

Karachi
March 21, 1967

To: Amir Ahmed Khan
Secretary of Agriculture
Government of West Pakistan
Lahore

From: Normen E. Borlaug, Wheat Consultant

Subject: Machinery Demonstration Unit at Yusefwala

During March 1967 I visited the Machinery Demonstration Unit (MDU) operating near Montgomery under Adviser James Altfillisch and a staff of about 12 men, and am pleased to submit my observations.

First, I believe the first Machinery Demonstration Unit has already attracted wide attention, and uncovered much useful information for agricultural policy makers.

Second, the MDU has encountered administrative problems in the Agriculture Department which might be solved by a single administrative order from the Secretary.

Let me provide details on each of these points:

Impact of the Machinery Demonstration Unit

1. Even though the machinery was not assembled until late November 1966, it was possible for the crew to plant 109 acres of Mexican dwarf wheat in the vicinity of Montgomery with mechanized procedures. The farmers who own the 109 acres also cultivate 10,370 acres with 11 private tractors. Therefore the demonstration work on 109 acres had wide influence. These landowners have expressed interest in purchasing tractor attachments, as demonstrated by the MDU, including disk ploughs, offset disks, and bund makers.

2. The interest of neighboring farmers is high. No field days were possible during the short planting season, but an average of 40-50 farmers observed the operation at each location.

3. Approximately 100 Government officials including the Governor have visited the Machinery Demonstration Unit.

4. Cost data has been gathered on the mechanical planting of wheat, compared to local methods and the cost data and yield data will be summarized after the harvest in April-May.

5. Four private farmers have consulted Mr. Altfillisch on mechanizing their farms. Two have already expended Rs.125,000 (\$25,000). One farmer is starting a custom machinery rental service for his neighbours.

6. The experience in importing the machinery for the MDU has led the Planning Cell of the Agriculture Department to prepare a paper on the problems of importing agricultural machinery. It is expected that this paper will result in the revision of customs regulations.

7. Policies of the IBRD foreign exchange loan, administered by the Agricultural Development Bank, are being revised to include machinery more suitable to Pakistan.

8. As a result of the machinery maintenance problems on the MDU, John Deere Company is preparing to establish 3 mobile workshops in West Pakistan.

I regard the above developments as highly productive for the first three months of the machinery demonstration.

Summer season (Kharif) plants

The Machinery Demonstration Unit will continue to operate in the Montgomery area for the summer of 1967. Specific fields have not yet been negotiated but the cropping emphasis, in order to develop double cropping with wheat, is expected to concentrate upon:

Maize
Jowar
Cotton

If the Machinery Demonstration Unit can teach farmers how to make use of tractors to the maximum degree on two crops a year, this will help make tractors fully economic.

Training of Tractor Operators, Munshis, and Farm Owners

In the future we hope that arrangements can be made through the Extension Service to use the MDU more effectively for training private personnel. I would hope that arrangements can be made to hold at least two 10 day training courses during the summer kharif season and a similar number during the winter rabi season.

Such courses might include the following:

1. A ten day training course for Tractor Operators (Drivers) employed by private farmers - which would include demonstrations in:
 - (a) Care and maintenance of machinery. This aspect is of prime importance and now neglected.
 - (b) Considerations in land preparation and choice of machinery for a specific job.
 - (c) Considerations in sowing and planting.
 - (d) Handling the crop - cultivation, irrigation, weed control, and insect control.
 - (e) Mechanized harvesting.

During the last two days of the training course the foremen (munshis) and owners from each of the farms from where you have drawn trainees (drivers) should participate. They should be given a briefing on all aspects of the training that you have given to the tractor drivers, so that when the drivers return to the farms where they are employed they will not be blocked from carrying out what they have learned by counter orders from either the munshi or owner.

One additional aspect that might be emphasized during the last two days - for owner and munshi - would be a discussion on choice of machinery. What equipment is needed to do a good job of land preparation, seeding, and care of row crops and rabi crops. This will permit the owners to give first consideration to those implements that are basic to all good mechanized farming and add other items as they can be justified. Much capital is wasted in unwise choice of implements at the present time.

Second Machinery Demonstration Unit

I have concurred in the recommendations of the resident agricultural advisers that the purchase of a second Machinery Demonstration Unit should be postponed until we have one full year of experience with this unit, and can decide from fuller experience whether a second Demonstration Unit is needed to accomplish the studies needed.

Administrative problems

At my request Mr. Altfillisch has reviewed the difficulties he has encountered in the administration of funds and personnel.

I believe these problems could be minimized if the Secretary's office were to issue a directive containing the following points, which you would need to rewrite to fit your departmental regulations:

1) Responsibility for supervising the Machinery Demonstration Unit should be transferred to the Director of Agriculture, Lahore Region, and the disbursement of expenditures should be made by the Chief Accountant in the office of the Director of Agriculture.

2) The revolving fund of Rs.15,000 advanced under the Wheat Improvement Scheme for current expenses, should continue to be used for this purpose. This fund now covers:

Pay of non-gazetted employees
POL
Local machinery repairs

3) Housing for the staff of the Machinery Demonstration Unit should be authorized at the Maize Research Farm at Yusefwala.

4) With the help of the Director of Agriculture, Lahore Region, the two posts for gazetted officers should be filled with men who are qualified and interested in machinery work, and can benefit from training under the foreign adviser. The adviser is willing to interview candidates proposed by the Department and help identify the needed qualifications.

5) A sub-allocation of Rs.500 should be made available to one of the gazetted officers on the project for payment of local expenses at Montgomery, and these expenses should be accounted for and the funds replenished, once every 30 days.

6) All non-gazetted staff should be paid on a monthly basis, not on a daily basis, in order to bring about more continuous service.

Conclusion

Mr. Secretary, you made a sound decision when you sponsored this Machinery Project. It is giving promise of great usefulness.

With the minor administrative changes I have proposed, I believe this project will complete its first year of service with a report to you which will be of great value to the Government.

I would therefore appreciate your giving personal attention to the necessary administrative directive.

(Signed) Norman E. Borlaug