

POLAND

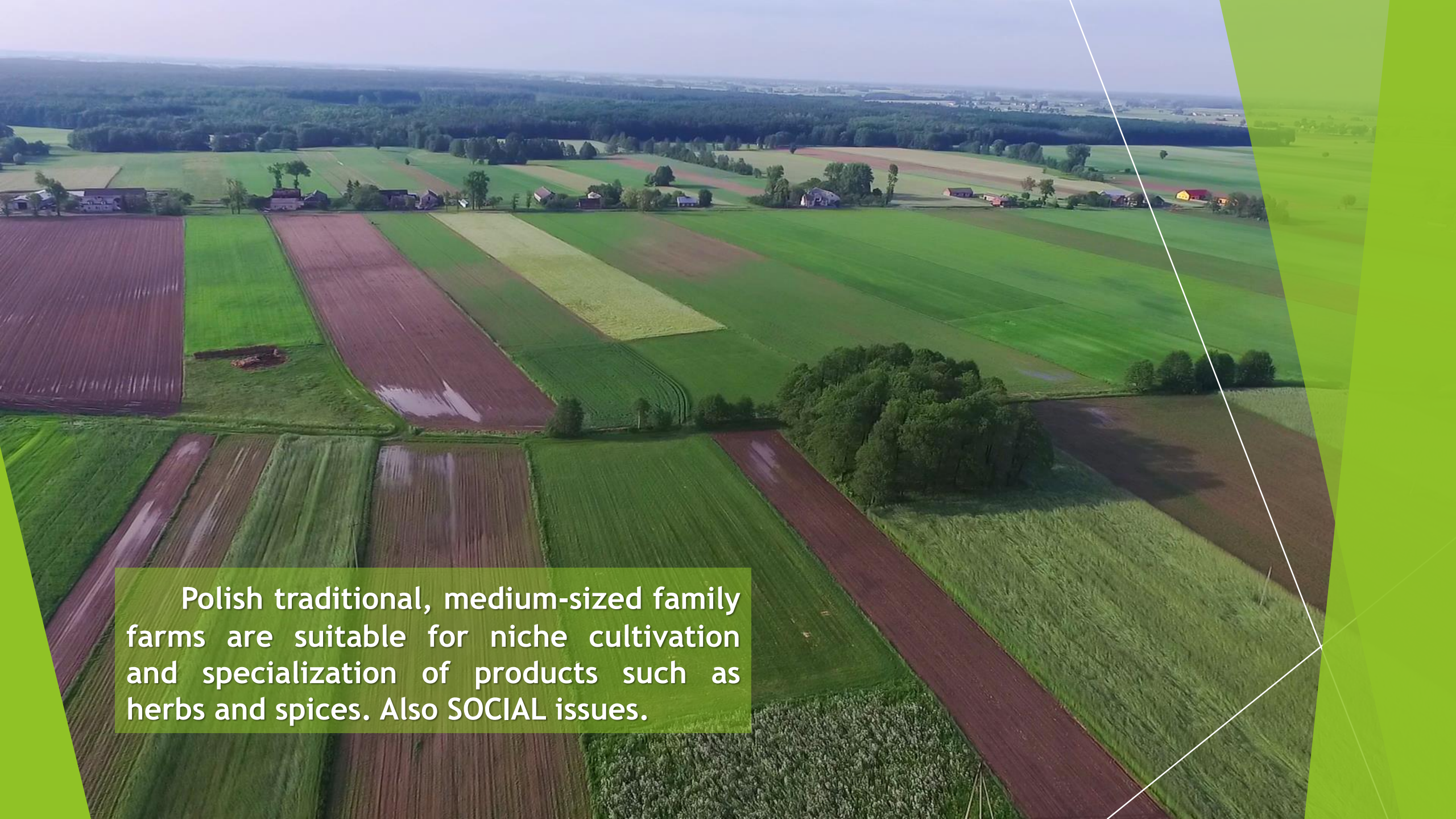
Production of herbal raw materials





Poland = rich biodiversity

- moderate climate
- fair amount of humidity
- variety of fertile soil types
- plants from many corners of the world grow well

An aerial photograph of a rural landscape in Poland, showing a patchwork of agricultural fields in various colors (green, brown, yellow, and purple) indicating different crops or stages of cultivation. In the background, there are clusters of small farmhouses and a dense line of trees. The sky is clear and blue. A large green triangular graphic element is on the right side of the image, and a white diagonal line runs from the top right towards the bottom right. A semi-transparent green box with white text is overlaid on the bottom left of the image.

Polish traditional, medium-sized family farms are suitable for niche cultivation and specialization of products such as herbs and spices. Also SOCIAL issues.

RAISING FARMERS qualifications during winter trainings



Łódź, 15 września 2022 r.

PROTOKÓŁ UPRAWY POLEWEJ, STOSOWANIE ŚRODKÓW OCHRONY ROŚLIN I NAWOZÓW

PROJEKTANT: BEATA
PROJEKT: ALBISZCZAK
TERMIN SIEWU: 03.09.2022
TERMIN SĄCZENIA: 15.09
CZY SUROWIEC JEST MODYFIKOWANY GENETYCZNIE: nie

NUMER PARTII: ALBISZCZAK
PRZEDSIĘWZIĘCIE: 03.09.2022
WARUNKI SUŻENIA: Temperatura: 20°C
POCHODZENIE MATERIAŁU SIEWNEGO: na chlebiec
DO PRODUKCJI ZOSTAŁY UŻYTE ORGANIZMY: na chlebiec

Data zastosowania	Nazwa handlowa środka chemicznego	Substancja czynna	Zastosowana ilość środka chemicznego (kg/ha lub l/ha)	Cel
03.09.2022	ALBISZCZAK	200g	200g	na chlebiec
03.09.2022	ALBISZCZAK	200g	200g	na chlebiec
03.09.2022	ALBISZCZAK	200g	200g	na chlebiec
03.09.2022	ALBISZCZAK	200g	200g	na chlebiec

Wzrost rośliny: 20 cm
Wzrost rośliny: 20 cm
Wzrost rośliny: 20 cm
Wzrost rośliny: 20 cm



SUPPORTING FARMERS by supervising their plantations and helping with documentation

HELPING FARMERS by providing:

seedlings

machines

sowing seeds





SELECTIONS OF CROPS that grow well in our climate and in which we can specialize. NOTHING AGAINST NATURE!



To protect the environment we REDUCE greenhouse growing and irrigation. Sustainability!



We DEVELOP optimal farming and processing technology, often invent new machines. Polish construction companies and dedicated herbs solutions.

The background of the slide features abstract, overlapping green geometric shapes, primarily triangles and polygons, in various shades of green, creating a modern and dynamic visual effect.

Production models of herbs in POLAND

INDUSTRIAL DRYING of herbs

- Concentrated on big crops like **parsley, chives, valerian, dill**
- Many new sophisticated facilities (EU funds) with very good production conditions
- **Disadvantage:**
 - higher temperature and air flow decrease active contents or aroma
 - Prolonging harvesting window (decrease of contents)

DRYING ON SMALL / MEDIUM SIZE FARMS

- Wide range of smaller products, cultivated and wildcrafted
- Flexibility to use different technics and settings
- Higher active contents (like essential oil in **Valerian** or **thyme**, **RA in Melissa**), because of slower and lower temperature drying
- Disadvantages: QA challenges, old technologies, low productivity, no strong cooperative organisations

WILD CRAFTING

- decrease of production in POLAND
- reworking of wildcrafted herbs from Ukraine
- big QA challenges
- unpredictable prices and quantities

**What is
current
situation in
Poland?**

Implementation of PA and PAH solutions

- chance and challenge for farmers and EU growers
- big understanding from farmers
- huge increase of production costs on farms and manufacturers

Professionalization of herbal business

- fewer producers
- decrease of total production in 2017 (climate?)
- bigger farms
- small herbal farms give up

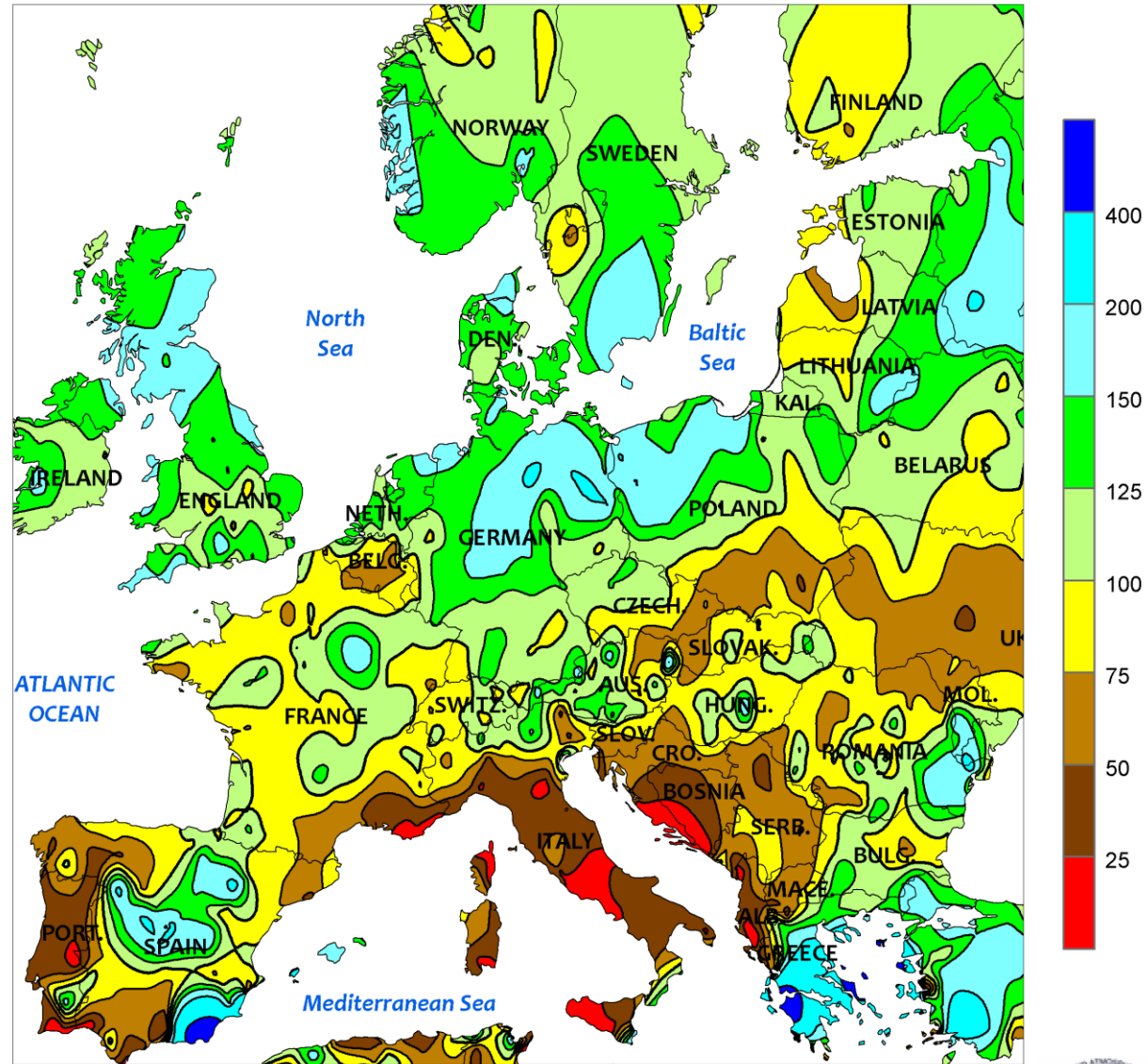
The background features a series of overlapping, semi-transparent green triangles and polygons that create a dynamic, layered effect. The colors range from a light lime green to a darker forest green. The text is positioned on the left side of the image, set against a white background that is partially obscured by the green shapes.

**Difficult
(wet and cold)
summer 2017**

EUROPE

Percent of Normal Precipitation

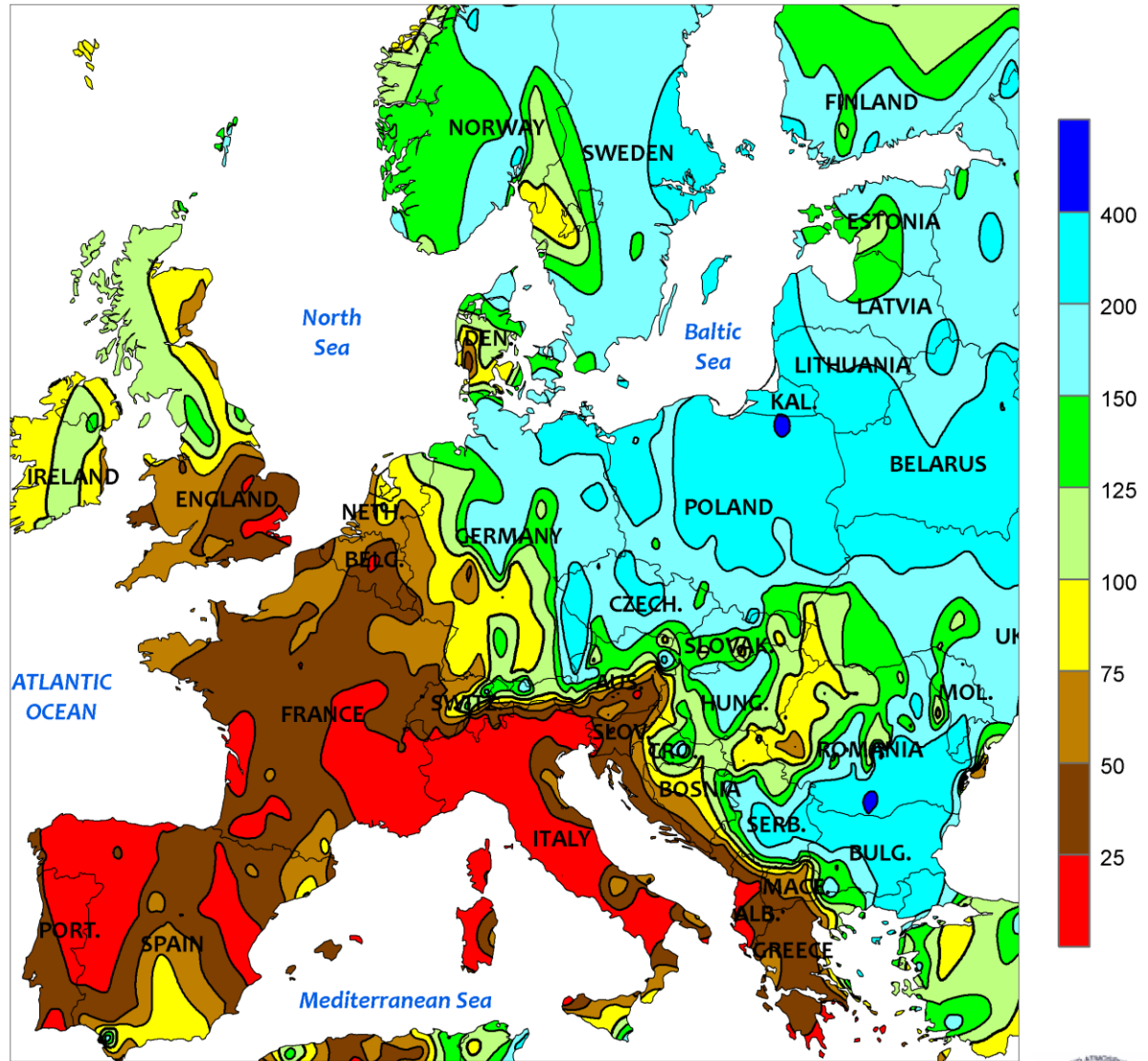
June 1, 2017 - August 31, 2017



CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data




EUROPE
Percent of Normal Precipitation
October 2017



CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data



The background features a series of overlapping, semi-transparent green geometric shapes, primarily triangles and polygons, creating a dynamic, layered effect. The colors range from a light lime green to a darker forest green. The shapes are concentrated on the right side of the image, with some extending towards the center.

**Labour deficit on farms
1.5 million Ukrainians
work in Poland**

The background features a series of overlapping, semi-transparent green triangles and polygons of various shades, creating a dynamic, abstract geometric pattern. The colors range from a light lime green to a darker forest green. The shapes are layered, with some appearing in front of others, creating a sense of depth. The overall composition is modern and clean.

**Big domestic demand from Polish
diet supplements companies**

**BUT new advertising restrictions
may change it**

MAIN HERBAL PRODUCTS OF POLAND

A large pile of Silybum marianum seeds, which are small, dark brown, and elongated with a lighter-colored hilum, scattered on a white surface. The seeds are densely packed in the upper right and more sparsely distributed towards the bottom left.

Silybum marianum

- 3000 hectares
- Good silymarin content
- Huge local consumption



Carum carvi

- Biannual mainly
- High essential oil 3-5%
- Important local consumption



Thymus vulgaris

- for spices, pharmaceuticals, cosmetics and feed
- >3% essential oil
- huge increase of demand and production over last years
- Mainly export
- Increase of demand (Mediterranean food expansion?)



Mentha piperita

- essential oil >2%
- tea market mainly
- local consumption and export

A photograph of a field of Valeriana officinalis plants. The plants are green with deeply lobed leaves and are growing in rows. The background shows a field of tall grass and some trees in the distance. The image is overlaid with a green geometric design consisting of several overlapping triangles and a thin white line.

Valeriana officinalis

- one of biggest export item
- challanging active compounds

A wide-angle photograph of a vast field of chamomile flowers. The flowers are white with bright yellow centers, densely packed together. The field stretches towards a horizon under a grey, overcast sky. A green semi-transparent banner is at the bottom, and a green geometric shape is on the right side.

Matricaria chamomilla

- Decrease of production PAs!!!
- Tea market mainly



Melissa officinalis

- >500 ha per year
- rosmarinic acid 2-4%
- high essential oil



Plantago psyllium

- 
- Big local consumption
 - Purity >99.8%
 - also import from France (in wet years)



Salvia officinalis

- 
- >1.5% essential oil
 - for tea, pharmaceuticals, spices and feed

THANK YOU

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