

# Virtual stakeholder meeting for expanding potato farming northward

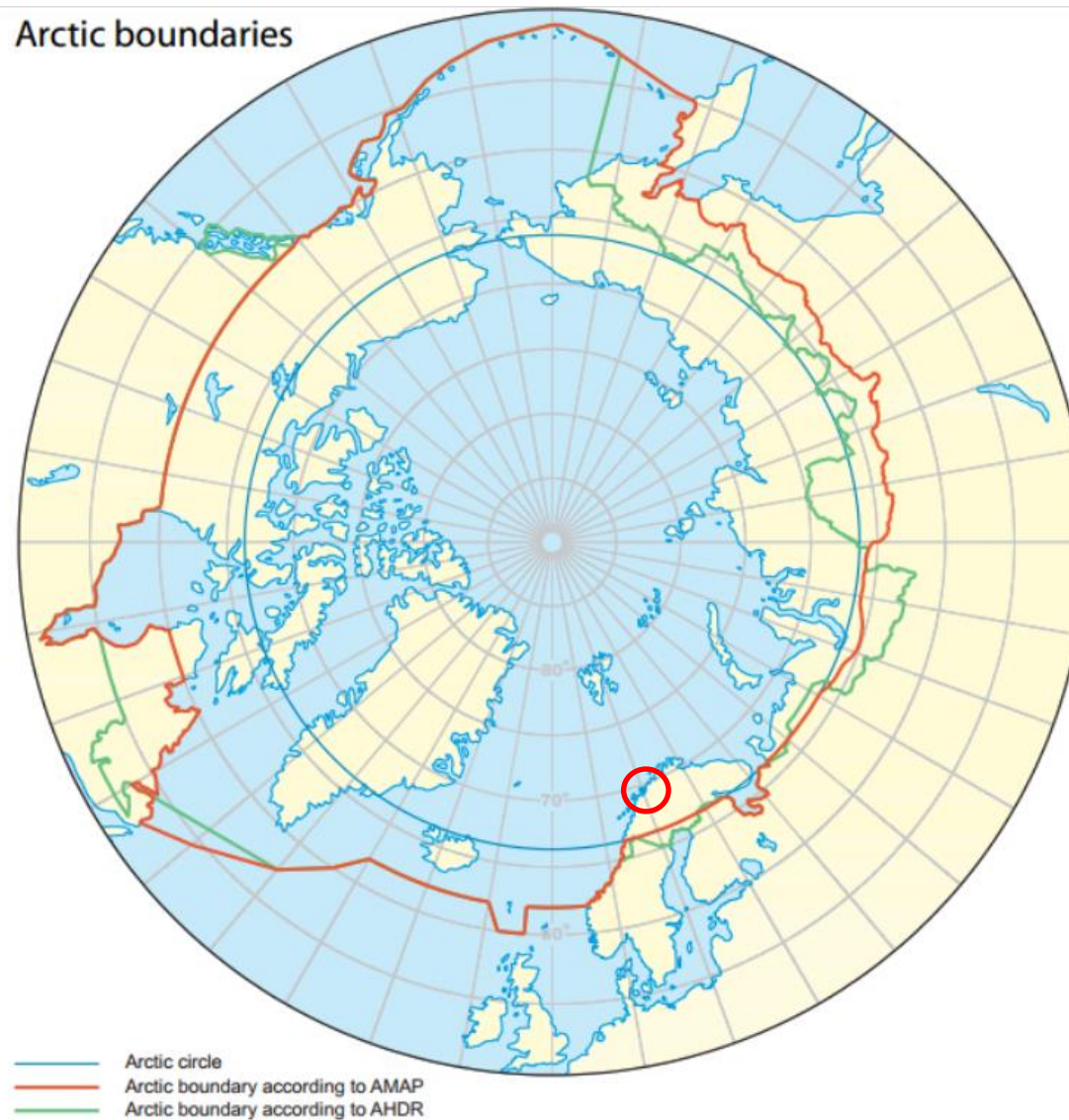
*April 29<sup>th</sup> 2021*

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Agricultural Extension Service / Norsk  
Landbruksrådgiving Nord Norge*

*Photo by: Kristin Sørensen, unless named*



## Arctic boundaries

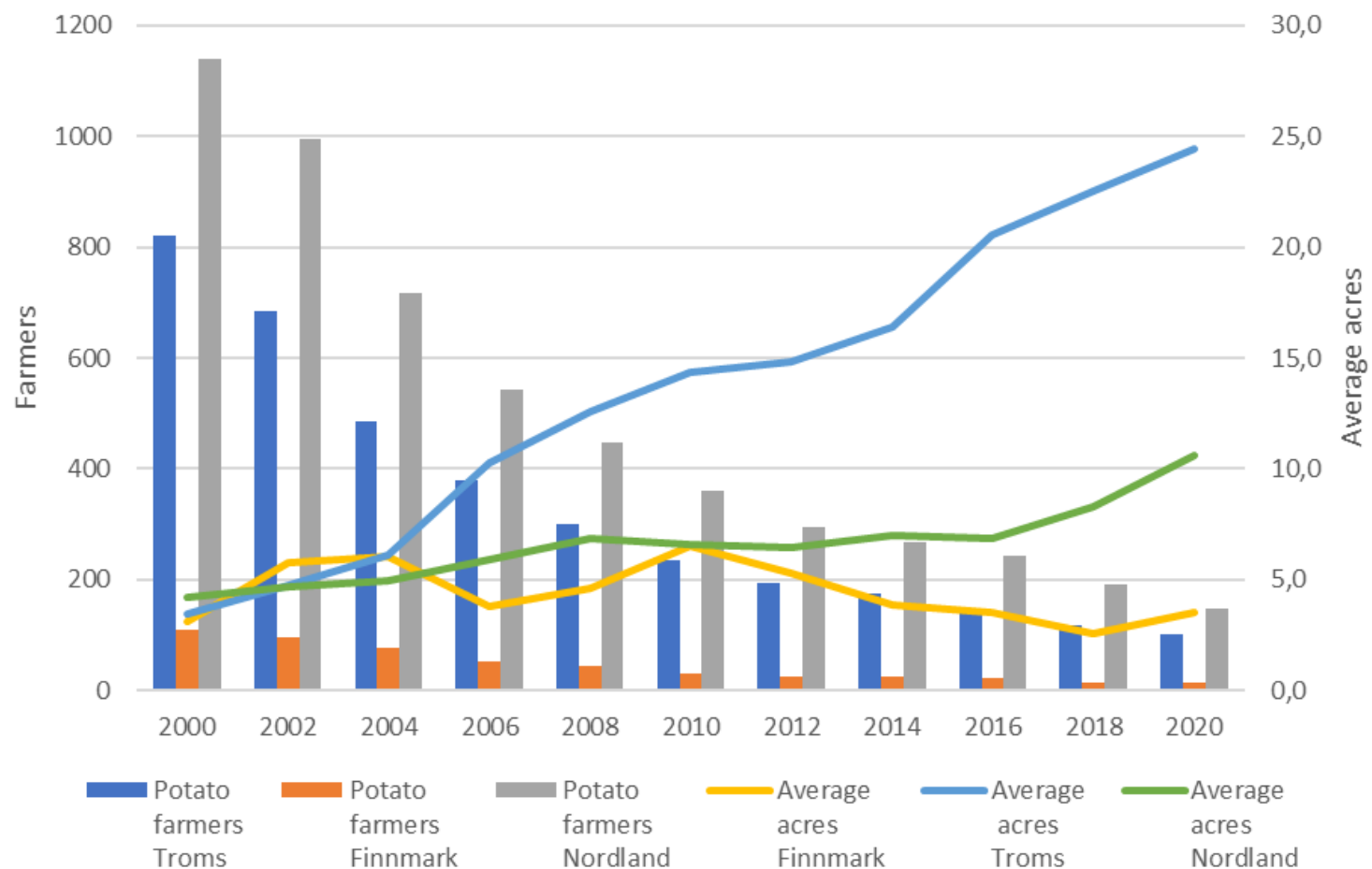


*Potato production in the Arctic*  
*Tromsø: latitude 69,65°N*

Source: Arctic Monitoring and Assessment  
Programme (AMAP)

# Potato production in Nordland, Troms and Finnmark counties 2000-2020

*Farmers and average acreage*



# Yield and quality in northern Norway

## YIELD

- Round potatoes for pre packing, first class around 2000 kg/acres
- Round potatoes for peeling, around 2500 kg/acres
- Special potatoes (Mandel and Gulløye), first class 1500 kg/acres
- The main potato packing company in north; Tromspotet  
handeling about 4500 tonn a year

## QUALITY

- Well ...

	Ant dyrkere	Ant daa i snitt pr dyrker	Ant daa totalt
<b>POTET</b>			
Nordland	147	10,6	1 554
Finnmark	13	3,5	46
Troms	102	24,4	2 490
Norge	1505	76,1	114 463



Lack of  
skin sett



Skin spot



Powdery scab

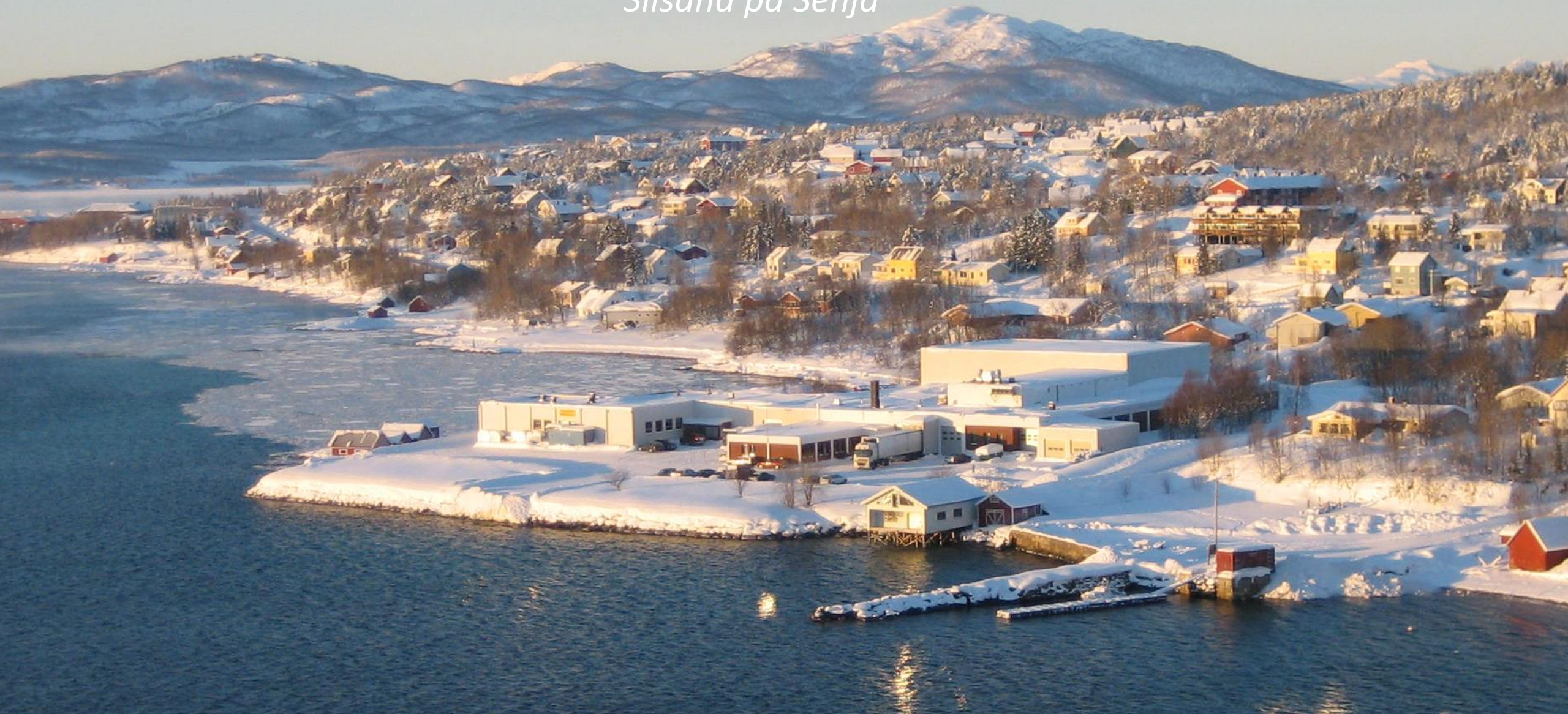


Mop-top virus



# *Tromspotet AS og Art Nor AS*

*Silsand på Senja*





# Climate change

Municipality	Growing season in days	Expected increase in days
Kommune	Vekstsesong 1961 – 1990	Økning 2021 – 2050
Tana	90 – 120	11 – 25
Porsanger	90 – 150	15 – 30
Tromsø	120 – 150	11 – 25
Bardu	120 – 150	11 – 25
Hattfjelldal	120 – 150	11 – 25
Vestvågøy	150 – 180	6 – 15

Source: Eiving Uleberg, NIBIO POP nr 16, juni 2017

## Challenges

- Less snow
- More frost in the ground
- More rain in spring and autumn
- Longer periods with draft
- **The same lack of light in autumn**

## Benefits

- Higher temperature in the growing season

# Spring and autumn in north of Norway





# Climate improvement



*Pre sprouting in April-Mai*



*Snow baiting in April  
with black lime*





**Climate improvement**

*June 2020. Non woven fabric  
Foto: Ulrike Naumann*









*Potatoes under cover*





*Juli 2016. Uncovering*



If the non woven fabric is uncovered to late, the foliage collapse in some varieties, and the stem continue to grow in an angle

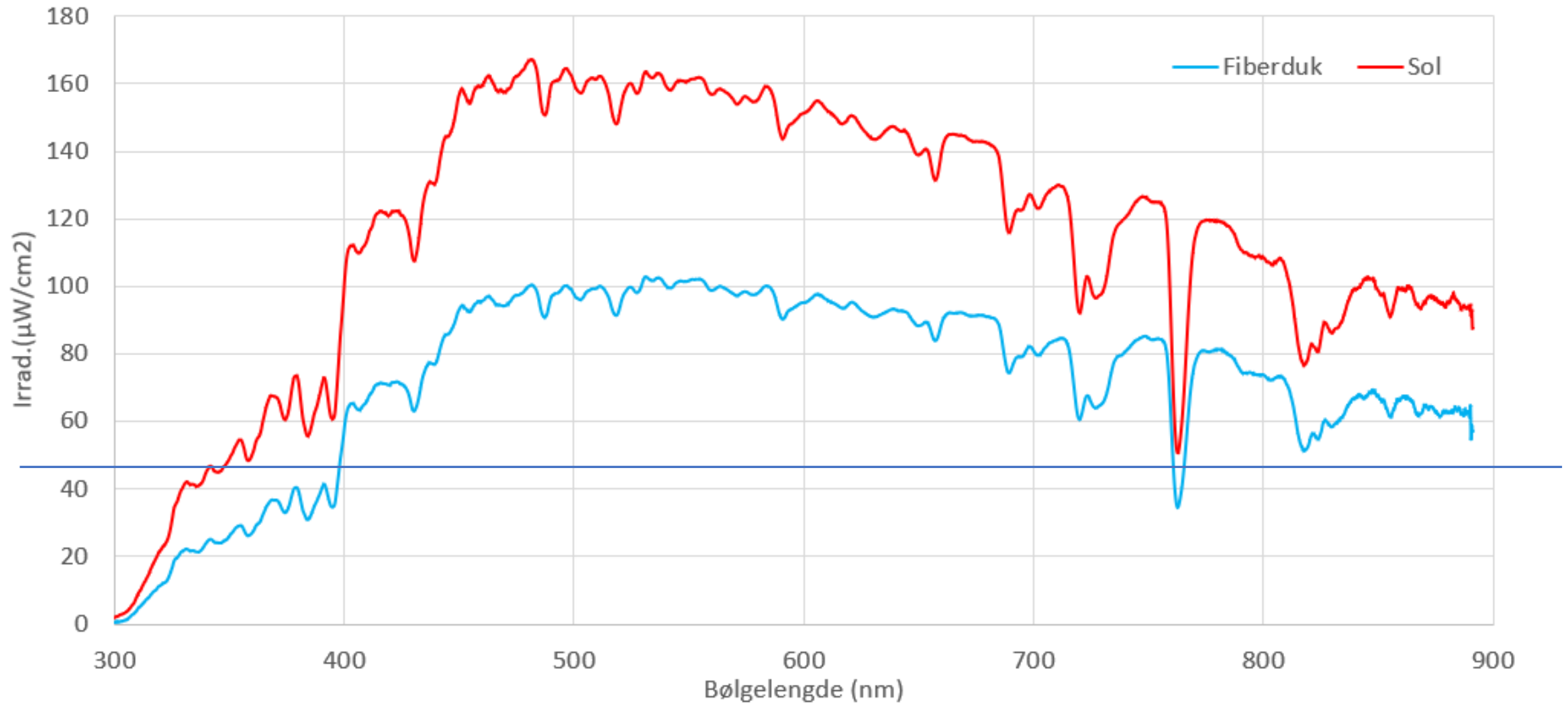








# Non woven fabric filtrating 1/3 of the sunlight





# Sun hight and latitude



Solhøyde

=> Intensitet

Daglengde

Lysfarge

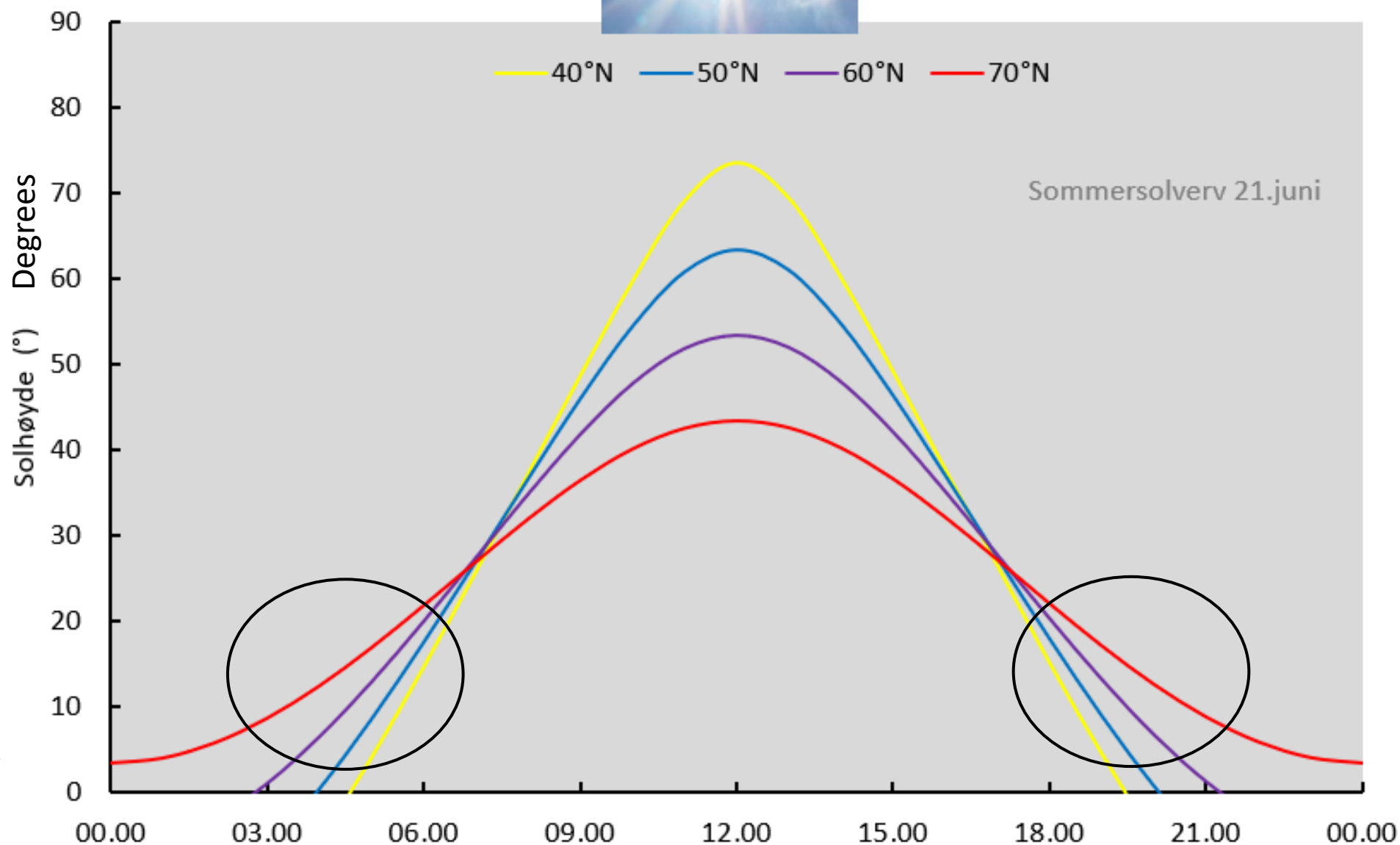
>50 W/m<sup>2</sup>

Holt: 18,5 timer

Landvik: 15 timer

Ca kl 02.00 - 21.00, 21. juni

Source: Jørgen Mølmann, NIBIO  
Holt in Tromsø (Norwegian Institute  
of Bioeconomy Research)





# Climate improvement





# New varieties



*Back in 2006, we started looking for new potato varieties suitable for northern growing seasons ...*





*... in cooperation with Graminor, a  
Norwegian plant breeding company*



**FORSIDEN**

NYHETER

SORTER ▼

**UTVIKLING AV PLANTESORTER ▼**

FOU PROSJEKTER ▼

OM OSS ▼



**Utvikling av plantesorter for norsk og nordisk klima**

*Hassel og Nansen*



**Norsk  
Landbruksrådgiving**



# Financial collaborators



Produsent-  
organisasjonen  
**OTTAR**



**målseier**  
- mulighetslandet -



Fylkesmannen i Troms og Finnmark



Fylkesmannen i Nordland



**SÁMEDIGGI**  
SAMETINGET



**Norsk**  
Landbruksrådgiving





Photo: Kirsten Topp





# Selection and multiplying number varieties











## Found any?

Long term work  
Not easy peasy to  
become a potato hit!

### Satisfactory

- taste
- dry matter content
- yield
- skin set
- dormancy
- resistance
- properties for growing
- and it needs to be good looking





*Thank you for listening!*