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13 October 2000

Mr Wayne McDonald  
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NICO House, City Center  
Private Bag 30455  
Lilongwe 3  
MALAWI

Dear Mr McDonald,

*Sub: Submission of quarterly program performance reports.*

*Ref: Grant No. 612-G-00-99-00221-00; Project No. 612-0235 – Project Title:  
Rural Prosperity is Nation's Economic Stability – A partnership  
approach to attain sustainable production of groundnut and pigeonpea  
in smallholder agriculture for quality diet, household food security,  
and poverty alleviation in Malawi.*

We are pleased to submit three copies of the quarterly program performance report for the period July to September 2000 on the above-mentioned project. You will be pleased to note that good progress continues to be made and that milestones by and large have been achieved.

Our Finance Division will be sending you the relevant Financial Status Reports separately.

We thank you and staff of the USAID-Malawi for the support on this project.

With best wishes,

Yours sincerely,

Jugu J Abraham  
Head, Donor Relations

Encl.: As above.

Copy: PPC/CDIE/DI ACQUISITION, Room M.01-010, Agency for International  
Development, 1300 Pennsylvania Ave N.W., Washington, D.C. 20523, USA.  
(With two copies of the report)

Dr J M Lenné / Dr P Subrahmanyam / Dr R Ortiz / Mr K Akuffo-Akoto (ICRISAT)

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**Grant No. 612-G-00-99-00221-00**  
**Project No. 612-0235**

**Rural Prosperity is Nation's Economic Stability: A Partnership Approach  
to Attain Sustainable Production of Groundnut and Pigeonpea  
in Smallholder Agriculture for Quality Diet, Household Food Security, and  
Poverty Alleviation in Malawi**

**Quarterly Report**  
**July to September 2000**

**A.J. Chiyembekeza, P. Subrahmanyam and P.J.A. vander Merwe**

*Submitted to*  
**United States Agency for International Development (USAID)**  
**Malawi**

**International Crops Research Institute for the Semi-Arid Tropics (ICRISAT)**

**in partnership with**

**The Ministry of Agriculture and Irrigation Development-Malawi**

**United States Agency for International Development (USAID), Malawi**

*October 2000*

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## 1. Summary

This quarterly report highlights activities carried out during the period July to September 2000, progress made to date, and activities planned for the next quarter (October to December 2000). The main activities of this quarter included: field days on pigeonpea and a pigeonpea training course; visits to all breeder seed and basic seed pigeonpea fields to give advice on harvesting, threshing and packaging; shelling, cleaning, and packaging of all groundnut breeder seed produced at Chitedze; monitoring progress on shelling and grading of basic groundnut seed from all contract growers.

During the first two weeks of July, we conducted pigeonpea field days in collaboration with NASFAM, PLAN International, and World Vision Malawi. The objectives of these field days were: 1) to demonstrate the differences among four pigeonpea varieties (ICP 9145, ICEAP 00020, ICEAP 00040, and a local) that were planted on several demonstration plots; 2) to discuss with the farmers the most appropriate cultural practices to be followed for increased pigeonpea production, and; 3) to offer an opportunity to farmers to discuss and learn from each other the best cultural practices for increased pigeonpea production. In total, 15 field days were held in which 1,315 farmers participated. Of all the participants to these field days, 48% were women.

A pigeonpea production technology training course was conducted from 16 to 20 July 2000, at Motel Paradise, Blantyre. The objectives of the course were: 1) to develop and upgrade skills of field-level technicians from research, extension, and NGO communities in the recent pigeonpea production technologies; 2) to empower all participants with skills to increase pigeonpea production, and; to encourage cross-fertilization of ideas among participants through field visits and discussions.

Forty-seven participants representing CARE Malawi, World Vision Malawi, NASFAM, PLAN International, Save the Children Federation Inc, Bunda College of Agriculture, the Malawi Agroforestry Extension Project (MAFE), and the Ministry of Agriculture and Irrigation Development attended the course. In addition we also had six participants from Mozambique representing CARE Mozambique, World Vision Mozambique, TechnoServe Mozambique and INIA Mozambique.

Threshing, grading and packaging of pigeonpea breeder seed is completed. We have 1 t each of ICP 9145 and ICEAP 00040 and 0.5 t of ICEAP 00020. Shelling and grading of groundnut breeder seed is in progress.

All groundnut and pigeonpea growers were visited to monitor progress on harvesting, shelling, grading and packaging. We have already received over 60 t of groundnut basic seed which is being treated with Thiram and packaged in 40 kg labeled bags. The remainder of the groundnut basic seed and pigeonpea will be delivered during the next quarter.

## **2. Objectives of the Project**

The project has three main objectives:

- To provide high quality breeder seed and basic seed of high-yielding, disease-resistant groundnut and pigeonpea varieties to various stakeholders in Malawi.
- To increase awareness of the value of improved varieties in enhancing the production of groundnut and pigeonpea among smallholder and commercial farmers through on-farm demonstrations.
- To strengthen the capacity of DARTS, the Department of Extension, and relevant NGOs in transferring groundnut and pigeonpea production technologies through short-term training courses.

## **3. Activities carried out during the period July to September 2000**

### **3.1. Objective 1: To provide high quality breeder seed and basic seed of high-yielding, disease-resistant groundnut and pigeonpea varieties to various stakeholders in Malawi.**

#### **3.1.1. Progress on shelling, threshing, grading and packaging of groundnut and pigeonpea breeder seed crops**

##### **3.1.1.1. Groundnut breeder seed crop**

Processing of all breeder seed from Chitedze Research Station was completed. The lot from Chitala Experimental Station is being processed. The total quantity of breeder seed expected still remains at 15 t.

##### **3.1.1.2. Pigeonpea breeder seed crop**

All the pigeonpea breeder seed crop from Baka and Chitala Experimental Stations have been processed. We have at the moment 1 t of breeder seed of each of ICP 9145 and ICEAP 00040 and 0.5 t of ICEAP 00020.

#### **3.1.2. Monitoring of groundnut and pigeonpea basic seed crops**

We visited all farmers on the contract basic seed production program for both groundnut and pigeonpea and advised them on processing and packaging of the seed. The yields were high in some cases but low in others. On average, the small-scale farmers produced more crop per unit area of land as compared to the large commercial farmers.

### 3.1.2.1. Contract groundnut basic seed crop

All except one of the small-scale growers have already delivered. While for the large growers, only Macpherson has finished delivering. Press Agriculture and Hatzco Ltd. are yet to finish deliveries. The quantities of seed delivered are presented in Table 1.

**Table 1. Quantities of seed delivered to ICRISAT Lilongwe as at 30 September 2000**

Name of farmer or estate	Area planted (ha)	Quantity of seed delivered (t)	Remarks
D.W.K. Macpherson	50	18.8	Finished delivering, the quantity of seed delivered represents only 25% of the expected yield <sup>1</sup>
Press Agriculture	40	19.4	Still delivering
Hatzco Ltd.	30	5.0	Still delivering
T.W. Kampingo	5	4.7	Finished delivering, the seed quantity delivered represents 79% of the expected yield
Dr. E.H. Chilembwe	5	3.1	Finished delivering, the seed quantity delivered represents 77% of the expected yield
Dr. I.M.G. Phiri	5	4.7	Finished delivering, the seed quantity delivered is 56% higher than expected
Mrs. Rose Nyirenda	5	1.1	Finished delivering, the seed quantity delivered represents 55% of the expected yield
Mr. E.B. Mahuka	5	-	Not yet delivered
Mr. Khembo D. Phiri	5	3.9	Finished delivering; the quantity delivered is 30% higher than expected

**1. The percentage given is based on the expected yield presented in the last quarterly report.**

It is evident from Table 1 that the overall quantity of groundnut basic seed will be lower than expected by almost 50%. The low yields are mostly attributed to the poor on-set of the planting rains this year, which resulted in late planting. Consequently some of the fields were badly hit by rosette, resulting in lower than expected seed quantities.

As a strategy for the next season, we will increase hectareage under the small to medium growers and reduce the numbers of the large commercial growers. We will increase the area by 50 hectares to make up for the loss in yield this year.

### 3.1.2.2. Contract pigeonpea basic seed crop

All farmers have finished harvesting and threshing. Grading and packaging is in progress in readiness for delivery. Deliveries of the seed that is already processed will be made soon. The season was not particularly congenial for pigeonpea. Poor onset of the planting rains, a severe cold spell during the flowering stage, and heavy pod infestation by insect pests led to drastic reduction in yield. Hence, we realized only a total of 15 t of pigeonpea from the three varieties (Table 2).

**Table 2. Quantities of basic pigeonpea seed realized from contract growers during the 1999/2000 growing season.**

Name of farmer or estate	Variety	Area planted (ha)	Quantity of seed realized (t)	Remarks
Speedys 1 (Chadzunda)	ICEAP 00040	20	4.25	Represents only 21% of the expected yield
Speedys 2 (Chadzunda)	ICEAP 00020	20	0.65	Represents only 3% of the expected yield
Speedys 3 (Mapanga)	ICP 9145	20	2.60	Represents only 13% of the expected yield
Gulugufe Farm	ICEAP 00040	10	2.50	Represents 83% of the expected yield
Kamata Limited	ICP 9145	10	2.50	Represents only 25 % of the expected yield
Mr. E.D. Pyman	ICP 9145	5	0.75	Represents only 11% of the expected yield
Mr. L.M. Daza	ICP 9145	5	0.534	Represents only 18% of the expected yield

### 3.2. **Objective 2. To increase awareness of the value of improved varieties in enhancing the production of groundnut and pigeonpea among smallholder and commercial farmers through on-farm demonstrations.**

#### 3.2.1. Field days:

During the first two weeks of July, we conducted pigeonpea field days in collaboration with NASFAM, PLAN International, and World Vision Malawi.

The objectives of these field days were:

- To demonstrate the differences among four pigeonpea varieties (ICP 9145, ICEAP 00020, ICEAP 00040, and a local) that were planted on several demonstration plots.
- To discuss with the farmers the most appropriate cultural practices to be followed for increased pigeonpea production.
- To offer an opportunity to farmers to discuss and learn from each other the best cultural practices for increased pigeonpea production.

In total 15 field days were held. Seven field days were conducted in collaboration with NASFAM in areas of Ntcheu, Mangochi, Thyolo, and Mulanje Districts; four in collaboration with World Vision Malawi in areas of Mulanje and Chiradzulu districts, and another 4 in collaboration with PLAN International held in areas of Mzuzu Agricultural Development Division. In total, 1,315 farmers participated at these field days. Of all the participants to these field days, 48% were women. Details of the field days are presented in Table 3.

**Table 3. A summary of pigeonpea field days conducted during the quarter.**

NGO	Number of field days held	Number of farmers attending		
		Women	Men	Total
NASFAM	7	260	286	546
World Vision Malawi	4	202	212	414
PLAN International	4	174	181	355
<b>TOTAL</b>	<b>15</b>	<b>636</b>	<b>679</b>	<b>1315</b>

**3.3. Objective 3. To strengthen the capacity of DARTS, the Department of Extension, and relevant NGOs in transferring groundnut and pigeonpea production technologies through short-term training courses.**

**3.3.1. Pigeonpea production training course:**

A three-day training course on Pigeonpea Production Technologies was held from 17-19 July 2000 at Motel Paradise in Blantyre. The course was organized with three objectives in mind: 1) to develop and upgrade skills of field-level technicians from research, extension, and NGO

communities in the recent pigeonpea production technologies; 2) to empower all participants with skills to increase pigeonpea production, and 3) to encourage cross-fertilization of ideas among participants through pigeonpea field visits and discussions.

Forty-seven participants, five of whom were women, attended the course. The participants were drawn from Malawi and Mozambique. From Malawi, the participants came from the Department of Agricultural Research and Technical Services (DARTS); the four Agricultural Development Divisions (ADDs) that grow pigeonpea in Malawi (Salima ADD, Blantyre ADD, Shire Valley ADD, and Machinga ADD); Bunda College of Agriculture; the Malawi Agroforestry Extension Project (MAFE), and such NGOs as NASFAM, PLAN International, World Vision Malawi, Save the Children Federation, Inc., and CARE Malawi.

From Mozambique, we had six participants. One each came from CARE Mozambique, TechnoServe Mozambique, and INIA Mozambique while three participants came from World Vision Mozambique.

#### **4. Comparison of Actual Accomplishments with the Goals and Objectives Established for the Period 1 July to 30 September 2000**

Achievements made this quarter are presented in Table 4. Essentially all planned activities for the period 1 July to 30 September 2000 were carried out. No major deviations occurred.

#### **5. Activities Planned for the Next Quarter**

Planned activities for the next quarter (October -December 2000) include:

- Land preparation and planting of both groundnut and pigeonpea breeder seed crops.
- Identification of contract seed growers for the 2000/2001 growing season.
- Land verification and preparation of contracts for the 2000/2001 growing season.
- Conduct a one-day training course for contract seed growers and signing of contracts.
- Distribution of seed to contract growers.
- Packaging and distribution of seed for on-farm demonstrations.
- Sale of basic seed.

**Table 4. Comparison of actual accomplishments with the goals and objectives established for the period 1 July to 30 September 2000.**

Objective	Planned activities for the quarter (July -September 2000)	Accomplishment	Remarks
1. To provide high quality breeder seed and basic seed of high-yielding, disease-resistant groundnut and pigeonpea varieties to various stakeholders in Malawi.	<ol style="list-style-type: none"> <li>1. Field visits to all basic seed growers to ascertain isolation distances required for certification.</li> <li>2. Visit Baka and Chitala Experimental Stations to monitor ICP 9145, ICEAP 00020 and ICEAP 00040 pigeonpea breeder seed production.</li> <li>3. Shelling, cleaning and packaging of groundnut breeder seed.</li> </ol>	<p>-Visited all basic seed growers as planned and provided advice on crop processing.</p> <p>-Visited Baka and Chitala Experimental Stations to monitor progress..</p> <p>Completed shelling groundnut breeder seed planted at Chitedze.</p>	<p>-Good progress was being made by all farmers. Some have already delivered their seed and have already been paid for it.</p> <p>-Generally very good pigeonpea crop. All the three varieties have been harvested, threshed and graded and the seed delivered to Chitedze for packaging. A total of 2.5 t of good quality seed from the three varieties has been realized.</p> <p>-Approximately 7 t seed was realized.</p>
2. To increase awareness of the value of improved varieties in enhancing the production of groundnut and pigeonpea among smallholder and commercial farmers through on-farm demonstrations.	Conduct on-farm demonstrations and farmer pigeonpea field days for NASFAM, PLAN International, and World Vision Malawi.	<p>-Demonstration of new varieties at 1,100 locations in Malawi.</p> <p>-4 Field Days were conducted in collaboration with PLAN International and World Vision Malawi in areas of Mzuzu, Thyolo and Chiradzulu, respectively; 7 Field Days were conducted in collaboration with NASFAM in areas of Ntcheu, Mangochi, Thyolo, and Mulanje districts.</p>	<p>-All demonstrations were very well managed. Pigeonpeas were nearing maturity and drying in some cases.</p> <p>-355 farmers attended PLAN field days; 414 farmers attended World Vision field days while 546 farmers attended NASFAM field days.</p>
3. To strengthen the capacity of DARTS, the Department of Extension and relevant NGOs in transferring groundnut and pigeonpea production through short-term training courses.	Conduct a pigeonpea training course.-	A pigeonpea training course was conducted from 16-20 July 2000.	47 participants attend this course. Six of the participants came from Mozambique.

**Conclusion:** All planned activities for the period 1 July to 30 September 2000 were accomplished. No major deviations occurred.