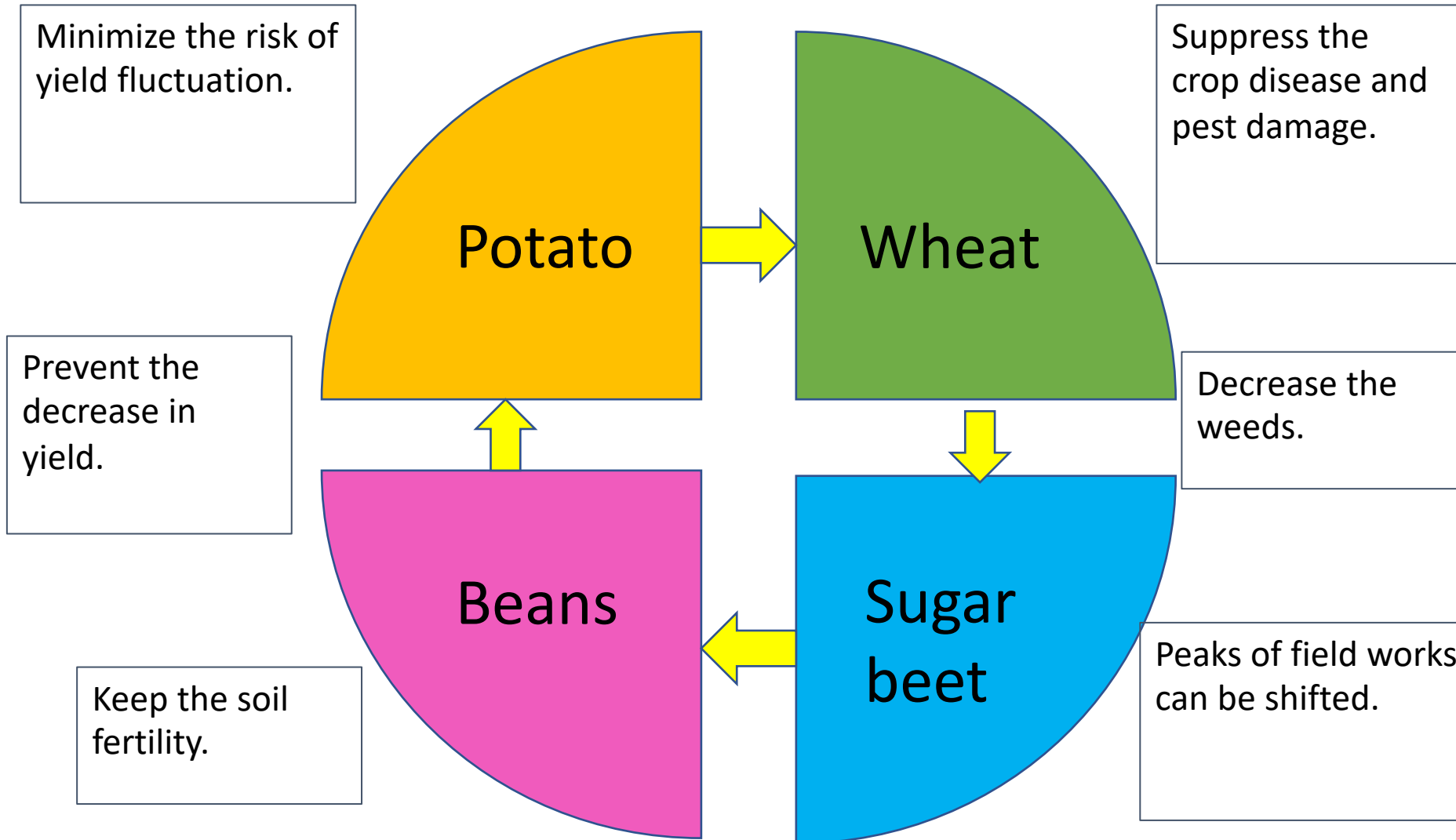


Three stages in soil fertility

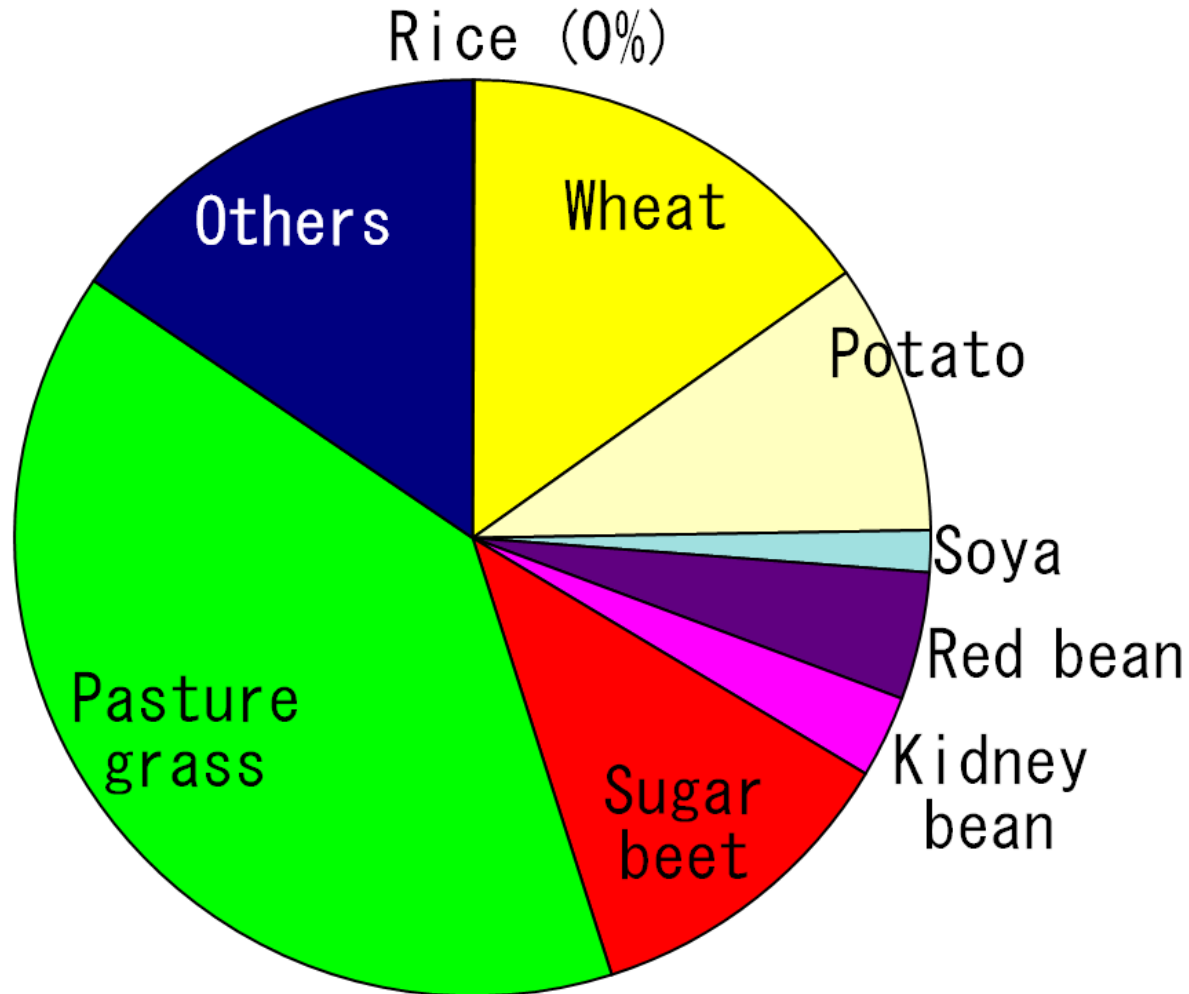
Concept by Prof. Kikuchi

- Stage 1: Natural soil fertility with various constraints
- Stage 2: Improved fertility by adjustment of relief, land drainage, mixing and reversing soil layers, soil acidity amelioration, etc.
- Stage 3: Improved fertility by proper fertilizer application, cropping system management for high quality and sustainability.



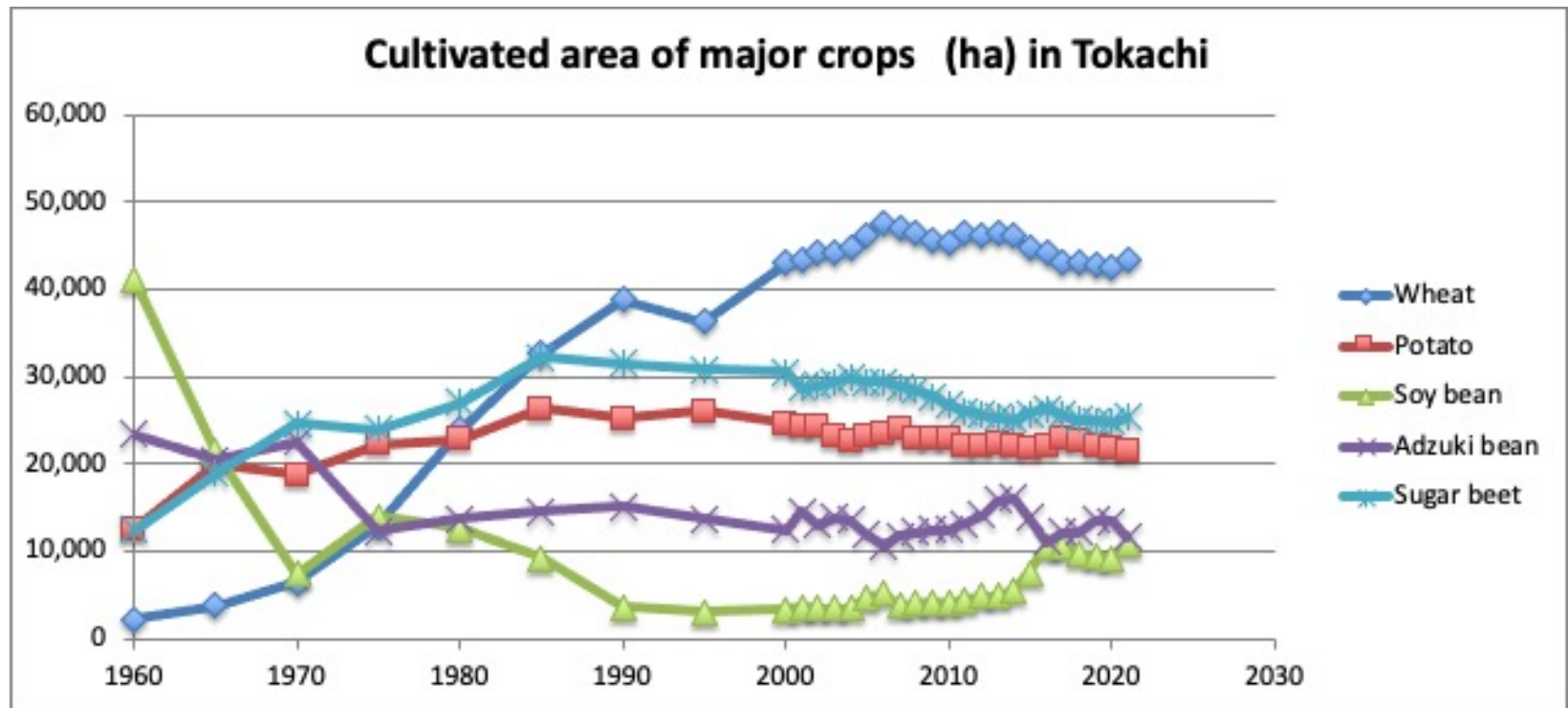
Crop rotation in Tokachi

Area of main crops (Tokachi)



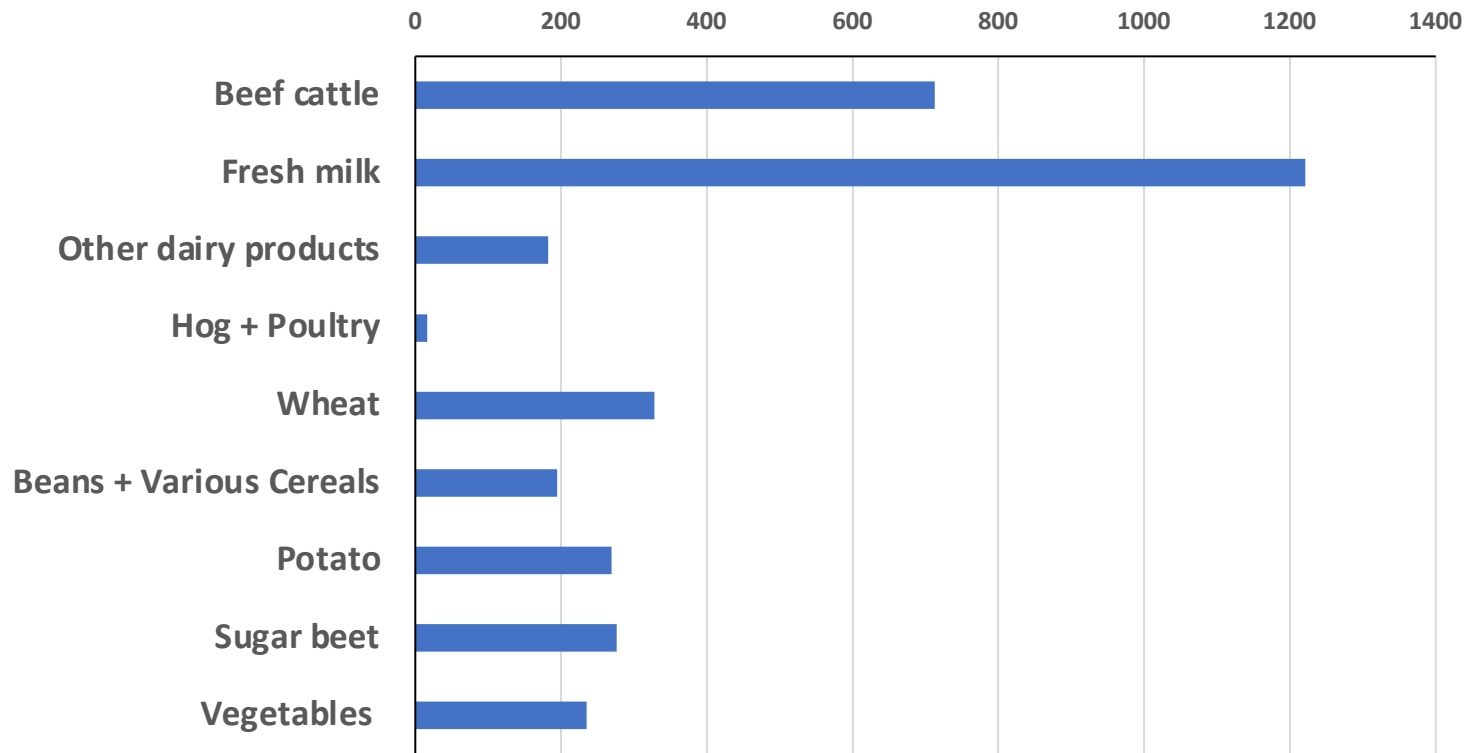
Cultivated Area (ha) in Tokachi compared with those in Hokkaido and Japan (2020).

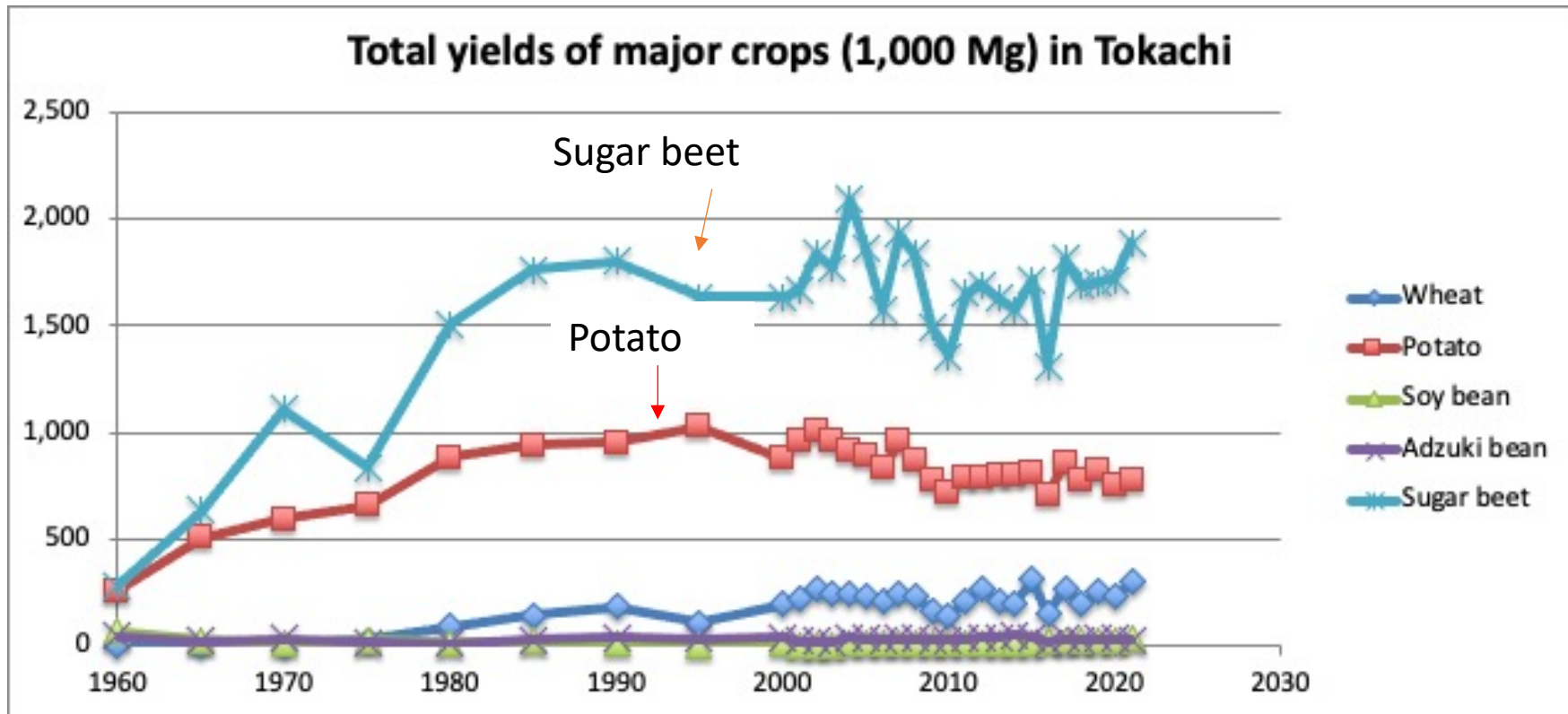
	unit	Japan	Hokkaido	Tokachi	Tokachi/Japan(%)
Wheat	1000 ha	212.6	122.2	42.6	20.0
Potato		71.9	48.1	21.8	30.3
Sugar beet		56.8	56.8	24.8	43.7
Soy bean		141.7	38.9	9.28	6.5
Adzuki bean		26.6	22.1	13.5	50.8
Kidney bean		7.37	6.88	5.16	70.0
Data from the Tokachi Federation of Agricultural Cooperatives.					
Total agricultural field area in Tokachi: 255 × 1000 ha					

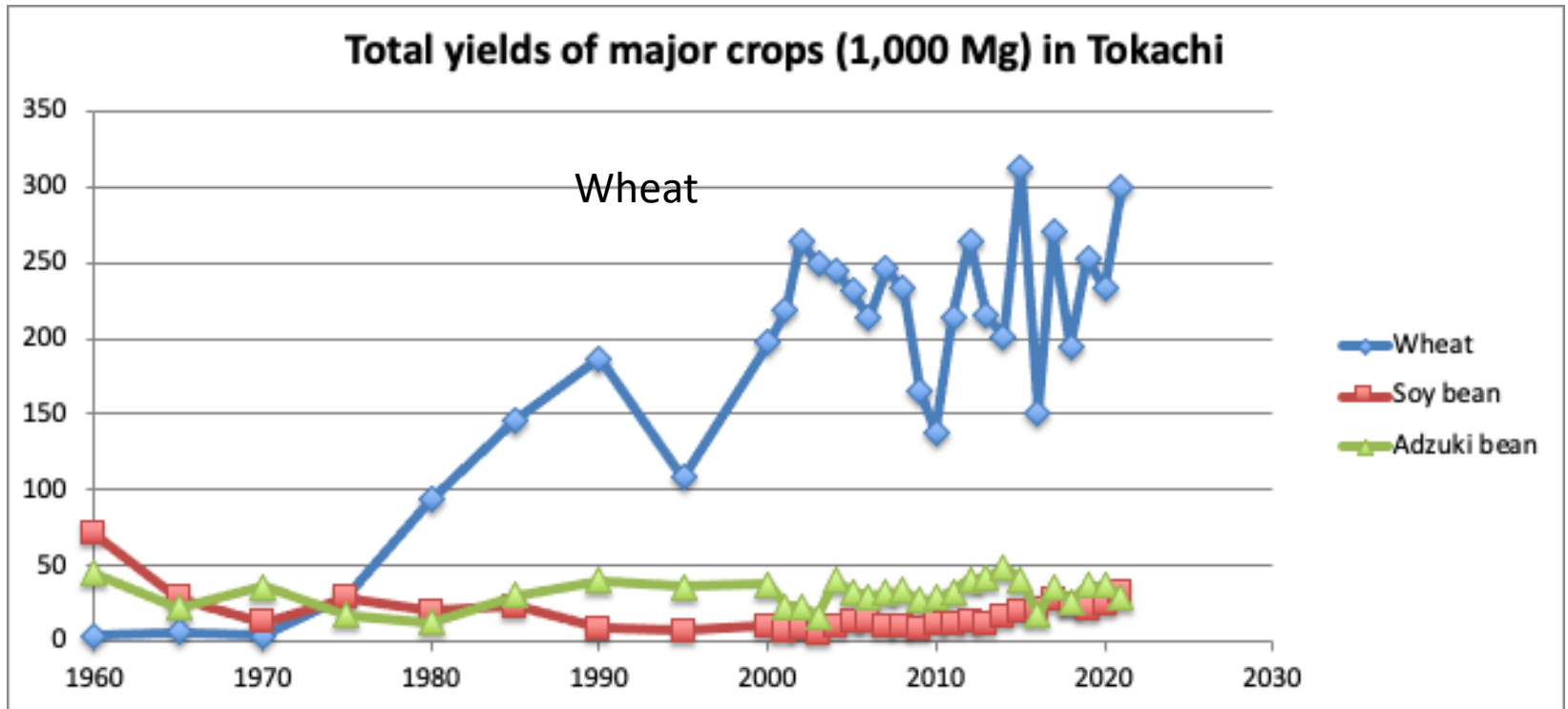


Amounts (Yen) of field crop and stock farming production in Tokachi.		
	hundred million	%
Field crops	1308	37.7
Stock farming	2158	62.2
Whole agriculture	3456	

Monetary amounts of agricultural production in Tokachi (Hundred million Yen) in 2020 .







Slide 24
Potato

Transplanting seed potato: end of April – early May



July 10, 2020

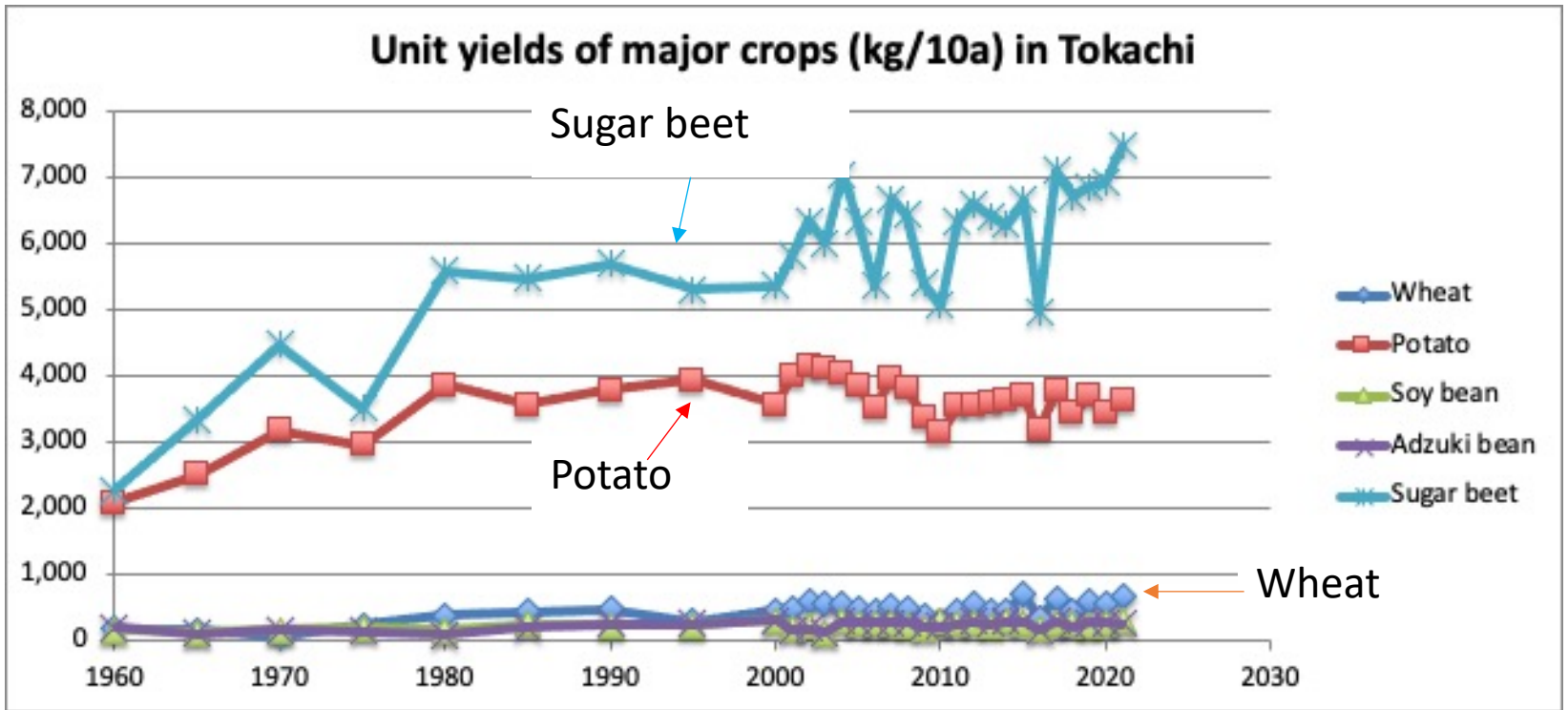
Harvest:
August - September



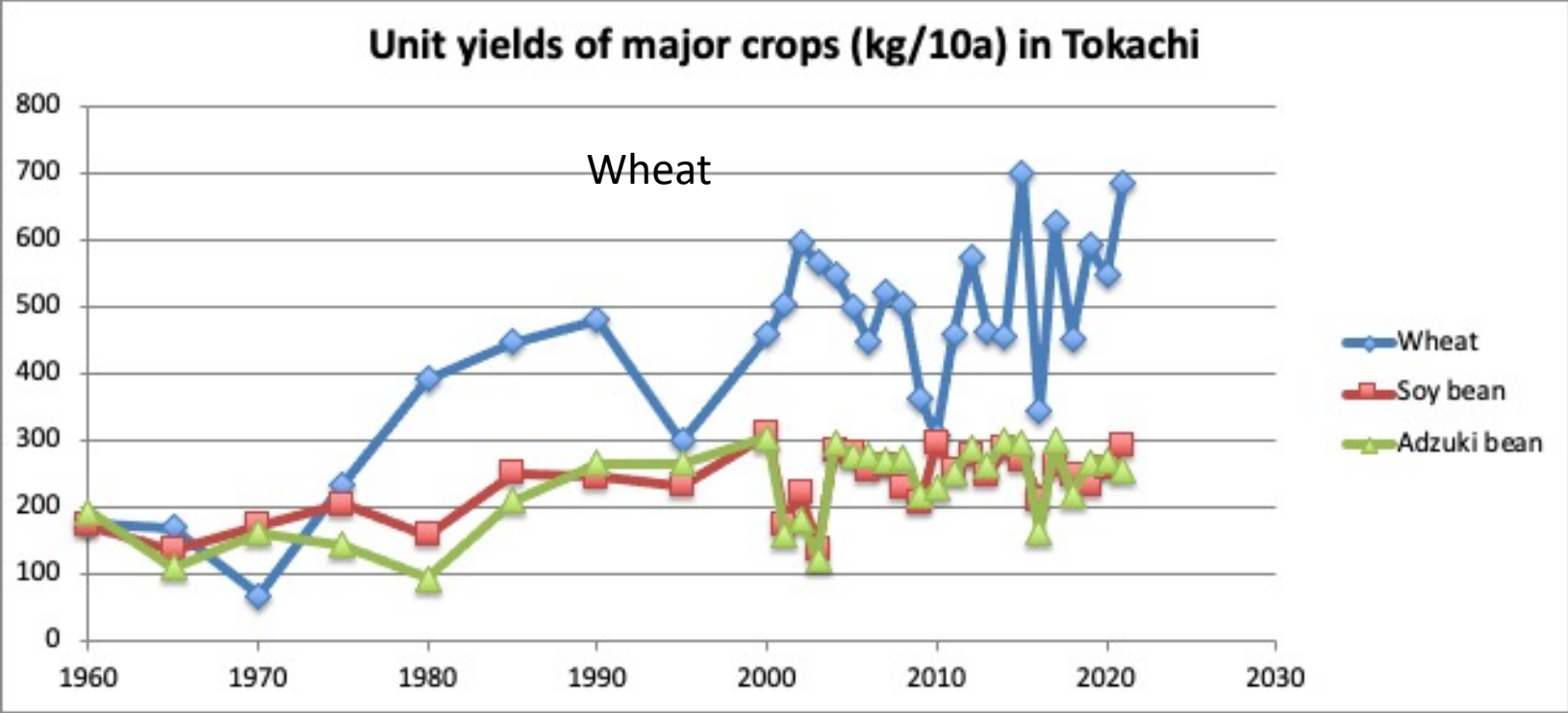
September 8, 2020

Variety: Kita-akari

kg/1000 m²



kg/1000 m²



Number and cultivation area of farms in Tokachi

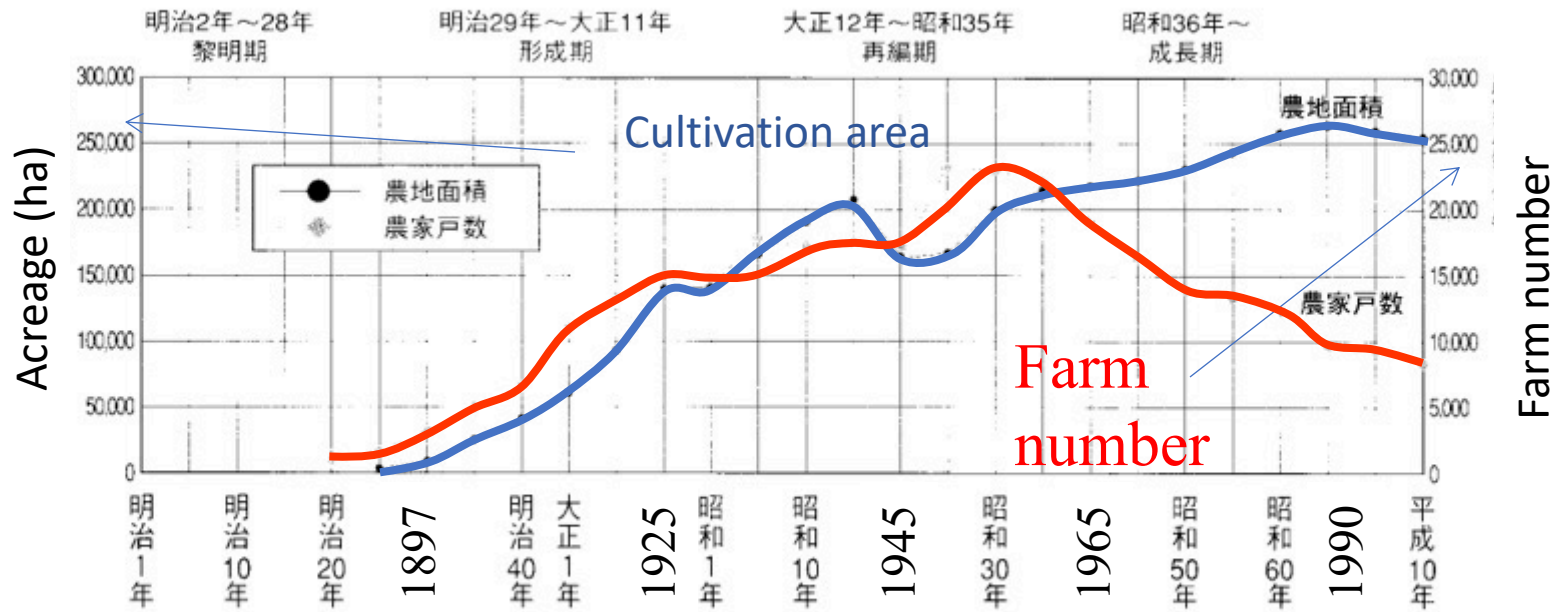
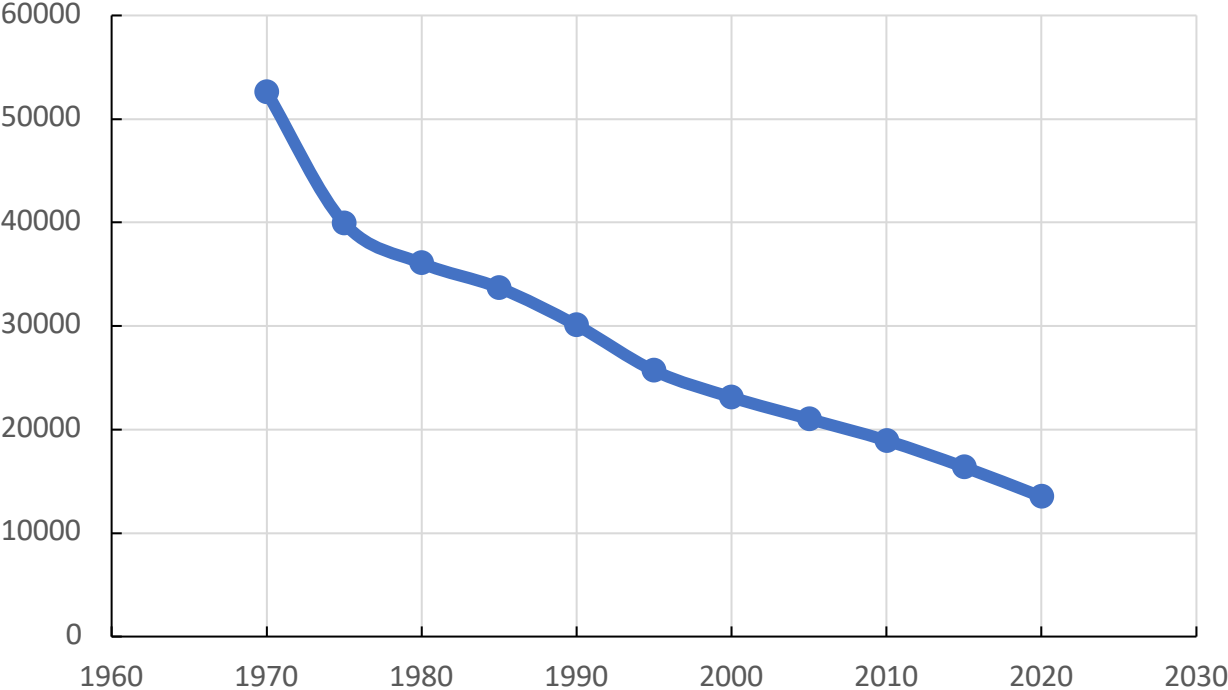


図-1 十勝管内における農家戸数と農耕地面積の推移

Number of full-time farmers in Tokachi.



Why agricultural population decreased in Tokachi?

- Merit of large scale operation of agriculture.
- Necessary man power decreased, as agricultural machinery was introduced.
- For efficient farm management, small farm lands had to be combined into a large field.
- Outflow of the excess labor force to industrial, commercial, and civil service.