

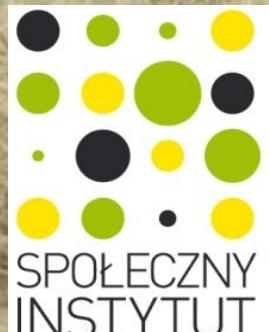
# **Społeczny Instytut Ekologiczny**

## **Social Ecological Institute**

**Agrobiodiversity for rural  
development in Poland**

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Founded in 1990 - (one of the first NGO's after political transformation) by people who are aware of environmental threats and appreciate the importance of local initiatives in sustainable development.

Social Ecological Institute aims:

- conducting and supporting ecological education
- supporting sustainable development in rural areas
- promoting and protecting of agrobiodiversity
- promotion of regional and local products

# The situation of Poland today

- Part of European Union (since 1.05.2004)
- Intensive development - economic and social
- Threat - globalization, consumerism, lust of regionalism and tradition
- Advantage: quick lesson of civil society, gender, possibilities for international cooperation

# The structure of polish rural areas

- rural areas = 93% of Polands area
- arable land = 60% of Polands area
- 39% inhabitants lives in the countryside  
(ca 15 mln - in Poland 38 mln people)
- 11% od populations work as farmer
- 1 700 000 farms
- 90% of arable land belongs to family farms
- 85% - are farms until 10 ha
- In 2012 - 600 000 ha was organic cerified

# Changes

- Pressure to produce more and cheaper = intensive agriculture = less small farms = destruction of traditional rural landscape and biodiversity
- The subsidies for environmental and nature protection helps to slow down the changes but the direction is one way
- New trends:  
Young rural people exodus to the city  
Town people emigration to the rural areas
- Still the connection between city and rural areas is close

# The challenge

- Implement the idea of sustainable development on every level of polish society
- Protection and sustainable use of polish biodiversity and agrobiodiversity
- Raising of ecological awareness

# Biological diversity in Polish agriculture is still one of the richest in Europe.

- favorable natural and socio-historical conditions
- predominance of small, family farms with extensive and diverse production
- conditions to bring back many almost extinct indigenous breeds of farm animals and local plant varieties and enable their protection *in situ*.

# The agro-environmental program package:

- I. Sustainable agriculture (100 EUR/ha)
- II. Organic farming (from 200 EUR to 450 EUR)
- III. Extensive use of green areas (120 EUR/ha)
- IV. Protection of endangered bird species and habitats outside Natura 2000 (250 EUR/ha)
- V. Protection of endangered bird species and habitats on Natura 2000 areas (350 EUR)

# The agro-environmental program Package: Gene resources protection

VI. Preservation of endangered plant genetic resources in agriculture:

6.1. for sale - 150EUR/ha

6.2 for seed production - 200 EUR/ha

6.3. for Gene Banks - 1200 EUR/ha

6.4. traditional orchards - 520 EUR/ha

VII. Preservation of endangered farms breeds in agriculture:

Cattle - 280 EUR/year

horses - 380 EUR /year

sheeps - 80 EUR /year

pigs - 150 EUR/year

# In Poland there are 74 native breeds protected in the National Gene Program:

- Cattle - 4 breeds (PC -2500, czerwono-biała -3000, czarno-biała -2000, białogrzbieta -300)
- Horses - 7 breeds (Konik polski, Hucul, Małopolski, Śląski, Wielkopolski, Zimnokrwisty sokólski and sztumski)
- Pigs - 3 breeds (zlotnicka biała 600, pstra 900; pulawska -900)
- Sheep - 11 breeds (Corriedale, Cakiel podhalański, Kamieniecka, Merynos, Olkuska, Pomorska, Górska, Wielkopolska, Wrzosówka, Świniarka, Uhruska, Żelaźnieńska)

- **Hens** - 7 breeds (Leghorn, Polbar, Rhode Island Red, Rhode Island White, Sussex, Zielononóżka and Żółtonożka Kuropatwiana)
- **Geese** - 11 breeds (Biłgorajska, Garbonosa, Kartuska, Kielecka, Landes, Lubelska, Podkarpacka, Pomorska, Romańska, Rypińska, Słowacka, Suwalska, Zatorska)
- **Ducks** - 6 breeds (Minikaczki K2, Khaki Campbell x Orpington, Pekin Polski P33, Pekin LSA, Pekin P8, Pekin P9)
- **Fish** - 6 lines (Karp: polski gołyski, knyszyński, litewski, ukraiński, starzawski; Polski pstrąg tęczowy)
- **Bees** - 4 line (Linia M: Kampinoska, Augustowska, Północna, Asta)

## VI.3. Package VI. Preservation of endangered plant genetic resources in agriculture:

- a) *Secale cereale* var *multicale*, (krzyca)
- b) *Triticum dicoccum*, (płatkurka)
- c) *Triticum monococcum*, (samopsza)
- d) *Panicum miliaceum L.*, (proso)
- e) *Avena strigosa Schreb*, (owies szorstki)
- f) *Camelina sativa L.*, (Inicznik siewny)
- g) *Lotus uliginosus Schkuhr*, (komonica błotna)
- h) *Melilotus alba Medik*, (Nostrzyk bialy)
- i) *Lactuca sativa L.* var. *angustana hort. ex*, (sałata łodygowa)
- j) *Lathyrus sativus L.*, (lędźwian siewny)
- k) *Lens culinaris Medik*, (soczewica jadalna)
- l) *Pastinaca sativa L.*, (pasternak)

# List of varieties that are part of traditional orchard includes:

**70 varieties of apple trees,**

**39 pear varieties,**

**16 sweet cherry varieties,**

**10 sour cherries,**

**6 plums varieties**

1. Ananas Bierżenicki, Antonówka Półtorafunt, Aporta, Babuszkino, Beforest, Boiken, Bukówka, Cellini, Cesarz Wilhelm, Charłamowska, Cytrynówka, Glogierówka, Grafsztynek Czerwony Grafsztynek Finlandzki, Grafsztynek Prawdziwy, Grahama Jubileuszowe, Grochówka, Gruchoty, Jakub Lebel, Kalwillia Jesienna, Kantówka Gdańska, Kardynalskie, Koksa Pomarańczowa, Kosztela Kronselska, Królowa Krótkonóżka, Książę Albrecht Pruski, Książęce, Kuzynek Buraczek, Landsberska, Malinowa Oberlandzka, Montwiłówka, Niezrównane Peasgooda, Ontario, Oliwka Czerwona, Oliwka Inflancka, Pepina Linneusza, Pepina Ribstona, Piękna z Barnaku, Piękna z Hrnhatt, Piękna z Rept, Rajewskie, Rarytas Śląski, Reneta Ananasowa, Reneta Baumana, Reneta Blenheimaska, Reneta Gwiazdkowa, Reneta Kasselska, Reneta Kulona, Reneta Muszkatołowa, Reneta Orleańska, Reneta Sudecka, Reneta Szampańska, Reneta Szara, Reneta Złota, Reneta Zuccalmagilio, Różanka Polska, Ryszard Żółty, Signe Tillisch, Suislepper, Sztetyna Czerwona, Sztetyna Zielona, Titówka, Złotka Kwidzyńska, Zorza, Żeleźniak.

2. Amanlisa, Bera Boska, Bera Diela, Bera Liońska, Bera Szara, Bera Ulmska, Bergamota Czerwona, Jes, Boika, Cytrynówka, Diuszesza Wczesna, Dobra Ludwika, Dobra Szara, Dr Jules Gujot, Dziekanka Lipcowa, Dziekanka Jesienna, Flamandka, Józefinka, Kalebasa Płocka, Kongresówka, Król Sobieski, Księżna Elza, Napoleonka, Owsianka, Panienka, Paryżanka, Patawinka, Pomarańczówka, Proboszczówka, Pstragówka, Pstragówka Zimowa, Salisbury, Tongrówka, Urbanistka, Winiówka Francuska, Źyfardka

3. Bladoróżowa, Czarna Późna, Donissena żółta, Gubeńska, Gubińska Czarna, Kanarkowa, Kassina, Kozerska, Kunzego, Lotka Trzebnicka, Merla, Miodówka, Przybrodzka, Sercówka Nieszawska, Wczesna Riverso, Wolska

4. Hiszpanka, Hortensja, Książęca, Min. Podbielski, Pożóg 29, Szklanka Wielka, Wczesna Ludwika, Włoszakowice, Wróble, Wiśnie odroślowe lokalne

5. Brzoskwińiowa, Fryga, Kirka, Lubaszka, Mirabelka z Nancy, Renkloda Zielona

The idea:  
to create a holistique model  
of farming



Reintorduction of native breeds and plants variety, organic farming, local processing, short chaines of distributions, marketing of quality agrobiodiversity product, direct selling

# How we do it?

- Reintroduction of breeds and local plant varieties in organic farms.
- Training, workshops, education
- Cooperation with scientific institutions, NGO
- Networking farmers, breeders, producers
- Developing food processing
- Marketing of local products
- Promoting agrobiodiversity products

The greenlegs hens are back in hundred of farms





Eggs became a flagship product, promoting not only the green-legged chicken breed but also organic products and the need to protect biodiversity in agriculture.

The zlotnicka pigs:  
the meat is suitable for the  
production of specific,  
regional and meat products



In Lutobrok local food processing factory for meat of zlotnicka pig: traditional smoked sausages and ham.

The smokehouse is made from alder tree wood



## Polish red and white-black cow:

- milk: fat 4,5%; Protein above 4%
- good for cheese production
- meat - tender, finely-fibrous



Hundred of new „old“ orchards was planted in the farms as traditional orchards.



# Products from an old orchard:

Domestic drying  
heated by wood chips.  
Drying at 45 C.



# The arobiodiversity products

Are good products for local processing, traditional recipes, culinary heritage

More and more consumers are asking for such specific products

On the market there are already: spelta bred and cereals , emmer flour, greenlegged hens eggs, cheese from Polish Red cow, Złotnicka pig meat, juice from polish apple antonowka, plum butter, etc.



U. Krakowskie Przedmieście  
21/23 →  
Siedmiogrodzka

Suburbanische

kuchnia.tv  
food film fest

ICHLEB

kuchnia.tv  
food film fest

smak



# Problems to solve

- administration and paperwork
- difficult cooperation with scientists and Gene Banks,
- inbreeds problem in cattle, pigs and shepps husbandry
- need of networks
- cooparation with central institutions (ex. catering)
- need of a national campaign
- need of a good marketing
- the production is small, still niche products



RÓŻNORODNOŚĆ

BIOLOGICZNA W ROLNICTWIE