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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 January to March 2001

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(In Partnership with The Ministry of Agriculture and Irrigation – Malawi)

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1.0 Summary

This quarterly report highlights activities carried out during the period January to March 2001, progress to date, and activities planned for the next quarter (April to June 2001). The main activities included: visiting breeder seed and all contract basic seed production fields for groundnut and pigeonpeas to monitor crop development and assess general crop hygiene in terms of management. A Government Seed Inspector was also taken to all fields to inspect the crop for registration and subsequent seed certification.

Towards the end of the quarter, we started conducting a series of field days in collaboration with NGO's such as CARE, NASFAM, World Vision, just to mention a few. The objectives of these field days are: 1) to demonstrate the differences among four groundnut varieties: three improved varieties, CG 7, ICGV-SM 90704, and JL 24 and a farmer's local variety; 2) to discuss with the farmers the most appropriate cultural practices to be followed for increased groundnut production; and 3) to offer an opportunity to farmers to discuss and learn from each other the best cultural practices for increased groundnut production. These field days are continuing. Full details will be presented in the next quarterly report.

We conducted a Groundnut Production Technology Training Course at the Natural Resources College, Lilongwe from 7-9 March 2001. Sixty participants attended the course, 15 of them were women. The participants came from the Ministry of Agriculture and Irrigation and the NGO community in Malawi, Mozambique, and Zambia. The largest number of participants came from the Ministry of Agriculture and Irrigation (33). Fourteen participants came from the NGO community in Malawi (CARE 4, Christian Service Committee 2, NASFAM 4, OXFAM 2, and GTZ Integrated Food Security Project 2). We also had three participants from CARE Mozambique and four participants from CLUSA-NRM-Zambia.

The objectives of the courses were: 1) to develop and upgrade skills of the participants in current groundnut production technologies, 2) to empower the participants with skills to increase groundnut production, and 3) to encourage cross-fertilization of ideas among participants through field visits and discussions.

Dr. I.M.G. Phiri, presided over the opening session on behalf of the Director of Agricultural Research and Technical Services (DARTS). On behalf of the Ministry of Agriculture and Irrigation and DARTS in particular, Dr. Phiri was very grateful to ICRISAT and USAID for joining hands to organize such a training course.

The three days were indeed very fruitful to the participants as most of them were attending this kind of course for the first time. Speaking on behalf of the participants at the end of the course, Mrs. Margaret Mkandawire of CARE Malawi, thanked ICRISAT for organizing such a course. She assured ICRISAT of the participants' commitment in implementing all that they had learned at this course to increase groundnut production.

2.0 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.

3.0 Activities carried out during the quarter

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. Monitoring of groundnut and pigeonpea breeder seed crops

3.1.1.1 Groundnut breeder seed crop

As reported in the last quarter, we planted 5 ha of CG 7 and 3 ha of ICGV-SM 90704 at Chitala. In addition, we planted 3 ha of ICGV-SM 90704 and 2 ha each of ICG 12991, JL 24, and CG 7 at Chitedze. The crop at Chitala was visited twice during the quarter and was doing very well. CG 7, JL 24, and ICG 12991 planted at Chitedze as well as ICGV-SM 90704, received two sprays of Bravo to control leaf spots in order to maximize seed yields. The crop is now being harvested. A bumper yield is expected from both CG 7 and ICGV-SM 90704.

3.1.1.2 Pigeonpea breeder seed crop

The 7 ha of ICEAP 00040 and the 1 ha of ICP 9145 pigeonpea varieties also planted at Chitala were doing well in spite of sporadic termite attacks. We however, managed to contain the problem through spraying with Karate. The crop is generally doing very well. The short-duration pigeonpea variety, ICPL 87105 planted at Chitedze also performed well. The early set pods from this variety were harvested towards the end of the quarter and harvesting of the remaining pods continues. We expect high yields from the crop.

3.1.2 Monitoring of groundnut and pigeonpea basic seed crops

3.1.2.1 Groundnut and pigeonpea basic seed production:

A total of 25 growers were contracted to produce CG 7, ICGV-SM 90704, and JL 24 groundnut basic seed while 7 farmers were contracted to produce pigeonpea. CG 7 is being produced on 210 ha while ICGV-SM 90704 and JL 24 are being produced on 5 and 4 ha each, respectively. Two visits were made during the quarter. The first visit was made to monitor crop management while the second visit was made with a Government Seed Inspector to achieve the following, which are necessary for crop registration and certification:

- Confirm actual seed fields and hectareage
- Check on adherence to isolation distances and demarcate where applicable
- Confirm land history
- Identify seed origin and source

- Assess crop establishment
- Varietal purity, disease and pest damage assessment, and
- Give advice on seed crop husbandry.

All growers visited were cleared and issued with crop registration certificates with Reg. Nos.: BscGN.. for basic seed groundnut and BscPp.. for basic seed pigeonpea. The numbers will appear on the Certificate to be issued at the end of the season. Two pigeonpea farmers were not visited because of poor access of the roads.

3.2 Objective2: 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 On-farm demonstrations

A total of 1100 demonstrations were distributed to and planted by various NGOs in Malawi. Over 50 field days have been planned and are currently under way in areas where a number of NGOs are in operation. Detailed figures on the field days will be presented in the April-June Quarterly Report.

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 Training Course on groundnut

We organized a Groundnut Production Technology Training course for field technicians. The course was held at the Natural Resources College (NRC), Lilongwe from 7-9 March 2001. The objectives of the course were: 1) to develop and upgrade skills of the participants in current groundnut production technologies, 2) to empower the participants with skills to increase groundnut production, and 3) to encourage cross-fertilization of ideas among participants through field visits and discussions.

The course attracted 60 participants, 15 of them were women. The largest number of participants came from the Ministry of Agriculture and Irrigation (33). Fourteen participants came from the NGO community in Malawi (CARE 4, Christian Service Committee 2, NASFAM 4, OXFAM 2, and GTZ Integrated Food Security Project 2). We also had three participants from CARE Mozambique and four participants from CLUSA-NRM-Zambia.

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The three days were indeed very fruitful to the participants as most of them were attending this kind of course for the first time. Speaking on behalf of the participants at the end of the course, Mrs. Margaret Mkandawire of CARE Malawi, thanked ICRISAT for organizing such a course. She assured ICRISAT of the participants' commitment in implementing all that they had learned at this course to increase groundnut production.

4.0 Comparison of Actual Accomplishments with the Goals and Objectives Established for the Period 1 January to 31 March 2001

Achievements made this quarter are presented in Table 1. Essentially all planned activities for the period under this report were successfully carried out as planned. No major deviations occurred.

Table 1. Comparison of actual accomplishments with the goals and objectives established for the period 1 January to 31 March 2001.

Objective	Planned activities for the quarter (Jan-Mar 2001)	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"> 1. Monitoring of all breeder seed of groundnut and pigeonpea. 2. Monitoring all groundnut and pigeonpea basic seed production fields. 	<p>-Visited all breeder seed plots planted at Chitala and Chitedze.</p> <p>-All basic groundnut and pigeonpea fields were visited and advised the contract growers on good cultural practices.</p> <p>-All growers visited had their crops registered for certification.</p>	<p>Excellent crop establishment.</p> <p>All early planted groundnut and pigeonpea fields were good. High yields are expected.</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 field days.	<p>-Demonstration of new varieties at 1,100 locations in Malawi.</p> <p>-Over 50 field days planned and are currently under way.</p>	-Most demonstrations were very well managed. Groundnuts were nearing maturity.
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 groundnut production training course	<p>-A training course was conducted from 7-9 March 2001 with participants from DARTS, ADDs, WVI, CARE, NASFAM, and ICRISAT.</p> <p>- We also had participation of technicians from CARE Mozambique and CLUSA-NRM- from Chipata Zambia.</p>	60 participants attended the course; 15 of them were women. The rating of the course by the participants was high.

Conclusion: All planned activities for the period 1 January to 31 March 2001 were accomplished. No major deviations occurred.

5.0 Activities planned for the next quarter

The main activities planned for the next quarter (April-June 2001) include:

- Continue with the planned field days
- Field visits to advise contract basic seed growers on harvesting and seed processing procedures.
- Continue harvesting groundnut breeder seed at Chitala and Chitedze.
- Planning for a pigeonpea training course scheduled for July 2001.
- Continue monitoring pigeonpea basic seed production areas and advise contract growers on crop management.
- Three research technicians will be sent to Potchefstroom, South Africa for a week-long training in groundnut processing and storage.