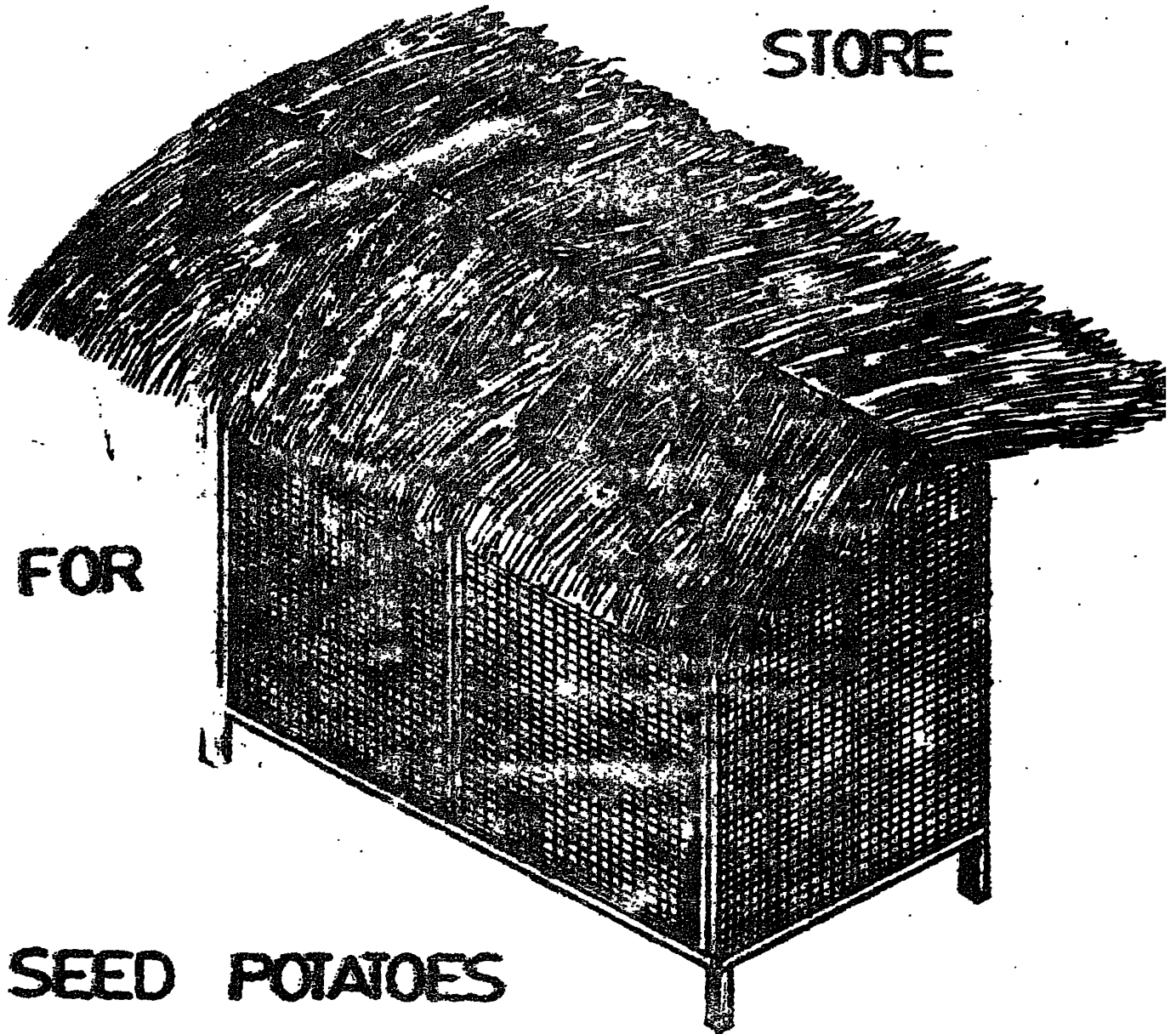


DIFFUSE LIGHT STORES FOR SEED POTATOES  
(Credit Scheme)

*W. V. Albert*



BASIC FEATURES OF A SEED POTATO STORE

- (1) loading density: 20-22 lbs/ft<sup>2</sup>  
eg. for a 6'x4' shelf 5 boxes of 50 kg.
- (2) Light penetration: (a) Optimum distance between shelves 9-10 in. to allow sufficient light penetration.

(b) Where sides are covered with opaque material provide windows/opening on side walls such that the ratio of covered/open area.

(i) On walls 6:1

(ii) On Store where materials other than thatch are used the ratio should be

(iii) On wall 6:1

(iv) On roof 10:1

Ventilation - (a) Wire netting all round - excellent  
(b) translucent or opaque walls the ratio of covered to open area.  
a) Gable ends 4:1  
b) Wall opening 4:1  
(c) opaque sides with wall openings  
a, b, and c are in the order of preference.

Insulation - (a) 4"-6" thatch roof  
(b) Asbestos sheets covered with thatch or country Tiles.  
(c) Clay tiles

Shading - (a) long over hanging hipped roof  
(b) long over hanging gable roof.

Protection from rodents - Provide rat guards. When appropriate.

General - a) Light penetration will be hindered by increased width. Hence to increase capacity increase length and not width. Height may be increased but should be minimal.  
b) Longitudinal axis of store to be North South.  
c) During rainy season the side may have to be provided with temporary covers.

## INTRODUCTION

Presently around 12,000 acres of potatoes are grown in Sri Lanka producing over 80,000 tons of potatoes. To plant this extent annually about 12,000 tons of seed potatoes are required. Of this quantity around 3000 tons are imported at a cost of nearly Rs.30 million in foreign exchange, of the balance 9000 tons, around 1500 tons are produced in Government farms and the balance 7500 tons are kept by farmers themselves as their 'own seeds'.

The use of 'own seeds' by the farmers of the Badulla and the Nuwara Eliya districts while helping in the stoppage of imports of seed for the Yala season also led to an appreciable expansion in the extents grown during Yala, particularly in the Welimada and Uva Paranagama areas. This practice therefore has to be actively encouraged so that the country could be increasingly self reliant in seed potatoes. However, for the continued success of this practice adequate precautions have to be taken as the indiscriminate use of seed of unknown health status will invariably lead to disastrous situations where the cultivation may have to be curtailed due to the soils getting infected with tuber borne diseases such as Bacterial Wilt.

Another important aspect in promoting the use of "own seed" is the handling and storage of seed. This aspect has received scant attention in the past. It has been observed that the methods of loading and storage currently practiced by farmers lead to heavy storage losses and that these methods are not conducive to good sprouting and consequent high yields.

Investigations, were conducted on a simple lowcost on farm storage method that essentially substitutes diffused light for low temperatures as a means of improving seed tubers through controlled sprouting. These investigations revealed that seed potatoes could be stored successfully without loss of quality for periods up to nine months, thus allowing the use of seed obtained in one maha/yala season in the next maha/yala season. Successful diffusion of this technology amongst the farmers in the Badulla and the Nuwara-

Eliya districts will not only minimize the storage losses and provide the farmers with better sprouted seeds, but also will afford greater flexibility in planting times bringing about better distribution of production.

As a result of extension work carried out during the last two years more than Five hundred farmers in both the districts have adopted this method of storage while large number of others have shown positive interest towards the use of this technology. Hence a credit scheme either to improve the existing storage facilities or to construct new simple structures will be immensely helpful in the rapid and successful diffusion of this technology. Small scale farmers who form more than 95.1% of the potato growing population will be the main beneficiaries of such a scheme of assistance.

The Bank of Ceylon and the People's Bank, have agreed to operate a credit scheme for the above purpose.

#### CREDIT SCHEME:

#### NO. OF UNITS PROPOSED TO BE FINANCED BY THE BANK

Nuwara Eliya District - 200 Units.

Badulla District - 400 Units.

#### Selection of Borrowers

The applicants who comply with the eligibility criteria given below will be selected by a Committee comprising of representatives from the Bank, Agrarian Services, Department of Agriculture and Agricultural Managers of the Agricultural Development Authority in the districts concerned. The Manager, Agricultural Development Authority and the Agricultural Instructor/ Divisional Officer should recommend the suitability of the site for the proposed stores. The Bank's field Officer will carry out an inspection to verify the information submitted to the Bank and he should submit his independent Report to the Bank.

## Equity Participation by the Borrowers

The borrower should bear a minimum of 20% of the cost of the construction of stores in the form of material and labour as his equity participation.

## Eligibility Criteria for Borrowers

- a) Should be a potato cultivator who possess a valid agro-identity card issued by the Department of Agrarian Services.
- b) Should be a customer of the Bank (A Savings Account would suffice)
- c) Should have a satisfactory repayment record with the Lending Institution he deals with in respect of previous borrowing, if any.
- d) Should not be a defaulter in respect of any loans obtained previously from any lending institution. In the event of a defaulter, should have had such loans rescheduled in agreement with the Bank.
- (e) Should receive the recommendation of the Agricultural Instructor/Divisional Officer countersigned by the Agricultural Manager of the Agricultural Development Authority/Ass. Commissioner of Agrarian Services as a potato cultivator for not less than 1/2 an acre.
- (f) Should be in a position to bear a part of the cost of the stores as described above.
- (g) If applicant is not the sole owner of the land the other co-owner/s to join in the transaction either as co-borrower/s or guarantor/s.
- (h) In the case of leasehold land the period of lease to be a minimum of 5 years from the date of application of the loan.

## SPECIAL NOTE:

The Bank reserves the right to grant or decline credit under the scheme.

Cost of construction of the Seed Potato Stores and  
Quantum of Credit.

- a) Unit cost of a single storage house of 1500 kg. or 1.5 metric tons of seed (sufficient to cultivate 1.5 acres or 0.5 hectares) is estimated at Rs.4,000/- approximately.
- b) The maximum loan amount at present under the scheme will be Rs.3,200/- per borrower i.e. 80% of the cost. The borrower's minimum equity participation is 20%. If the prospective borrower agrees to provide a higher equity contribution, the amount of the loan should be reduced accordingly.

Security:

One of the following -

- (a) Inter-se guarantee of 2 other potato cultivators who are eligible to receive credit under the scheme. Under inter-se guarantee one person could guarantee only two loans.
- (b) Guarantee of any two other farmers who are acceptable to the Bank.
- (c) Any other security acceptable to the Bank.

Rate of Interest:

12½% per annum as Central Bank refinance is available.

Release of Funds

Release of funds will be in 2 stages.

- (a) Stage I - Rs.1,800/- being the cost of wooden structure.
- b) Stage II - Balance amount of loan i.e. 1,400/- to be released on receipt of a satisfactory report from the Bank's Field Officer, that Stage I has been completed.

## Payment

The repayment of the loan should coincide with the potato harvest as the seed potatoes are used for planting. Taking into consideration the cultivation pattern and income generated, the loan should be settled in equal instalments together with interest in 6 seasons within a period of 3 years, from the date of granting the loan. However, if any borrower wishes to settle the loan prior to the stipulated period he should be encouraged to do so.

## Monitoring and Supervision

The Agricultural Instructors/Divisional Officers and the Agricultural Managers of the Agricultural Development Authority shall assist the Bank in monitoring, supervision, and recovering of the loans granted under this scheme. In addition the Bank Field Officer is required to carry out pre and post sanctioned inspections and to assist the Bank with the recovery.

### B.C.Q. LOW COST STORE FOR SEED POTATOES

<u>Item</u> <u>descri-</u> <u>ption.</u>	<u>Qty.</u>	<u>Unit</u>	<u>Date</u>	<u>Amount</u>
5"x2" timber	30	L ft.	9.00	270.00
2"x2" timber	475	L ft.	2.50	1187.50
4"x2" timber	15	L ft.	6.00	90.00
1/2"x2 reeper	750	L ft	1.00	700.00
No.3 expanded metal mesh	1.5	12'x8' sheet	650.00	975.00
4" wire nails	1	kg	18	18.00
3" wire nails	1	kg	18	18.00
2" wire nails	1	kg	18	18.00
1/2" Brass screw	75	No.	00.15	37.50
1/2' Brass screw	15	No.	00.50	7.50
Hasp & Staple (3")	4	No.	5.00	20.00
Butt Hinger 4"x2½")	8	pair	20.00	160.00
Roof covering including	-	Item		
		12	250.00	250.00