

# Current Status and Programs of Potato Seeds: Potato Crop Development Center, Nigale, Sindhupalchowk



Government of Nepal  
 Ministry of Agriculture and Livestock Development  
 Department of Agriculture  
 National Center for Potato, Vegetables and Spice Crops Development



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 Nigale, Sindhupalchowk

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## Pre-basic Seed (PBS) Production, Demand and Supply in Different Fiscal Year

S.N	Fiscal Year	Number of In-vitro Jars	Pre-basic Seed (No. of Tubers)	Demand of PBS Tubers	Supply of PBS Tubers
1.	2076/77	0	12,500	20,300	8,500
2.	2077/78	60	28,180	50,500	26,000
3.	2078/79	1800	45,000	65,000	39,500
4.	2079/80	4220	56,850	95,000	51,208
5.	2080/81	6500	95,240	1,61,000	-

Source: Annual Reports of PCDC

## Basic Seed and Ware Potato Production, Demand and Supply in Different Fiscal Year

S. No.	Fiscal Year	Production of Basic Seeds (MT)	Demand of Basic Seeds (MT)	Supply of Basic Seeds (MT)	Production of Ware Potato (MT)
1.	2076/077	8.45	15	5.0	4.4
2.	2077/078	7.43	25	4.5	5.57
3.	2078/079	15	40	9.7	8.5
4.	2079/080	22.97	45	16.1	9.7
5.	2080/081	21	69	15.5	7.123

Source: Annual reports of PCDC

- The demand is in the increasing trend every year
- Demand from Farmers, Farmers groups, Cooperatives, Local governments, AKC, Agricultural Projects i.e. PMAMP

## True Potato Seed (TPS) Production Status in Different Fiscal Year

S.No.	Fiscal Year	TPS Seeds (Kg.)
1.	2080/81	19.50
2.	2079/80	32.00
3.	2078/79	9.80
4.	2077/78	8.30
5.	2076/77	9.50

Source: Annual reports of PCDC

## Challenges

1. Unbalanced demand and supply of seed potato i.e. demand far exceeding the supply
2. New technology is not adopted in PBS production (Aeroponics, Hydroponics)
3. No functional Seed certification scheme of Seed Potato
4. Difficulty in Seed cycle maintenance
5. Same Parental line of TPS are using from long time
6. Infestation destructive diseases and pest i.e. Late Blight, Wart, Wilting, Semi-lopper
7. Negative impact of climate change on potato production i.e. long drought, incidence of hailstorm and frost

## Way Forward/Recommendation

1. It is necessary to change the perception of farmers between PBS, Basic seeds and ware potato
2. Produce quality pre-basic seeds at government farms/centers by utilizing in-vitro jars from certified government tissue culture laboratories
3. Three level of Government organizations should actively involved in Seed Potato Production and Distribution (Central: In-vitro plants & PBS; Provincial: PBS & Basic Seed and Local Level: Improved Seed Production)
4. Rapid Multiplication Technology: Plantlets/Tissue Culture
5. Introducing genetic diversity to enhance crop resilience and disease resistance
6. Encouraging the use of advance methods to produce PBS
7. Training programs and knowledge dissemination are essential to enhance productivity and efficiency