

562 National Agriculture Research Institute

(in Millions of Kina)

| PIP No. | Project Title | 5 Year Total | 2006 | 2007 | 2008 | 2009 | 2010 |
|---|---------------|--------------|------|------|------|------|------|
| 1739 | acnars | 4.0 | 2.8 | 2.5 | 1.5 | | |
| 2042 | RGRP | .5 | .4 | .3 | .2 | | |
| 2088 | aciarad | 4.5 | 4.7 | 3.0 | 1.5 | | |
| TOTAL CAPACITY BUILDING PROJECTS | | 9.0 | 7.9 | 5.8 | 3.2 | | |
| 2170 | HAHRP | .4 | .3 | .2 | .2 | | |
| TOTAL CAPITAL PROJECTS | | .4 | .3 | .2 | .2 | | |
| TOTAL | | 9.4 | 8.2 | 6.0 | 3.4 | | |

562 National Agriculture Research Institute

AGENCY SUMMARY OF ALL PROJECTS

EXPENDITURE PROJECTIONS AND FINANCING REQUIREMENTS (K Millions)

| PROJECT COST | 2004 Actual | 2005 | 5 Year Total | 2006 | 2007 | 2008 | 2009 | 2010 |
|--|----------------|------|-----------------|------|------|------|------|------|
| DIRECT PROJECT COST | | | | | | | | |
| Current Expenditure | | | | | | | | |
| Personal Emoluments | | | .4 | .1 | .1 | .1 | | |
| Goods and Other Services | | 8.6 | 11.0 | 5.1 | 3.8 | 2.2 | | |
| Current Transfers | | | | | | | | |
| Sub-Total | | 8.6 | 11.4 | 5.2 | 3.9 | 2.3 | | |
| Capital Expenditure | | | | | | | | |
| Acquisition of Existing Assets | | | | | | | | |
| Capital Formation | | 1.1 | 6.2 | 3.0 | 2.1 | 1.1 | | |
| Capital Transfers | | | | | | | | |
| Sub-Total | | 1.1 | 6.2 | 3.0 | 2.1 | 1.1 | | |
| A TOT DIRECT PROJECT COST | | 9.7 | 17.6 | 8.2 | 6.0 | 3.4 | | |
| Technical Assistance | | | | | | | | |
| Project Preparation | | | | | | | | |
| Advisory | | | | | | | | |
| Training | | | | | | | | |
| Equipment | | | | | | | | |
| B TOT TECHNICAL ASSISTANCE | | | | | | | | |
| TOTAL PROJECT COST (A+B) | | 9.7 | 17.6 | 8.2 | 6.0 | 3.4 | | |
| FINANCING SOURCES | | | | | | | | |
| IDENTIFIED FINANCING | | | | | | | | |
| Direct Project Financing: | | | | | | | | |
| Government Contributions: | | | | | | | | |
| a) Government Input | | .3 | 1.9 | | 1.0 | .9 | | |
| b) Self Generating Revenue | | | | | | | | |
| Loan | | | | | | | | |
| Grant | | 4.3 | 7.5 | | 5.0 | 2.5 | | |
| C TOTAL DIRECT FINANCING | | 4.6 | 9.4 | | 6.0 | 3.4 | | |
| D Technical Assistance | | | | | | | | |
| TOTAL FINANCING (C+D) | | 4.6 | 9.4 | | 6.0 | 3.4 | | |
| FINANCING SOUGHT | | | | | | | | |
| Direct Project Cost (A-C) | | 5.1 | 8.2 | 8.2 | | | | |
| Technical Assistance (B-D) | | | | | | | | |
| TOTAL FINANCING SOUGHT | | 5.1 | 8.2 | 8.2 | | | | |

PIP NUMBER: 1739

PROJECT NAME: AUSTRALIAN CONTRIBUTION TO NARS

EXECUTING AGENCY: National Agriculture Research Institute

PROJECT OBJECTIVIES:

To assist the National Agricultural Research Institute to develop its capacity to identify farmer needs, prioritise responses, achieve cost-effective research results, and disseminate and adapt these results to the needs of the stakeholders - farmers in particular, and others such as consumers, processors, and private sector. Overall, objective is to contribute to improving farm productivity, raising income levels, creating rural employment, assuring food security, raising nutrition and health standards, and generating broad-based economic growth in the country.

PROJECT STATUS:

The ACNARS project is completed. This is a new phase of the project to commence this year (2006).

PROJECT COMPONENTS:

The project components are: i) Effective organisation, management, communications and work environment in NARI; ii) Strengthen networks and linkages among stakeholders; iii) Strengthened NARI capacity to deliver high quality agricultural research outputs through effective research projects of high priority, executed cost-effectively by well-trained staff with necessary funding, equipment and infrastructure; iv) developed process to determine and supply infrastructure and equipment needs, matched to programme planning, and assistance with the provision of these needs; and v) Relevant information from NARI research to stakeholders.

PROJECT LOCATION:

The project is located in NARI Headquarters in Lae and implemented in NARI research sites nationwide.

PROJECT JUSTIFICATION:

Setting up of NARI is one of Government's reform priorities in the agriculture sector. Over the years, attention and resources have been heavily biased towards major export crops and little attention paid to food crop and livestock sub-sectors. The setting up of NARI is to address this imbalance. Agricultural research is aimed at addressing food production and diversification of the agriculture base. However, due to resources constraint, NARI's ability to conduct research is limited. The ACNARS contribution in meeting the gap in identified research areas greatly improve the NARI's output and hence the capacity of NARI.

PROJECT CAPACITY:

NARI has adequate capacity to implement the project. Its major focus of the investment is to develop the human resources and to support development oriented operational expenses, publication and information and furniture and office equipment.

PROJECT BENEFICIARIES:

The direct beneficiaries of the project would be the smallholder farmers who will benefit from more effective transfer of information and agricultural technologies brought about by better research facilities and improve working conditions for reaserch scientists. The overall benefit to the sector and the country as whole will be increase in productivity, particularly in food and livestock sub-sectors. This is an important objective of the government in ensuring food security for PNG's increasing population. The potential for export will also be greatly enhanced.

PROJECT SUSTAINABILITY

Upon completion of the project, it is expected that the operation cost of research programmes and maintainance cost of infrastructure will be fully funded by NARI. It is expected that NARI will meet the cost of its operarions from internally raised revenue. Annual grants from Government must be seen as initial assistance only in building the capacity of the Institute.

1739 AUSTRALIAN CONTRIBUTION TO NARS

ESTIMATED TOTAL PROJECT COST 0.0 ESTIMATED DURATION OF THE PROJECT 3.0 Years

EXPENDITURE PROJECTION AND FINANCING REQUIREMENTS (K'000)

| PROJECT COST | 2004 Actual | 2005 Budget | 5 Year Total | 2006 | 2007 | 2008 | 2009 | 2010 |
|-----------------------------------|----------------|----------------|-----------------|---------|---------|---------|------|------|
| DIRECT PROJECT COST | | | | | | | | |
| Current Expenditure | | | | | | | | |
| Personal Emoluments | | | | | | | | |
| Goods and Other Services | | 3,285.7 | 4,100.1 | 1,600.1 | 1,500.0 | 1,000.0 | | |
| Current Transfers | | | | | | | | |
| Sub-Total | | 3,285.7 | 4,100.1 | 1,600.1 | 1,500.0 | 1,000.0 | | |
| Capital Expenditure | | | | | | | | |
| Acquisition of Existing Assets | | | | | | | | |
| Capital Formation | | 1,000.0 | 2,710.0 | 1,210.0 | 1,000.0 | 500.0 | | |
| Capital Transfers | | | | | | | | |
| Sub-Total | | 1,000.0 | 2,710.0 | 1,210.0 | 1,000.0 | 500.0 | | |
| A TOT DIRECT PROJECT COST | | 4,285.7 | 6,810.1 | 2,810.1 | 2,500.0 | 1,500.0 | | |
| Technical Assistance | | | | | | | | |
| Project Preparation | | | | | | | | |
| Advisory | | | | | | | | |
| Training | | | | | | | | |
| Equipment | | | | | | | | |
| B TOT TECHNICAL ASSISTANCE | | | | | | | | |
| TOTAL PROJECT COST (A+B) | | 4,285.7 | 6,810.1 | 2,810.1 | 2,500.0 | 1,500.0 | | |
| FINANCING SOURCES | | | | | | | | |
| IDENTIFIED FINANCING | | | | | | | | |
| Direct Project Financing: | | | | | | | | |
| Government Contributions: | | | | | | | | |
| a) Government Input | | | 1,000.0 | | 500.0 | 500.0 | | |
| b) Self Generating Revenue | | | | | | | | |
| Loan | | | | | | | | |
| Grant | | 4,285.7 | 3,000.0 | | 2,000.0 | 1,000.0 | | |
| C TOTAL DIRECT FINANCING | | 4,285.7 | 4,000.0 | | 2,500.0 | 1,500.0 | | |
| D Technical Assistance | | | | | | | | |
| TOTAL FINANCING (C+D) | | 4,285.7 | 4,000.0 | | 2,500.0 | 1,500.0 | | |
| FINANCING SOUGHT | | | | | | | | |
| Direct Project Cost (A-C) | | | 2,810.1 | 2,810.1 | | | | |
| Technical Assistance (B-D) | | | | | | | | |
| TOTAL FINANCING SOUGHT | | | 2,810.1 | 2,810.1 | | | | |

CURRENT DONOR INVOLVEMENT

Currently funded by AusAID.

POTENTIAL DONOR INVOLVEMENT

Outside sources of funds may be sought in the near future.

2006 Budget Votes for this PIP are :-

56231011202 AUS CONTRIBUTION TO NAT. AGRIC. RESEARCH

PIP NUMBER: 2042

PROJECT NAME: RICE AND GRAIN RESEARCH PROGRAMME

EXECUTING AGENCY: National Agriculture Research Institute

PROJECT OBJECTIVIES:

The objective of the project is to contribute to improve productivity, quality and production, develop marketing and demand, and enhance entrepreneurial skills in the rice and grain sector of PNG agriculture through applied, adaptive and development oriented research on all facets of grain and rice crops from production, protection, processing and marketing to demand and consumption.

PROJECT STATUS:

Staff continuing with literature review, development of land, soil and water for multiple blocks, review ongoing for rice pest management Multi-site trials done around the country. A dam was built at Bubia at a cost of over K17000. Six(6) rice paddies for research and demonstrati on purposes have been planted already.

PROJECT COMPONENTS:

The programme has eight components - (1) Review of research and development; (2) Management and evaluation of genetic materials; (3) Assessment and adaptability of crops and their species; (4) Crop management practices; (5) Cropping system integration; (6) Soil and water pest management; (7) Small-scale mechanization for crop cultivation and post harvest operations; (8) Farming systems Research; (9) Applied Research- Processing, Storage, Packaging and Transportatio n (10)Economics of Grain Production under Various Farming Environment; (11)Market Research; (12)Complementary Research: Feed Formulation and advanced processing; (13)Skills in Enterprise Development and Management; (14)Mapping of Areas suitable for rice and grain farming (15)Development of seed supply systems; (16)Provision of information, Training and Education and Research and Policy Advice on Food and Nutrition.

PROJECT LOCATION:

The project is located at the main Grain Research Centre in Lae with research extensions to smallholder farmers in Sepik, Madang, Morobe, East New Britain, Bougainville and Central Provinces.

PROJECT JUSTIFICATION:

Rice and Grains have emerged strongly during the post war era and by now have become prominent in the PNG food basket; contributing a significant part to national nutrition and calorie requirements, and thereby playing critical role in National Food Security. Reseach in this programme is vital so as to support the National Food Security policy in PNG.

PROJECT CAPACITY:

NARI has the Insitutional Capacity to implement the project with its existing research facilities and research areas through out the country.

PROJECT BENEFICIARIES:

The main beneficiaries of the project would be smallholder farmers, having access to better techniques and methods of grain and rice farming and production. Also the People of Papua New Guinea will benefit by being able to consume our own domestically produced and processed rice and grain products.

PROJECT SUSTAINABILITY

The project can be sustained through better specialist manpower and research facilities provided by NARI.

2042 RICE AND GRAIN RESEARCH PROGRAMME

ESTIMATED TOTAL PROJECT COST 820.0 ESTIMATED DURATION OF THE PROJECT 1.0 Years

EXPENDITURE PROJECTION AND FINANCING REQUIREMENTS (K'000)

| PROJECT COST | 2004 Actual | 2005 Budget | 5 Year Total | 2006 | 2007 | 2008 | 2009 | 2010 |
|-----------------------------------|----------------|----------------|-----------------|-------|-------|-------|------|------|
| DIRECT PROJECT COST | | | | | | | | |
| Current Expenditure | | | | | | | | |
| Personal Emoluments | | | 193.5 | 64.5 | 64.5 | 64.5 | | |
| Goods and Other Services | | 300.0 | 536.5 | 286.5 | 150.0 | 100.0 | | |
| Current Transfers | | | | | | | | |
| Sub-Total | | 300.0 | 730.0 | 351.0 | 214.5 | 164.5 | | |
| Capital Expenditure | | | | | | | | |
| Acquisition of Existing Assets | | | | | | | | |
| Capital Formation | | | 147.0 | 49.0 | 49.0 | 49.0 | | |
| Capital Transfers | | | | | | | | |
| Sub-Total | | | 147.0 | 49.0 | 49.0 | 49.0 | | |
| A TOT DIRECT PROJECT COST | | 300.0 | 877.0 | 400.0 | 263.5 | 213.5 | | |
| Technical Assistance | | | | | | | | |
| Project Preparation | | | | | | | | |
| Advisory | | | | | | | | |
| Training | | | | | | | | |
| Equipment | | | | | | | | |
| B TOT TECHNICAL ASSISTANCE | | | | | | | | |
| TOTAL PROJECT COST (A+B) | | 300.0 | 877.0 | 400.0 | 263.5 | 213.5 | | |
| FINANCING SOURCES | | | | | | | | |
| IDENTIFIED FINANCING | | | | | | | | |
| Direct Project Financing: | | | | | | | | |
| Government Contributions: | | | | | | | | |
| a) Government Input | | | 477.0 | | 263.5 | 213.5 | | |
| b) Self Generating Revenue | | | | | | | | |
| Loan | | | | | | | | |
| Grant | | | | | | | | |
| C TOTAL DIRECT FINANCING | | | 477.0 | | 263.5 | 213.5 | | |
| D Technical Assistance | | | | | | | | |
| TOTAL FINANCING (C+D) | | | 477.0 | | 263.5 | 213.5 | | |
| FINANCING SOUGHT | | | | | | | | |
| Direct Project Cost (A-C) | | 300.0 | 400.0 | 400.0 | | | | |
| Technical Assistance (B-D) | | | | | | | | |
| TOTAL FINANCING SOUGHT | | 300.0 | 400.0 | 400.0 | | | | |

CURRENT DONOR INVOLVEMENT

The project is currently fully funded by Government.

POTENTIAL DONOR INVOLVEMENT

Further assistance may be sought from donors to assist in the implementation of the project.

2006 Budget Votes for this PIP are :-

56231011208 RICE AND GRAIN RESEARCH PROGRAMME

PIP NUMBER: 2088

PROJECT NAME: ACIAR RESEARCH AND DEVELOPMENT

EXECUTING AGENCY: National Agriculture Research Institute

PROJECT OBJECTIVES:

The objective is to provide research & development planning and management services into AusAID's program of agricultural and rural development agreed with the government of PNG. It will assist PNG research capacity in collaborative research, information sharing with outcome benefiting both countries.

PROJECT STATUS:

ACIAR's collaborative program of agricultural research with PNG commenced in 1983 and will continue on to 2004. Four projects have been funded by ACIAR so far.

PROJECT COMPONENTS:

Program has two components: Renewable Resource Development and Capacity Building.

PROJECT LOCATION:

Program has projects located nationwide.

PROJECT JUSTIFICATION:

PNG has large renewable resources sector which if fully developed, will benefit the country and its people.

PROJECT CAPACITY:

It is anticipated that the project will enhance the capacity of the participating institutions and transfer skills & knowledge to Papua New Guineans. Thus the Papua New Guineans will have the capacity

PROJECT BENEFICIARIES:

The beneficiaries will be the participating institutions, staff, the people and the farmers and the nation as a whole.

PROJECT SUSTAINABILITY

Upon completion of the projects, the activities will be included in the recurrent budget of the participating organisations.

2088 ACIAR RESEARCH AND DEVELOPMENT

ESTIMATED TOTAL PROJECT COST 2,923.1 ESTIMATED DURATION OF THE PROJECT 5.0 Years

EXPENDITURE PROJECTION AND FINANCING REQUIREMENTS (K'000)

| PROJECT COST | 2004 Actual | 2005 Budget | 5 Year Total | 2006 | 2007 | 2008 | 2009 | 2010 |
|--|----------------|----------------|-----------------|---------|---------|---------|------|------|
| DIRECT PROJECT COST | | | | | | | | |
| Current Expenditure | | | | | | | | |
| Personal Emoluments | | | | | | | | |
| Goods and Other Services | | 4,761.9 | 6,000.0 | 3,000.0 | 2,000.0 | 1,000.0 | | |
| Current Transfers | | | | | | | | |
| Sub-Total | | 4,761.9 | 6,000.0 | 3,000.0 | 2,000.0 | 1,000.0 | | |
| Capital Expenditure | | | | | | | | |
| Acquisition of Existing Assets | | | | | | | | |
| Capital Formation | | | 3,240.0 | 1,740.0 | 1,000.0 | 500.0 | | |
| Capital Transfers | | | | | | | | |
| Sub-Total | | | 3,240.0 | 1,740.0 | 1,000.0 | 500.0 | | |
| A TOT DIRECT PROJECT COST | | 4,761.9 | 9,240.0 | 4,740.0 | 3,000.0 | 1,500.0 | | |
| Technical Assistance | | | | | | | | |
| Project Preparation | | | | | | | | |
| Advisory | | | | | | | | |
| Training | | | | | | | | |
| Equipment | | | | | | | | |
| B TOT TECHNICAL ASSISTANCE | | | | | | | | |
| TOTAL PROJECT COST (A+B) | | 4,761.9 | 9,240.0 | 4,740.0 | 3,000.0 | 1,500.0 | | |
| FINANCING SOURCES | | | | | | | | |
| IDENTIFIED FINANCING | | | | | | | | |
| Direct Project Financing: | | | | | | | | |
| Government Contributions: | | | | | | | | |
| a) Government Input | | | | | | | | |
| b) Self Generating Revenue | | | | | | | | |
| Loan | | | | | | | | |
| Grant | | | 4,500.0 | | 3,000.0 | 1,500.0 | | |
| C TOTAL DIRECT FINANCING | | | 4,500.0 | | 3,000.0 | 1,500.0 | | |
| D Technical Assistance | | | | | | | | |
| TOTAL FINANCING (C+D) | | | 4,500.0 | | 3,000.0 | 1,500.0 | | |
| FINANCING SOUGHT | | | | | | | | |
| Direct Project Cost (A-C) | | 4,761.9 | 4,740.0 | 4,740.0 | | | | |
| Technical Assistance (B-D) | | | | | | | | |
| TOTAL FINANCING SOUGHT | | 4,761.9 | 4,740.0 | 4,740.0 | | | | |

CURRENT DONOR INVOLVEMENT

AusAID.

POTENTIAL DONOR INVOLVEMENT

Nil.

2006 Budget Votes for this PIP are :-

56231011210 ACIAR RESEARCH AND DEVELOPMENT

PIP NUMBER: 2170

PROJECT NAME: HIGH ALTITUDE HIGHLANDS RESEARCH PROGRAM

EXECUTING AGENCY: National Agriculture Research Institute

PROJECT OBJECTIVIES:

To research into the most suited forms of frost resistant food crop cultivation, and to make available a wide range of frost resistant crops for both consumption and cash income.

PROJECT STATUS:

An ongoing research programme into high altitude resistant food crops with support from the Chinese Government. Funding for 2006 is to continue the research program and recruitment of appropriate qualified research scientist. The project is in the third stage of implementation.

PROJECT COMPONENTS:

There are two (2) main components, namely: (1) GoPNG is responsible for the infrastructure component which includes provision of road, water supply, power supply, etc; and (2) Chinese Gov't is responsible for the Technical Assistance component which includes Laboratory Buildings, Field and laboratory Research, Training others.

PROJECT LOCATION:

The project is located in Kandep in the Enga Province.

PROJECT JUSTIFICATION:

Kandep, including the whole of Enga province, is a high altitude area where frost disaster is an annual occurrence. Frost often destroys food gardens including seedlings, which are the very core of livelihood. There is a need to research into most suited forms of food crops, which can withstand the effect of frost that can also be propagated in cultivation, and to sustain the livelihood of the people. The conduct of this research is extension driven.

PROJECT CAPACITY:

The project is being implemented with technical assistance from the Chinese Government, NARI and FPDC.

PROJECT BENEFICIARIES:

The people in and around the vicinity of the project area as well as the people of Enga and neighbouring Highlands Provinces. There is also potential for benefits to be extended to other provinces.

PROJECT SUSTAINABILITY

This activity will be absorbed into the recurrent activities of NARI.

2170 HIGH ALTITUDE HIGHLANDS RESEARCH PROGRAM

ESTIMATED TOTAL PROJECT COST 0.0 ESTIMATED DURATION OF THE PROJECT 5.0 Years

EXPENDITURE PROJECTION AND FINANCING REQUIREMENTS (K'000)

| PROJECT COST | 2004 Actual | 2005 Budget | 5 Year Total | 2006 | 2007 | 2008 | 2009 | 2010 |
|-----------------------------------|----------------|----------------|-----------------|-------|-------|-------|------|------|
| DIRECT PROJECT COST | | | | | | | | |
| Current Expenditure | | | | | | | | |
| Personal Emoluments | | | 221.4 | 73.8 | 73.8 | 73.8 | | |
| Goods and Other Services | | 250.0 | 337.7 | 187.7 | 100.0 | 50.0 | | |
| Current Transfers | | | | | | | | |
| Sub-Total | | 250.0 | 559.1 | 261.5 | 173.8 | 123.8 | | |
| Capital Expenditure | | | | | | | | |
| Acquisition of Existing Assets | | | | | | | | |
| Capital Formation | | 50.0 | 115.5 | 38.5 | 38.5 | 38.5 | | |
| Capital Transfers | | | | | | | | |
| Sub-Total | | 50.0 | 115.5 | 38.5 | 38.5 | 38.5 | | |
| A TOT DIRECT PROJECT COST | | 300.0 | 674.6 | 300.0 | 212.3 | 162.3 | | |
| Technical Assistance | | | | | | | | |
| Project Preparation | | | | | | | | |
| Advisory | | | | | | | | |
| Training | | | | | | | | |
| Equipment | | | | | | | | |
| B TOT TECHNICAL ASSISTANCE | | | | | | | | |
| TOTAL PROJECT COST (A+B) | | 300.0 | 674.6 | 300.0 | 212.3 | 162.3 | | |
| FINANCING SOURCES | | | | | | | | |
| IDENTIFIED FINANCING | | | | | | | | |
| Direct Project Financing: | | | | | | | | |
| Government Contributions: | | | | | | | | |
| a) Government Input | | 250.0 | 374.6 | | 212.3 | 162.3 | | |
| b) Self Generating Revenue | | | | | | | | |
| Loan | | | | | | | | |
| Grant | | | | | | | | |
| C TOTAL DIRECT FINANCING | | 250.0 | 374.6 | | 212.3 | 162.3 | | |
| D Technical Assistance | | | | | | | | |
| TOTAL FINANCING (C+D) | | 250.0 | 374.6 | | 212.3 | 162.3 | | |
| FINANCING SOUGHT | | | | | | | | |
| Direct Project Cost (A-C) | | 50.0 | 300.0 | 300.0 | | | | |
| Technical Assistance (B-D) | | | | | | | | |
| TOTAL FINANCING SOUGHT | | 50.0 | 300.0 | 300.0 | | | | |

CURRENT DONOR INVOLVEMENT

Technical Assistance from the Chinese Government.

POTENTIAL DONOR INVOLVEMENT

Nil.

2006 Budget Votes for this PIP are :-

56231011209 HIGH ALTITUDE HIGHLANDS RESEARCH PROGRAM