

A photograph of a large field of yellow lupine flowers in bloom. The flowers are in the foreground and middle ground, with a line of trees visible in the background under a clear sky.

Protein Plants in Poland

Trade off environment/ economic benefits

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Content

- Growers Association - Introduction
- Poland- climatic/soil conditions
- Soybean in Poland
- Traditional legumes in Poland
- Problems, limitations
- Ideas, solutions
- Summary



National Oilseed rape and Protein Plants Growers Association in Poland

- Goals:
 - representing the interests of farmers
 - promoting oilseeds rape and protein plants cultivation
- Members – farmers from all over Poland
- Membership of COGECA

Farm structure in Poland

- 14,5 mln farmlands in PL
- 1,4 mln farms
- 1 mln farms have less than 10 ha (70%)
- 100 000 farms between 20-30 ha (7%)
- 30 000 farms more than 50ha
- 8200 farms has 100-300 ha
- 2300 farms above 300 ha

- Farms above 20 ha have around 10 % of lands

Farm structure consequences

- Small farms in Poland are not able to produce big amounts so it is difficult to provide uniform and big enough quantity to the industry
- Difficult to sell legumes seeds
- Price very low
- Full truck – 24 tonnes- (10-15 ha of soybean)
- Target: bigger farms

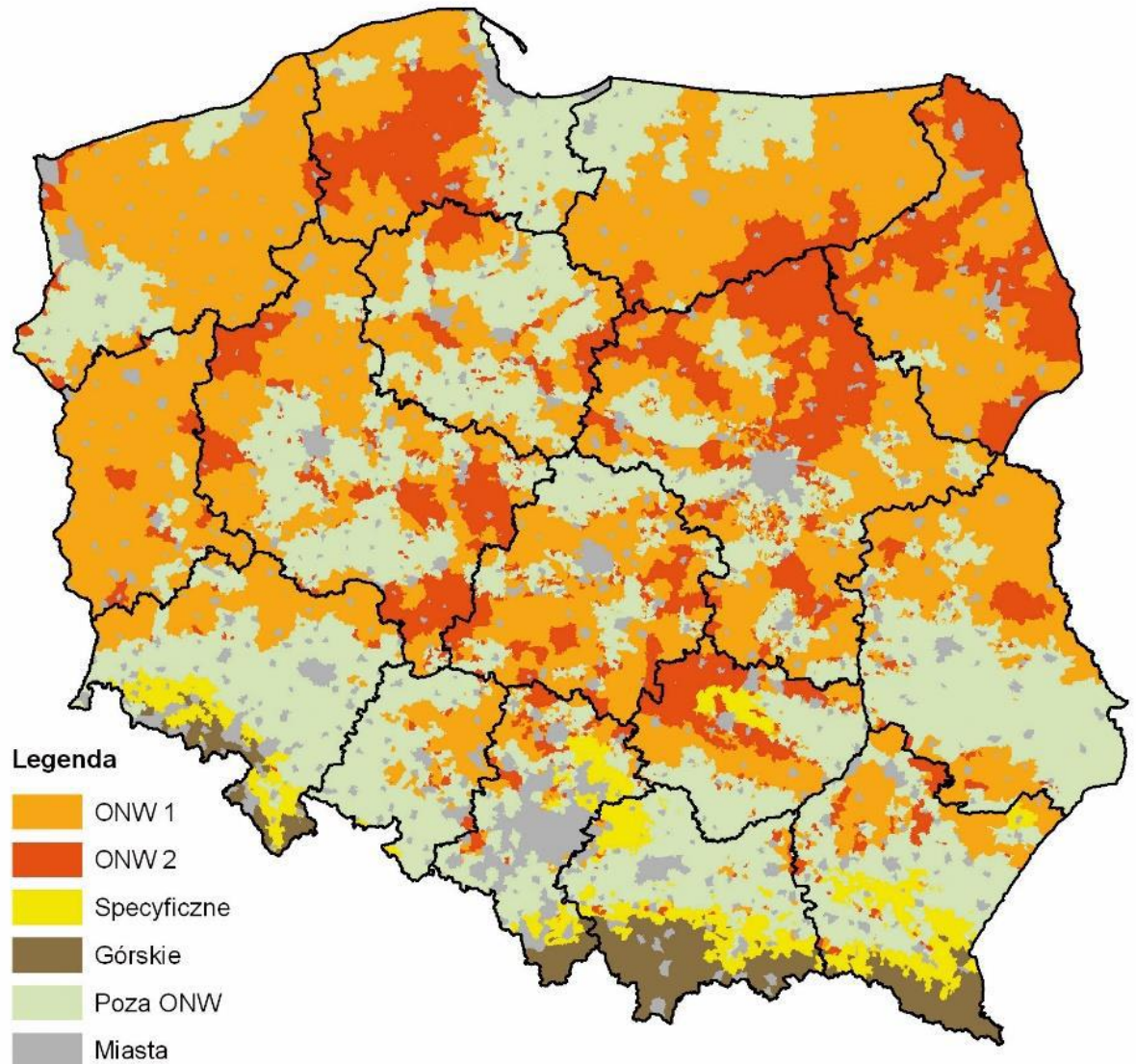
My farm

- 30 ha Lupin, very sandy location, drought



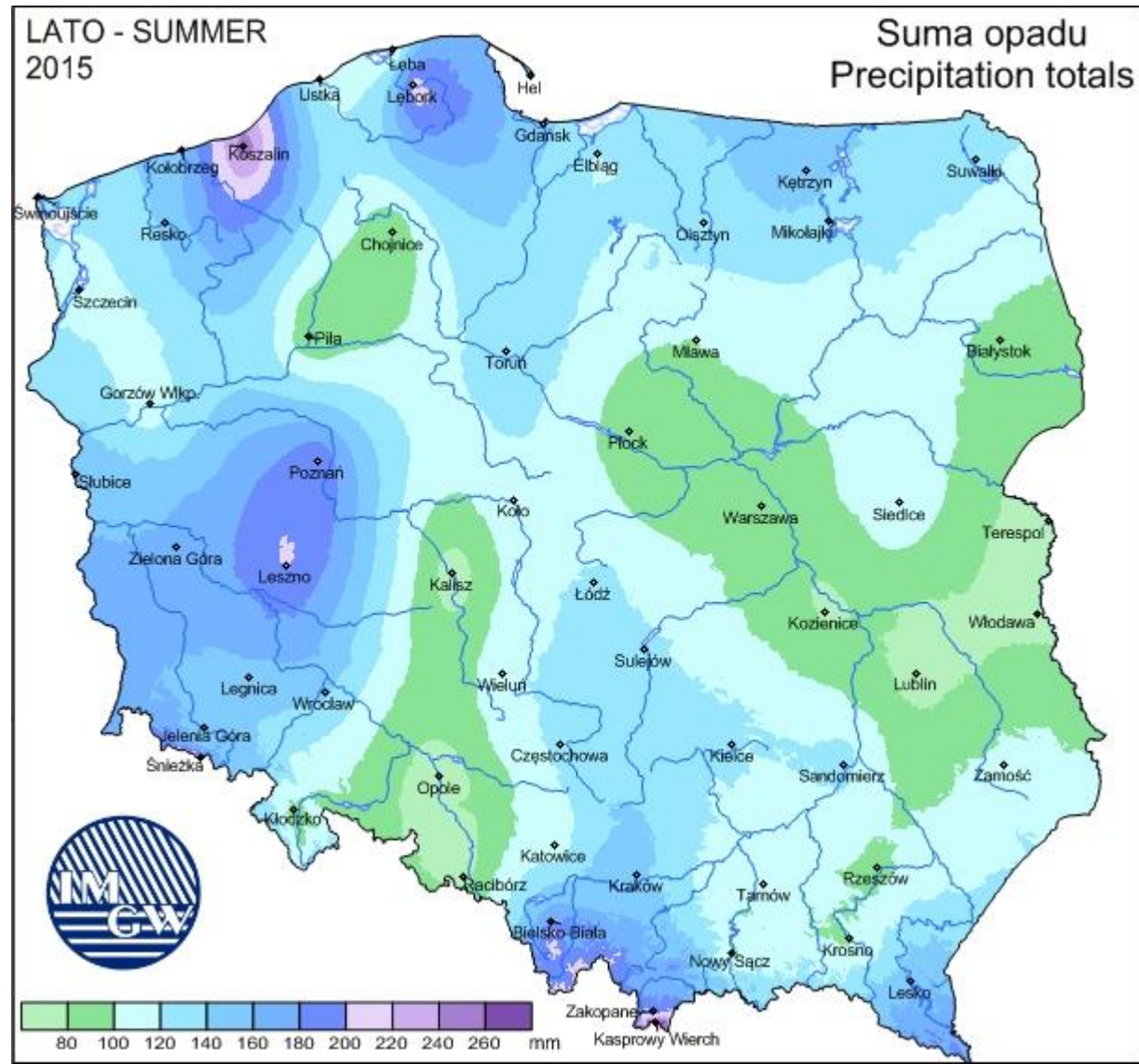
Polish soil condition

- Soils-less favoured areas
- 70% of soils are light



Poland- Precipitation

- Regular droughts
- May-August
- 100 mm possible in some regions



Climat- consequences

- Not stable yields
- Lower profits
- Choice of crops
- Investments in irrigation

SOYBEAN in Poland

- Not yet very popular in Poland:
2014 – 19 000 ha
2015 – 24 000 ha
2016 – 12 000 ha
2017 – 16 000 ha
- Big promotion: 23 field days, magazines, adverts...
- Calculation of income looks good „in excel”
- In practice the yields can vary from 1,5 to 3,5 tonnes – not very stable

Soybean in Poland

What limits the cultivation:

- Agrotechnical knowledge at farms, mistakes,
- Weather/climat and soil quality
- Varieties not yet well adapted in north PL
- To sell full truck (24 t) you need 10-15 ha, risk at smaller farms
- Greening- change of regulations
- Subsidies: not stable

Opportunities:

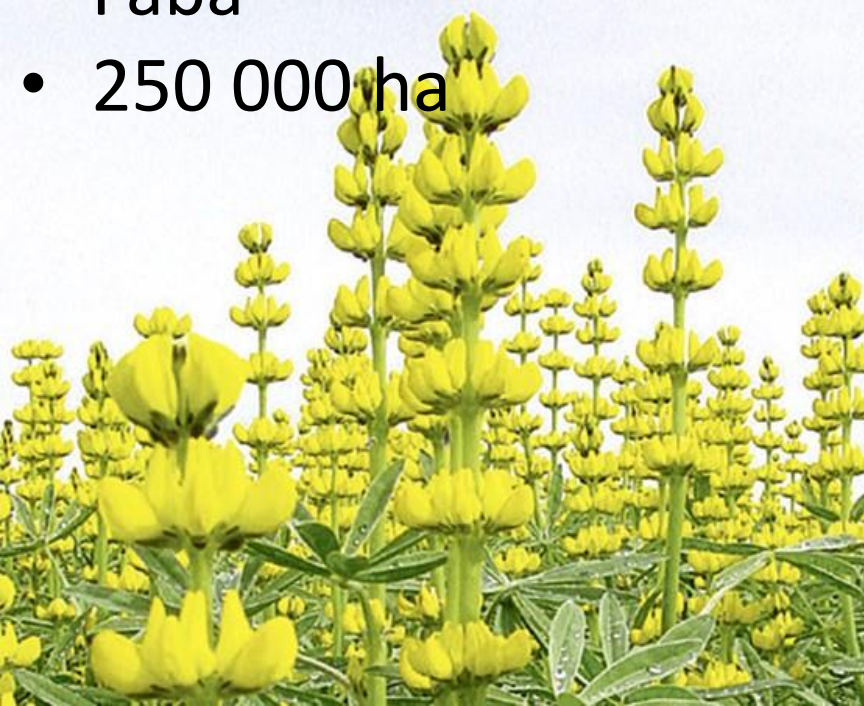
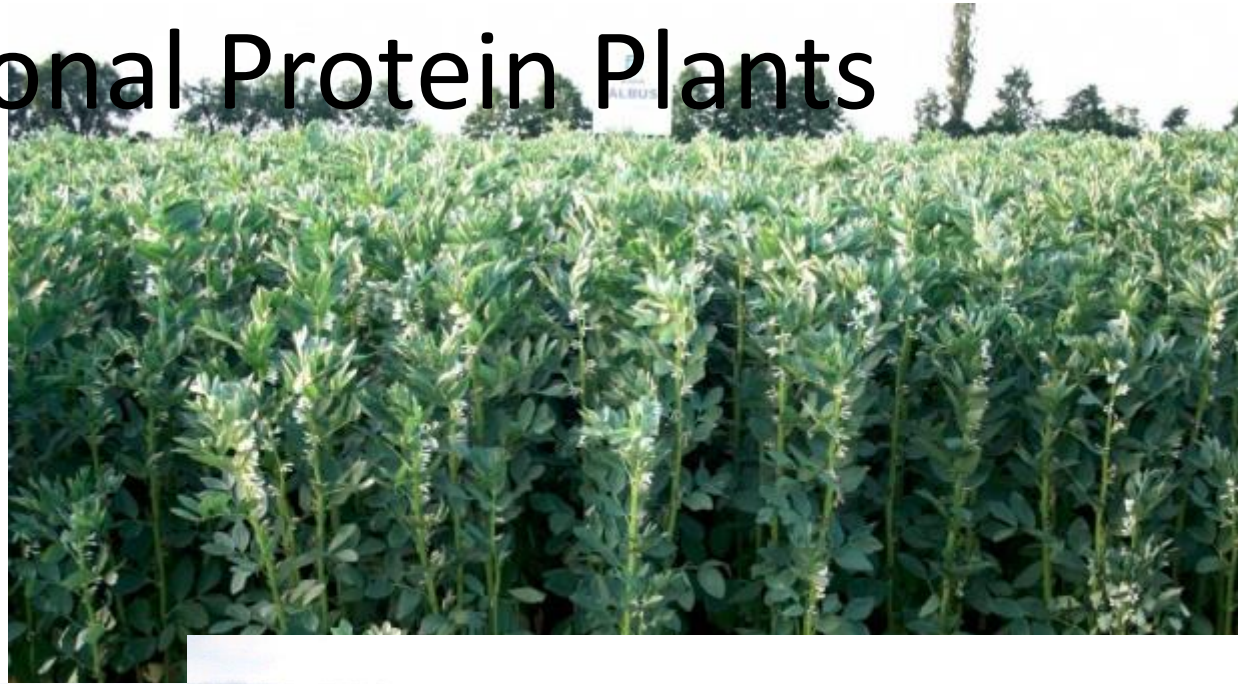
- Polish Government Strategy- support given to soybean, marketing, promotions
- Better agrotechnical knowledge
- More herbicides on the market
- More possibilities to sell- 45 places in PL
- Subsidies – fixed amount
- Greening- changes of pesticides ban

Soybean-Industry

- Imported soybean meal is easier, cheaper, more uniform for factories- represents 88% of needs of polish market
- Demand is high for non GMO
- Today the capacity of Polish factories are 140 000 tones of soybean/year (only soybean)
- Additional 200 000 tones possible by increasing capacities of oil factories
- 140 000 ha !!!! (10 times more than today on the field)
- 45 companies are able to buy soybean
- Polish farmers are not (yet) able to fulfill the needs of industry

Traditional Protein Plants

- Lupins – main crops in Poland – 70% of area
- Peas
- Faba Bean – Vicia Faba
- 250 000 ha



Legumes- what is the biggest problem

- A lot of advantages but area is very low, WHY?
- I asked this question to farmers, all members of the board of KZPRIRB. They are representing different regions, different soil potential and different climate.
- The answers were the same each time:

Profitability

- Less profitable compare to other species
- Low yields- sometimes just to cover the expences
- Not stable yields (1-3 tonnes)
- Not stable subsidies
- Greening regulations changes
- Planning in agriculture (crop rotation)is a long term planning , you have to think of seeds, place in the storehouse, contracts, money etc.
- Farmers wants stable regulations not changing the rules during the „game”, every year something new....
- Low demand and low price
- Advantages are not visible in the year of cultivation

Subsidies - legumes

- Farmers in Poland have extra subsidies to protein plants production but:
 - Subsidy depends on whole area of legumes
 - 2016 -100 EUR/ha
 - 2017 – 140 EUR/ha
 - You dont know what the subsidy is before sowing
 - Difficult businnes planing?
 - The first year when it were implemented area of legumes has jumped from 250 000 to 700 000 ha
 - Fixed amount would be the solution (230 EUR/ha)

- Subsidies to 6 species:
- Faba bean (*Vicia faba minor* L.);
- Peas (*Pisum sativum* L. (partim)), w tym peluszka (*Pisum arvense* L.),
- White lupin (*Lupinus albus* L.);
- Narrow leaf lupin (*Lupinus angustifolius* L.);
- Yellow lupin (*Lupinus luteus* L.);
- soybean (*Glycine max* (L.) Merrill).

Subsidies are given to the plants which are good component to fodders production

GREENING regulation (EFA)

- Ecological Area- it is decreasing farmers income- farmers has to pay for it,
- Legumes were very good solution to meet EFA regulation- it was soft solution,
- The easiest way to perform greening in farms was legumes cultivation,
- Impulse which convinced farmers to grow proteine plants
- This year area in professional farms has decreased by 50 % thanks to the pesticides ban,
- Difficult to plan crop rotation when regulations are changing very often

Summary

- profitability of legumes production is relatively low
- Planing is complicated
- Stable Subsidies would be a very good solution
- Withdrawal of pesticide ban on legumes on EFA greening would increase area in big farms
- Climat, soil potential, farm structure influence on legumes production
- Soybean promotions, national program, genetic improvment- should have effect very soon