government Affairs |
| DTI | Department of Trade and Industry |
| EHP | Eastern Highland Province |
| EPA | Economic Partnership Agreement |
| ESP | Extension service provider |
| EU | European Union |
| FER | Functional and Expenditure Review |
| FFS | Farmer Field School |
| FOB | Freight on Board |
| FPDA | Fresh Produce Development Agency |
| GC | Governing Council |
| GDP | Gross Domestic Product |

| | |
|----------|--|
| GIFT | Genetically Improved Farmed Tilapia |
| HAQDEC | Highlands Aquaculture Development Center |
| IATP | Integrated Agriculture Training Program |
| IHBA | Isten Hailans Bi-Kipas Asosiesen |
| ICCC | Independent Competition and Consumer Commission |
| IMF | International Monetary Fund |
| INA | Institute of National Affairs |
| IPA | Investment Promotion Authority |
| JICA | Japan International Cooperation Agency |
| KIK | Kokonas Indastri Koporesen |
| LDC | Livestock Development Corporation |
| LLG | Local Level Government |
| MAL | Making a Living |
| MSG | Melanesian Spearhead Group |
| MTDS | Medium Term Development Strategy |
| NADP | National Agricultural Development Plan |
| NADS | National Agricultural Development Strategy |
| NAEES | National Agricultural Extension and Education System |
| NAIS | National Agricultural Information System |
| NE | Nucleus Enterprise |
| NEC | National Executive Council |
| NFA | National Fisheries Authority |
| NGO | Non-government Organization |
| NARD | National Agricultural Research and Development |
| NARI | National Agricultural Research Institute |
| NARS | National Agricultural Research System |
| NDAL | National Department of Agriculture and Livestock |
| NAQIA | National Agricultural Quarantine and Inspection Authority |
| NISIT | National Institute for Standards and Industrial Technology |
| NOL | New Organic Law |
| NRI | National Research Institute |
| OPIC | Oil Palm Industry Corporation |
| OPRA | Oil Palm Research Association |
| PACER | Pacific Agreement on Closer Economic Relations |
| PATCRA | PNG-Australia Trade and Commerce Relations Agreement |
| PDPI | Provincial Division of Primary Industry |
| PGAB | Primary Government Agricultural Bodies |
| PIC | Pacific Island Countries |
| PICTA | Pacific Islands Countries Tourism Association |
| RDB | Rural Development Bank |
| SciCOM | Science Communication |
| SIB | Spice Industry Board |
| SP | Service Provider |
| SPARTECA | South Pacific Regional Trade and Economic Agreement |
| SPS | Sanitary and Phytosanitary Services |
| SSSPP | Smallholder Support Services Pilot Project |

| | |
|---------|---|
| TAC | Technical Advisory Committee |
| TBT | Technical Barriers to Trade |
| TPPRB | Technical Program Planning and Review Board |
| OLPGLLG | Organic Law on Provincial Governments and Local Level Governments |
| UoT | Papua New Guinea University of Technology |
| UoV | University of Vudal |
| VAT | Value Added Tax |
| VEW | Village extension worker |
| WTO | World Trade Organization |

FOREWORD

Since my government took office in 2002, we have deliberately introduced a number of key policy initiatives, strategies and plans to develop our nation. These include the Medium Term Development Strategy 2005 – 2010, Agriculture Investment Incentives and Subsidies (Green Revolution) Policy 2003, the National Education Plan 2005 - 2014, the National Transport Development Plan 2006 – 2010 and the National Strategic Plan on HIV/AIDS 2006 -2010 and National Lands Development Program. I am pleased that my government, has for the first time since our independence, developed the National Agriculture Development Plan (NADP) 2007-2016.



Grand Chief Sir Michael T Somare
Prime Minister

Agriculture is the backbone, foundation of our rural economy and heart of the nation. It produces all the food for subsistence and provides a base for employment and income generation for over 82% of the population. My government, recognizing that agriculture has enormous potential and will continue to play an important role in sustaining the basic livelihood of our people, has developed this National Agriculture Development Plan (NADP) as a blue print to guide our future directions in agriculture and rural development.

The NADP has created a platform for the local, district, provincial and national governments, and the private sector to venture into strategic partnerships with land owners and other stakeholders to utilize the available land, resources and technology in all 89 districts. This would enable the vast majority of the rural population to participate actively in the economic development of this nation and thereby guarantee food security and improved livelihood for all the citizens of Papua New Guinea.

The NADP will address the issues relating to economic inequality and poverty among the rural communities by promoting smallholder agriculture development, in tandem with medium to large scale commercial agricultural enterprises which will provide the framework to mobilize the rural poor to utilize their customary lands productively and invest in income generating activities. This would eventually enable them to work their way out of poverty and social inequality and spread the benefits across the wider community. It proposes a number of redistributive reform packages that would assist to unleash the productive potential of the rural population and contribute in achieving the Millennium Development Goals and the 5% national economic growth envisaged in the MTDS.

The enormous economic potential of the agriculture sector will be realized through proper management and implementation of the NADP. As a renewable resource, it will continue to support the future generations on a sustainable basis when non-renewable resources; oil, gas and minerals have declined or been depleted. The cost-benefit analysis of the plan reflects high economic returns, besides the social benefits to the rural

communities. It is projected that revenue from the agriculture sector is capable of financing 40% of the national budget.

Greater integration of activities and linkages of Central Agencies, provincial and local level governments, donor partners, non-government organizations, private sector and others are absolutely necessary for the successful implementation of NADP. It must be emphasized that implementing agriculture development, under the framework of NADP, serves as the precursor for rural development that will eventually lead to establishment of transport, utilities, schools, health centres and other economic and social infrastructures. The overall success of future agriculture development will depend on its integration and partnership with other sector agencies responsible for road, sea, and air transport, lands, forestry, environment and conservation, health, education, law and order and others.

Therefore, the implementation of NADP is a very significant national development program that should be supported by all sectors and the general society, as the catalyst to stimulate overall economic growth and social development in PNG. The importance of cooperation in order to achieve our common vision cannot be overemphasized. Only then can progress be achieved as envisioned in the NADP.

I am indeed pleased to note that under the framework of the NADP, agricultural development in Papua New Guinea will advance in a unified direction. I congratulate the Minister for Agriculture and Livestock, National Department of Agriculture and Livestock, sector agencies, national and provincial departments, private sector, donor agencies, NGOs, farmers and the community at large for the successful formulation of the NADP and urge you all to combine your efforts for the effective implementation of the plan.

I am honoured to present the NADP to the people of Papua New Guinea.



MICHAEL T SOMARE GCL GCMG CH CF KStJ

Prime Minister

MINISTER'S STATEMENT

I have always maintained that Papua New Guinea's agriculture sector has a significant role to play in providing broad based income and employment to the vast majority of the population in the country, who live in the rural areas. However, due to the absence of a national agriculture plan in the past, agriculture sector was driven on an ad-hoc basis, without proper coordination and control, and has faced many difficulties, with estimated growth well below expectations, except for one or two sub sectors that have fared well. This has apparently affected most rural population that depends exclusively on agriculture for their livelihood.



Hon. Sasa Zibe, MP
Minister for Agriculture
and Livestock

Among the factors identified as contributing to lack of growth of the agriculture sector are fragmented planning and lack of coordination, monitoring and evaluation. This situation has affected allocation of available limited resources to priority areas in agriculture.

To correct this situation, the Government directed the Department of Agriculture and Livestock to develop in consultation with all stakeholders, a well articulated National Agricultural Development Plan that clearly identifies priority areas for development and link the resource framework and budget to effectively implement agriculture programmes.

As the Minister responsible, I am now honoured to deliver this historical document; the National Agriculture Development Plan to the People of PNG. At last, after 32 years of independence, we now have a comprehensive and cohesive national plan that will not only pave the way for agriculture development, but also be a precursor for overall economic and social development in PNG.

The NADP will provide a unified direction in the next 10 years for all stakeholders including National and Provincial Governments, sector agencies, the 89 districts, private sectors, NGOs, Civil Society, Donor agencies and the farming communities at large. This will be a catalyst that will stimulate growth and sustainable development of the agricultural sector. Its main purpose is to underpin the MTDS of the Government and guide the development of the sector through the alignment of resources with identified priorities.

It is a known fact that 97% of land is owned by the people and about 80,000 school leavers are leaving school every year, and more that 87% of our people live in rural areas and depend very much on our biodiversity for their livelihood. For the first time, the NADP will absorb these people with their natural resources to actively participate

meaningfully in micro agricultural development. Women, youth and the general population will benefit from the implementation of this plan as this will provide employment and income generating opportunities and will continue to sustain the livelihood of households.

The activities identified in the plan will be implemented in the 89 districts and therefore calls for strengthening of linkages, support services and increased capacity in the districts as the emphasis of this plan is to foster economic growth in the districts.

The strategic direction over the next ten years under the NADP is to continue to build and consolidate on the efforts achieved over the last 32 years. However, this time, the efforts will be more concerted and focused to realize sustainable growth in the agriculture sector, and ultimately contribute to economic and social advancement in PNG.

It is envisaged that adequate levels of funding will be appropriated by Government to ensure that programmes are funded to make the agriculture sector more productive. The major source of funding will be from the Government, however it is expected that the NADP will also attract donor funding and private sector investment particularly in the areas where tree crops are linked to Clean Development Mechanisms.

The way forward for the economy to grow is to develop strategic partnerships and form alliances through private and public sector arrangements, and the vehicle through which we can move forward, is through the NADP. Since 2005, the Government has introduced a number of 'Green Revolution' incentives to attract investment in the agriculture sector. I encourage both public and private sector to take advantage of these and invest in the NADP.

On this note, I take this opportunity to acknowledge and thank the various agencies, departments, organizations and individuals who have collectively contributed to the successful formulation of the NADP, namely:-

The Government of PNG and the Food and Agriculture Organization of the United Nations, for their financial and technical support;

The Chairman and members of the Economic Sector Ministerial Committee for their invaluable guidance and undivided support;

The Members of the National Agriculture Council for their support and endorsement of the plan;

My predecessor, Hon. Mathew Siune, MBE, MP and former Department Secretary, Mathew'wela B. Kanua for initiating the formulation of the NADP;

Agriculture sector agencies and organizations; OPIC, CCI, KIK, CIC, NARI, NAQIA, LDC, FPDA, SIB, Cocoa Board, Rubber Industry, Provincial DAL;

Government Departments; DNP&M, Treasury, DoF, Dept. PM & NEC, DCI, DPLLG, NFA, DoW, DoT, DLPP, NEFC, ORD, Provincial Administrations;

Private Sector, Statutory Bodies and Civil Society; RIC, RDB, PNG Microfinance, PNGSDL, Trukai Industries, Galley Reach Holdings, NR Global, INA, CIMC, Hope Worldwide, Farmer Repts, UoT, UoV, Ramu Sugar Ltd;

Donors and International Agencies; ADB, AusAID, EU, IFAD, JICA, NZAID, PR-China, ROC- (Taiwan), UNDP, World Bank;

In conclusion, I express my sincere gratitude and appreciation to the Secretary of the Department of Agriculture and Livestock; Anton K. Benjamin and his NADP Team and Staff, as well as my Ministerial staff for their tireless and dedicated efforts in the coordination and formulation of the NADP.



HON. SASA ZIBE, MP
Minister for Agriculture and Livestock

EXECUTIVE SUMMARY

In September 2001, the National Executive Council (NEC) directed the National Department of Agriculture and Livestock (NDAL) to develop a medium term National Agriculture Development Plan (NADP). Accordingly, NDAL, having consulted all stakeholders and the wider community within the agriculture sector, formulated the plan with technical and financial assistance from the GoPNG and the Food and Agriculture Organization (FAO) of the United Nations under the Technical Cooperation Program (TCP No. 3003A).

The **vision** of NADP is sustainable transformation of the country's agriculture sector into a vibrant and productive economic sector that contributes to economic growth, social wellbeing, national food security and poverty alleviation.

The **Mission** of NADP is to enhance and improve the quality of life for over 87% of the rural population in 89 districts and 19 provinces; through increased productivity, sustainable and quality production coupled with integrated planning and environmental sustainable management.

The **overall goal of NADP** is to stimulate economic growth in the agriculture sector in all districts through the development of a well coordinated planning and implementation that are interactive, and effective, involving the full participation of the stakeholders, which promotes food security, income generation and poverty alleviation.

The objectives of NADP are;

- To reduce costs of production and improve quality of agricultural produce for both domestic and international markets
- To increase income earning opportunities of those dependent on agriculture.
- To allocate resources based on priority areas
- To ensure that development is socially, economically, and environmentally sustainable
- To improve the recognition of women's contributions to rural industries and increase opportunities for women's decision making in agriculture

The eight priority areas in NADP are;

(1) Agriculture research, extension, information and training;

The research, extension, information and training sub-components, aim at providing appropriate technology packages, backed up by extension information and human resources capacity building for farmers to effectively participate economically in agriculture activities in their respective communities. Out comes include; improved technology packages and delivery systems, increased knowledge and skills of farmers and extension agents, and efficient market intelligence networks.

(2) Food and horticultural crops development;

The food and horticultural crops sub-component will promote economic production of food and horticultural crops, for domestic consumption and for exports in crops that PNG has competitive advantage. Down stream processing will be promoted for value addition. Out comes include; increased production of local food crops and vegetables, establishment of efficient marketing systems, downstream procession and value adding facilities, reduction of imports (rice), increased income, employment and improved nutritional status, livelihood of rural households.

(3) Tree and industrial crops development;

The tree and industrial crops sector aims at mobilizing the population in the various production areas, to increase on the productivity and production of the various crops. This will be achieved through; rehabilitation of plantations, planting of new plantations / farms, promotion of nucleus estates where feasible, organizing farmers into cooperatives for production and marketing purposes, promote access to credit and markets and encourage down stream processing where feasible. The tree crop sector will continue to play an increasing role in income and revenue generation for the country. Out comes include; increased production, productivity, and marketing systems, generate export earning opportunities, improved employment and income of smallholders and contribute to increased GDP.

(4) Livestock, apiculture and aquaculture development;

The main aim of this component is to promote livestock, apiculture and aquaculture production for import replacement and to provide affordable nutritious food to Papua New Guineans.

This would entail rehabilitation of breeding centers; introduction of improved breeds, promotion of small and large livestock, and draught and pack animals for cultivation and transport. Out comes include; revitalized livestock industry, increased domestic livestock production, create employment and generate income, improved protein supplement, enhanced nutritional status, and contribute to import replacement.

(5) Spice and minor crops development;

Spices and minor crops that are economically sustainable will be promoted as alternative export crops; through capacity building, supply of quality planting materials and post harvest quality management/control and improved marketing opportunities. Out comes include; revitalized spice industry, increased production, and improved processing and marketing systems.

(6) Gender, social and HIV/AIDS related issues;

It is recognized that women's contribution to the well being of society is essential in agriculture production in PNG. The Gender social and HIV/AIDS sub component goals are; to promote equal participation of women in all aspects of agriculture and livestock

development, so as to improve the status of women through economic development, and also to ensure that, gender, social and HIV/AIDS are mainstreamed in all agriculture development programs. Women would be empowered through training, skills development and small credit scheme in the production, processing and marketing of agricultural products. Outcomes include; empowered participation of women in all aspects of agriculture development, and gender, social and HIV/AIDS mainstreamed in the agriculture sector.

(7) Regulatory and technical services;

The regulatory and technical services include agricultural quarantine, land use planning and development and Codex and food safety.

The Quarantine component is to preserve and protect the animals, plants and fish from exotic pests, diseases and weeds in the interest of national, social and economic development, and also to facilitate international trade through export and import risk analysis and quality assurance systems and thereby contributing to the Government's export driven economic recovery policy. Outcomes include; improved surveillance and intelligence systems on exotic pests and diseases, improved quality control and assurance on import and export products, improved human resource capacities.

The Land use planning and development component will develop sustainable land resource plans for the provinces, enhance geographical presentation of land resources and maps, and improve land resource inventory and database management. Outcomes include: improved land use planning, management and technical capacity.

Codex will promote against contaminated food and protect consumer's health, facilitate international trade by eliminating trade barriers and develop food standards and food policies in compliance with Codex requirements. Outcomes include; improved food safety standards and consumer health,

(8) NADP management and coordination.

A management structure for the overall coordination and monitoring of the implementation of the NADP to ensure that the programs and projects are successfully implemented within the time frame and allocated resources/budgets have been outlined. The current funding level to the agriculture sector has been reviewed and an indicative budget for development activities has been proposed. Outcomes include; well coordinated planning, management and monitoring of the sector through NADP.

The successful implementation of this plan hinges on the commitment of all players and the resources allocated at all levels (national, provincial and district). The targeted private sector investment programs are; rice, wheat, cattle, feed for domestic animal production, cashew, cassava, noni, jatropha, sago, spices, downstream processing, through the nucleus and out grower production systems.

Most of this plan will be implemented in the districts and likely to be affected by factors that are external to the sector. Hence, NADP will form part of the Medium Term

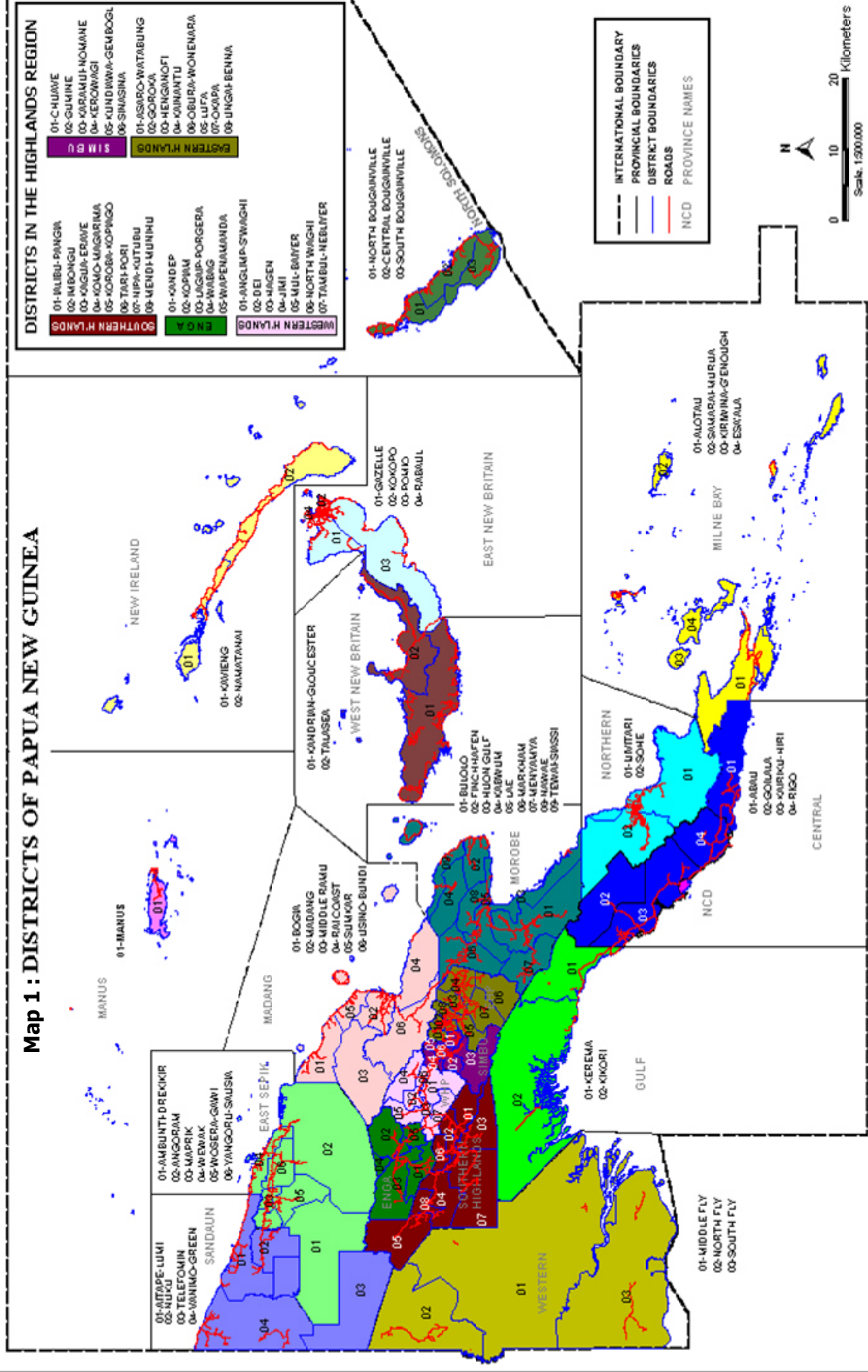
Development Strategy (MTDS) 2005 – 2010 which forms the overall national strategic framework for economic and social development.

The estimated total budget required for the implementation of NADP for the period 2007 – 2016 is **K1, 198 million**. The total projected revenue from the various components for the period 2007 – 2016 would be **K22, 000 million**. The breakup is; Tree crop sector **K10,547 million**, Food and Horticulture crops K553.3 million, Spice and minor crops K61.9 million, Livestock, aquaculture and apiculture K208.5 million, **The output (revenue) to input (budget) is highly positive and needs to be supported.**

In addition, the value of food and horticultural crops that are not marketed but produced and consumed/utilized by households is estimated at K5 billion annually.

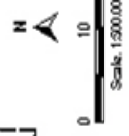
The major source of funding will be the national government. Other anticipated funding sources are bilateral and multilateral donor agencies and the private sector investment, particularly in the tree crop sector where further development is linked to Clean Development Mechanism Policies. Provincial government's commitment and counterpart funding is crucial to support those programs that will be implemented in the respective provinces. It is encouraging to note that under the new Provincial Finance Management Plan the derivation grants will be utilized for agriculture development in the districts.

Map 1 : DISTRICTS OF PAPUA NEW GUINEA



- DISTRICTS IN THE HIGHLANDS REGION**
- 01-CHUABE
 - 02-CHUINE
 - 03-KARAMUH-NOMANE
 - 04-KEROWAGI
 - 05-KUNDURWA-GENBOGL
 - 06-SINASINA
 - 07-ASARO-WATABUNG
 - 08-GOROKA
 - 09-HENGANOFI
 - 10-KAINANTU
 - 11-ORUBA-WONENARA
 - 12-LUFA
 - 13-OKAPA
 - 14-UNGRA-BENNA
- SOUTHERN HLANDS**
- 01-KALUBU-PANGWA
 - 02-MBONGU
 - 03-KIGJA-ERAVE
 - 04-KOAO-LAGARIMA
 - 05-KORORA-KOPNGO
 - 06-TARI-PORI
 - 07-NIPA-KUTUBU
 - 08-MENDI-MUNIHU
 - 09-KANDEP
 - 10-KOPRAM
 - 11-LAGIPA-PORGERA
 - 12-WABENG
 - 13-WAPEMAMANDA
 - 14-ANGLIMP-SWAGHI
 - 15-DEI
 - 16-HAGEN
 - 17-JIMI
 - 18-MUL-BUYER
 - 19-NORTH WAGHI
 - 20-TAMBU-NEELVER
- WESTERN HLANDS**
- 01-NORTH BOUGAINVILLE
 - 02-CENTRAL BOUGAINVILLE
 - 03-SOUTH BOUGAINVILLE

INTERNATIONAL BOUNDARY
PROVINCIAL BOUNDARIES
DISTRICT BOUNDARIES
ROADS
NCD PROVINCE NAMES



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