The Papua New Guinea – Australia
Agricultural Research and Development Support Facility

- ARDSF -
An AusAID Initiative

Launched May 1st 2007
(a five year project)

Dr. Miok Komolong
ARDSF Coordinator
GRM International Ltd
Outline

• What is ARDSF
• A brief overview of PNG Agriculture from a NARS perspective
• A ARDSF Results Framework
• An Agricultural Innovations Grants Scheme (AIGS)
• Paradigm Shift for Impact – a overview
ARDSF Goal and Purpose

Goal of the ARDSF
• To increase opportunities for rural small holders in PNG to generate income and maintain food security

Purpose of ARDSF
• To enable selected national agricultural research and development organisations to deliver improved services to their rural stakeholders through
  – Capacity development in the two areas of institutional governance and service delivery
  – Additional access to funds through competitive grants scheme
ARDSF OUTCOMES

The Outcomes sought for ARDSF are:

- PNG Agricultural Research and Development institutions operate as an integrated and sustainable National Agricultural Research System (NARS) that serve PNG smallholder farmer needs in the areas of food security and commercial or semi-commercial agricultural development;

- NARS institutions initiate and implement improvements in management and operational effectiveness;

- Increased availability of innovative information and technologies for smallholder farmers;

- AIGS evolves as a potential framework for a national agricultural grants scheme in PNG; and

- Gender and HIV issues are mainstreamed by NARS institutions.
ARDSF Components

1. Support to NARI

2. Support to NARS
   - Cocoa and Coconut Institute
   - Coffee Industry Corporation
   - Fresh Produce Development Agency
   - Oil Palm Research Agency and its sister body the Oil Palm Industry Corporation.
   - NARI – as partner agency
   - Other nominated and approved organisations

3. Agricultural Innovation Grants Scheme (AIGS)
Overview of PNG Agriculture

a NARS perspective

• Agriculture remains the backbone of PNGs economy and is the fabric of society

  ➢ Over 85% of the population live in rural PNG and depend directly on it for their livelihood

  ➢ Contributes over 20% of GDP

  ➢ Averaged 19% of total export earnings for 1995-2005 (NADP, 2007)

○ Wellbeing of the majority of Papua New Guineans depends directly on Agriculture
  - - - right?.. Yesss..
<table>
<thead>
<tr>
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* Source: FAO Yearbook *1990 data

- Worst Social and Human Development Indicators

- Opportunity for investments in Agriculture
## Agricultural Contribution to GDP: 1996-2005

<table>
<thead>
<tr>
<th>Calendar Year</th>
<th>Value Added to Agriculture (K million)</th>
<th>Agricultural Share (%) in GDP</th>
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<tr>
<td></td>
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<td>Non-marketed</td>
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Source: Department of Treasury and Planning; BPNG; compiled by: Rural Statistics Section, DAL.
PNG Agriculture (cont’d)

Volume of Export Commodities ('000 MT)

Year

Quantity ('000 MT)

Cocoa
Coffee
Tea
Copra
Copra Oil
Palm oil
Rubber
Total
Agriculture PNG (cont’d)

Value of Export Commodities (1996-2006)

Kina (mill)

Year


- Total
- Palm oil
- Coffee
- Cocoa
- Copra Oil
- Copra
- Tea
- Rubber
## Agriculture PNG (cont’d)

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>Palm oil</th>
<th>Coffee</th>
<th>Cocoa</th>
<th>Copra Oil</th>
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<td>2005</td>
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<td>300</td>
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<tr>
<td>2006</td>
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<td>309</td>
<td>118</td>
<td>17</td>
<td>167</td>
<td>580</td>
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</table>

11 year

| % Diff  | 136% | 262% | 77% | 209% | 18% | -83% | 67% | 480% |
| % Diff p.a. | 12% | 24% | 7% | 19% | 2% | -8% | 6% | 44% |
PNG Agriculture (cont’d)

  • Declining productivity, profitability
    (Palm Oil > Coffee > Cocoa > Copra Oil > Rubber > Copra > Tea)
    • NB: Some objection by Commodity groups & experts on available data or lack.

– Domestically Marketed Food Crops - most Interesting
  • Staple foods i.e. roots crops, banana, sago
    Surveys Data - PNGRIS & MASP (1986-2000),
    Household Survey (1996)
Significance of Domestic Fresh Food Production

- c.80% PNG rural villagers derive income from selling fresh food - a higher proportion than any other cash earning activity (MASP, 2000).

- c.80% of food energy consumed is from locally grown food (Household Survey, 1996).

- Since 2000, rice & wheat imports declining at 4% and 1%pp while population is increasing at 2.5%pa; Shortfall met by increase in subsistence food production and greater sales of fresh food.
Value of domestically marketed food crops

– 1996 Household survey

• Est. K59million pa total cash income earned from sale of fresh food

• 2nd only to Arabica coffee (K97million)

• More than from sale of cocoa, betel nut, copra, oil palm

– Current Value Estimate (Bourke, 2006)

• Account of CPI increases from 1992-2005

• Est. K264million for urban households spending on fresh food (K130million for Pom & Lae alone –c.50%)
• Need to re-examine investments in agricultural R&D
  – Is our focus appropriate in type of crop and market?
  – Is/are our organisational structures appropriate?
  – Is our resourcing for R&D appropriate?
  – Why do past investments (\& reforms) lack much visible impacts?
  – Are current R&D strategies adequate, both for export commodities, import replacement and local staple foods, fruits and vegetables?
Agriculture in PNG (cont’d)

- Mitigating circumstances
  - Land tenure & land mobilisation limiting
  - Poor infrastructure (transport, communication, market)
  - Political instability prior to 2002
  - Law & order issues – rural to urban ‘drift’
  - High population growth – at 2.5 – 2.7% pa (>3%)
  - Currency devaluation – (costs vs. opportunities)

- NZIER – [INA](#) Report “Issues & Options” in Agriculture
Evolution of Agriculture R&D (NARS)

What role has NARS?
- Pre-Independence (1945-1975)
- Post-Independence (1975-1980)
  • Any “Cause → Effect” ?

Major Reforms:
- Decentralization (Extension function)
- Corporatisation (Commodity research)
Evolution of Agriculture R&D (NARS) (cont’d)

Post Independence (1980-1996) -- NARS reforms

- Coffee - CIB, CRI, CDA → CIC
- Livestock – LDC
- Cocoa & Coconut – CCRI, CCEA, → CCI
- Agric Protection & Quarantine – NAQIA
- Fresh Produce Marketing – FPDC → FPDA
- Food Crop Research - NARI
- NDAL still hosts Rubber & Spice Boards

Yet result in following period 1995 – 2006: -- “cause/effects”?

-- poor sector performance viz. commodity crops
-- 2000 Social/HD indicators still 20 years behind other PICs
Evolution of Agriculture R&D (NARS) (cont’d)

Reforms in NDAL R&D and NARS

• Government Policy
  - good intention
  - reforms continuing

• It can be countered that;
  – The resulting R&D and the NARS systems are fragmented
  – Research organized along disciplinary lines
  – Trials limited to stations
  – Approach based more on ‘supply-driven’ than on ‘demand-driven’ technological innovations
Present state of NARS

This failure is attributable to;

- supply driven agenda of NARS

- obstructive intra- and inter-organizational boundaries (or inadequate linkages, partnerships and coordination within and between organizations),

- lack of inter-, or multi-disciplinarity,

- weak monitoring, evaluation and performance cultures (including lack of institutionalized organizational learning)

- precarious resource conditions

- confounding issues of governance & vision
Present state of NARS

- The consequences of all these have been;
  - organizational inefficiencies and management problems,
  - decreasing investor confidence,
  - low staff motivation and morale,
  - high staff turnover,
  - brain drain (leading to human capacity problems) and
  - ultimately, limited research, service, and outreach outputs as well as development impact (IAC, 2004).

- NARS organizations recognize these issues & have commenced strategic planning; a continuing process......
Way Forward for Agriculture R&D and NARS

- **NADP 2007 – 2016: NARS A MAJOR PRIORITY AREA & PROGRAM**
  - Development of an Effective National Agricultural Research System (NARS) *(Objectives)*:
    1. Strengthen collaborations among institutions, extension, districts and farmers.
    2. Ensure NARS can support NDAL policy and development decisions in delivering on the NDAP objective of sustainable agricultural development

- **MTDS 2005 – 2010**
  - Export lead-economic growth & poverty alleviation

- **PNG Constitution 1975**
  - Equitable income distribution and benefit for all Papua New Guineans
### ARDSF Component Two Results Framework: Impact Oriented

#### 2008 WORKPLAN

**Goal:** To enable selected national agricultural research and development organisations to deliver improved services to their rural stakeholders

**Purpose:** Institutional Development of the selected NARS that supports them in better achieving their respective missions

<table>
<thead>
<tr>
<th>Thematic Project Idea</th>
<th>Outputs</th>
<th>Activities</th>
<th>Input</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Responsiveness</td>
<td>1. Socio-economic profiling of target groups (including gender &amp; HIV)</td>
<td>1.1 Review situation and Design approach/action plan &amp; detailed activities</td>
<td>TA1</td>
<td>Social Scientist - Stakeholder analysis &amp; Targeted interventions</td>
</tr>
<tr>
<td>2. NARS have demonstrated capability in planning, and prioritising researchable issues and intervention strategies</td>
<td>2. Identify agro-ecological zonation and farming systems</td>
<td>1.2 Socioeconomic profiling &amp; priority setting</td>
<td>TA2</td>
<td>M&amp;E Specialist - Project cycle management – design approach</td>
</tr>
<tr>
<td>3. NARS have demonstrated capacity and capability in implementation of priority research and intervention strategies</td>
<td>3. Mapping of infrastructural conditions and markets accessibility</td>
<td>1.3 Harmonise program planning &amp; research management processes</td>
<td>NWG</td>
<td>Focus Group Planning Sessions (x2: per TA1 &amp; TA2)</td>
</tr>
<tr>
<td>4. Socioeconomics capacity</td>
<td>4. Harmonise program planning &amp; research management processes</td>
<td></td>
<td>Fieldwk</td>
<td>Stakeholder Analysis – PRA/RRAs per Region per 2 weeks</td>
</tr>
<tr>
<td>5. Gender mainstreaming</td>
<td>5. Harmonise program planning &amp; research management processes</td>
<td></td>
<td>IWG</td>
<td>Data Analysis &amp; ex-ante impact assessment and priority setting per institution</td>
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<tr>
<td>6. HIV and AIDS mainstreaming</td>
<td>6. Harmonise program planning &amp; research management processes</td>
<td></td>
<td>TA10</td>
<td>Res Mgt Specialist - Integrate R&amp;D programs and administration processes</td>
</tr>
<tr>
<td>7. Networking &amp; Partnerships</td>
<td>7. Harmonise program planning &amp; research management processes</td>
<td></td>
<td>IWG</td>
<td>Program formulation &amp; project design, and project cycle management training</td>
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<tr>
<td>8. Communications</td>
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<tr>
<td>9. Technical Services</td>
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### Nine Thematic Project Ideas - for NARS institutional development

1. Responsiveness
2. Planning Monitoring & Evaluation
3. Governance & Leadership
4. Socioeconomics capacity
5. Gender mainstreaming
6. HIV and AIDS mainstreaming
7. Networking & Partnerships
8. Communications
9. Technical Services
AIGS – Agricultural Innovation Grants Scheme
AIGS OBJECTIVE

• AIGS OBJECTIVE
  – Support the dissemination of agricultural innovations to rural small-holders

• AIGS OUTCOMES - Contribute to
  – Increased opportunities for smallholder farmers to improve productivity and market competitiveness;
  – A national grants scheme for PNG agriculture development established;
  – Improved performance of agricultural research and extension institutions, including both government and non-government agencies; and
  – Gender and HIV mainstreamed through AIGS activities.
AIGS concept

• Establish a mechanism to determine farmers real needs and response (demand driven)
• Use mechanism to test ideas and develop effective ways of spreading successful ideas wider
• NOT an investment mechanism to provide seed capital for rural development per se.
• Results must be able to be accessed by and be of benefit to a wider audience.
AIGS Launched
- November 2007 -

Call for Expressions of Interest

A Competitive Grants Scheme For PNG Agricultural Development

PUTTING FARMERS FIRST

The Agricultural Research and Development Support Facility (ARDSF) is a joint initiative by the Papua New Guinea and Australian Governments, aimed at helping research institutions to increase opportunities for rural smallholders in Papua New Guinea to generate income and maintain food security.

ARDSF is pleased to announce the launch of a competitive grants scheme:

The Agricultural Innovations Grants Scheme (AIGS)

The purpose of AIGS is to support the testing of innovations that will have a positive impact on the livelihood of smallholder farmers.

Organisations involved in agricultural research, rural development, education and extension services are invited to submit applications for funding consideration under AIGS.

For further information or to obtain a copy of the application form and guidelines, please contact the AIGS Administrator,

Email address: AIGSinfo@ardsf.grm.com.pg
Telephone: + (675) 325 4488;
PO Box 1177 Port Moresby – NCD.
Is my organisation eligible?

Contact AIGS and obtain application pack

Innovative idea but inadequate funding

Find organisation to partner with – AIGS may be able to assist

YES

Is my organisation eligible?

NO

Complete application form and submit with attachments

TAP: Is my application accepted?

NO

Ask for feedback and decide whether to improve and resubmit application

YES

Prepare full project proposal following AIGS Guidelines

ASSC: Is my proposal accepted?

NO

Ask for feedback and decide whether to improve and resubmit proposal

YES

Receive grant and commence with project implementation

AIGS Operations and Guidelines Manual - available
AIGS Application
deadline for 1st batch of funding
- 15th April 2008 -
Innovation System

AIS paradigm:

• for Agricultural R & D agencies to organise and deliver results
• a collective vision/mission to aspire to
• multi-agency / multi-sector / cross-sectoral partnerships
Multi-Sector

Partnership Building
# THE PARTNERING PROCESS

<table>
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<tr>
<th>Phases</th>
<th>Partnering Process</th>
<th>Roles for Partnership Broker</th>
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</thead>
<tbody>
<tr>
<td><strong>1. Partnership Exploration</strong></td>
<td>1) Identify the partnership <strong>vision</strong> and the sustainable development <strong>outcomes</strong></td>
<td>1) <strong>Undertake</strong> an Internal Assessment on behalf of the ‘initiating’ organisation</td>
</tr>
<tr>
<td></td>
<td>2) Identify the <strong>design parameters</strong> of the initiative</td>
<td>2) <strong>Produce</strong> a Proposal indicating ‘go’ / ‘no go’</td>
</tr>
<tr>
<td></td>
<td>3) Identify potential <strong>partners</strong></td>
<td>3) <strong>Analyse</strong> and consult partners</td>
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<tr>
<td></td>
<td>4) Map the range of <strong>resources and competencies</strong> available to deliver the design parameters</td>
<td>4) <strong>Undertake</strong> surveys and/or facilitate exploratory workshops to identify design parameters and required competencies</td>
</tr>
<tr>
<td><strong>2. Partnership Building</strong></td>
<td>5) Identify the <strong>strategic interests</strong> of the partners that need to be satisfied</td>
<td>5) <strong>Plan</strong> for effective partnership negotiations</td>
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<tr>
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<td>6) Negotiate the <strong>Partnering Agreement</strong></td>
<td>6) <strong>Facilitate</strong> the negotiation of a Partnering Agreement</td>
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<tr>
<td></td>
<td>7) Build <strong>capacity to implement</strong></td>
<td>7) <strong>Build</strong> capacity of partners to implement</td>
</tr>
<tr>
<td><strong>3. Partnership Maintenance</strong></td>
<td>8) <strong>Implement</strong> and track changes</td>
<td>8) <strong>Support</strong> partnership implementation and tracking</td>
</tr>
<tr>
<td></td>
<td>9) <strong>Review</strong> partnership performance</td>
<td>9) <strong>Facilitate</strong> periodic partnership review and evaluate and help partners internalise the lessons or scale-up</td>
</tr>
</tbody>
</table>
Conclusion

• **Three essential pillars for Impact pathway**
  - **Scope** – what needs to be done: Results Framework
  - **Scale** – How to organise to deliver results: Institutional arrangements & processes
  - **Resources** – innovative and competitive funding mechanisms

Thank you!