



MINISTRY
OF THE ENVIRONMENT

Agricultural advisory system in Poland contributing to ammonia emission reduction

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Aim

The major goal of the public agricultural advisory services in Poland is:

- to provide high quality advisory services,
- to support farmers and rural inhabitants to implement tasks resulting from:
 - ✓ the Common Agricultural Policy (CAP),
 - ✓ the national agricultural development programme,
 - ✓ the existing legislation in place,taking into consideration environmental, food safety and livestock welfare requirements.

Public agricultural advisory system

**Minister of Agriculture
and Rural Development
(MRiRW)**

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graph TD; MRiRW["Minister of Agriculture and Rural Development (MRiRW)"] --- CDR["Main Agricultural Advisory Centre (CDR)"]; MRiRW --- ODRs["16 Regional Agricultural Advisory Centres (ODRs)"]
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**Main Agricultural
Advisory Centre
(CDR)**

**16 Regional Agricultural
Advisory Centres
(ODRs)**

Present public system of agricultural advisory services is based on Act of 22 October 2004 on agricultural advisory units [1] and Regulation of the Minister of Agriculture and Rural Development of 23 October 2015 [2]

CDR's core activity

The activity of the CDR supporting agricultural advisors includes:

- On-line Support System for Agricultural Advisors (<http://helpdesk.cdr.gov.pl/>),
- Training courses, workshops and seminars,
- Operation of database (educational guide-books, software used in agriculture, production standards, timetable of promotion events, agricultural press publications),





CDR's core activity (continued)

Precision fertilisation, 2016 (incl. control of spreading and fertiliser dosing using GPS and GIS techniques)

Environmental protection on farms. A guidebook for agricultural advisors, 2010 (incl. chapters on fertilisers' management and air protection)

CENTRUM DORADZTWA ROLNICZEGO W BRWINOWIE
ODDZIAŁ W POZNANIU

**OCHRONA ŚRODOWISKA
W GOSPODARSTWIE ROLNYM**

Poradnik dla doradcy

Poznań 2010

- Dissemination of films, publications, leaflets, e-bulletins
- Interenational cooperation

 **Interreg**
Baltic Sea Region



Baltic Slurry Acidification

CDR and ODRs regional scope

16 Regional Agricultural
Advisory Centres (ODRs)

27 Branch Offices
in 12 Centres

312 Agricultural
Advisory Groups

Local Advisory
Focal Points

Farmers and
rural inhabitants



Scope of activity

ODRs provide, *inter alia* [1]:

- 1) Advisory services and training in the field of:
 - a) application of modern, low-emission agri-technical and breeding methods,
 - b) organic farming,
 - c) solving technological and organisational as well as economic problems on farms;
- 2) Cooperation within tasks resulting from agri-environmental programmes and action programmes aimed at reduction of nitrogen releases from agricultural sources [14];
- 3) Dissemination of information on agricultural production methods and life styles that are environmentally friendly;
- 4) Educational activities leading to professional qualification upgrading of farmers.



XXII Agricultural Knowledge Olympiad /competition for young farmers (Plonsk, 4 Dec. 2014) and its winners with prizes [20]



Pomorska On-line Platform on Information and Knowledge Exchange 2016 (<http://pepwiw.pl/>) [21]



STRONA GŁÓWNA FORUM

Pomorska Elektroniczna Platforma Wymiany Informacji i Wiedzy



Dla rozwoju obszarów wiejskich niezbędny jest transfer nowych rozwiązań innowacyjnych. Aby było to możliwe musi dojść do współpracy wielu instytucji i wymiany wiedzy w zakresie rolnictwa, leśnictwa oraz przedsiębiorczości pozarolniczej. Konieczna jest także promocja innowacji. Mamy nadzieję, iż realizowana operacja „Integracja działań na rzecz obszarów wiejskich Pomorza” i uruchomienie Pomorskiej Elektronicznej Platformy Wymiany Informacji i Wiedzy przyczyni się do pobudzenia współpracy podmiotów uczestniczących w rozwoju obszarów wiejskich w województwie pomorskim, a tym samym do przyspieszenia proinnowacyjnego rozwoju tych terenów.



Pomorska Elektroniczna Platforma Wymiany Informacji i Wiedzy ma na celu utrzymanie podjętej podczas operacji współpracy PODR i partnerów z innymi podmiotami uczestniczącymi w przeprowadzonych warsztatach, z 4 sektorów: nauki, biznesu, jst i organizacji społecznych. PEPWIW.PL umożliwia m.in. elektroniczną wymianę informacji i materiałów merytorycznych, a także wymianę doświadczeń. Zawiera bazę danych tj. zasoby aktualnej wiedzy w zakresie 7 dziedzin: „Rolnictwo”, „Rybolówstwo”, „Leśnictwo”, „Energetyka”, „Produkcja żywności”, „Inna przedsiębiorczość pozarolnicza na obszarach wiejskich”, „Bioekonomia”.

Ammonia reduction

With a view to reducing ammonia emissions from agriculture the advisors' tasks include:

- training in good agricultural practices [22, 23], incl. natural fertilisers' storage and use,
- preparation of agri-environmental action plans [3-4], incl. fertilisation plans based on nitrogen budget and chemical soil analyses,



Ammonia reduction (continued)



- optimum feeding strategies and microclimatic conditions ensuring livestock welfare [7],

- requirements to meet the needs of sustainable and organic farming [3-4, 17].



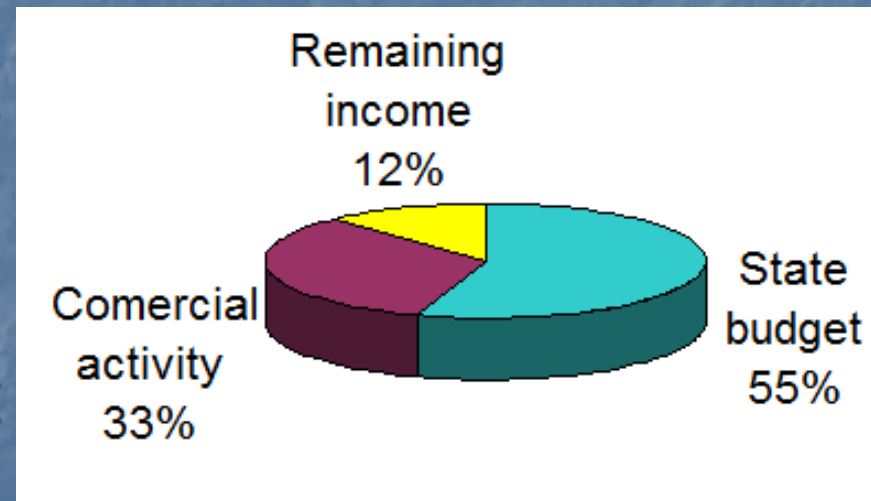
ODRs' costs

The costs of ODRs' functioning are differentiated and depending on:

- Individual statutory tasks according to regional needs,
- Additional or investment tasks or measures undertaken by the centres in different years.

The average annual costs amount to approx. **63 million EUR***/.

Annually, the statutory activity of ODRs is financed from the state budget in the form of target donation not exceeding approx. **42 million EUR***/ [18].



Financial sources

*/ according to average exchange rate of 21 April 2017: 1 EUR = 4.2705 PLN

Effects

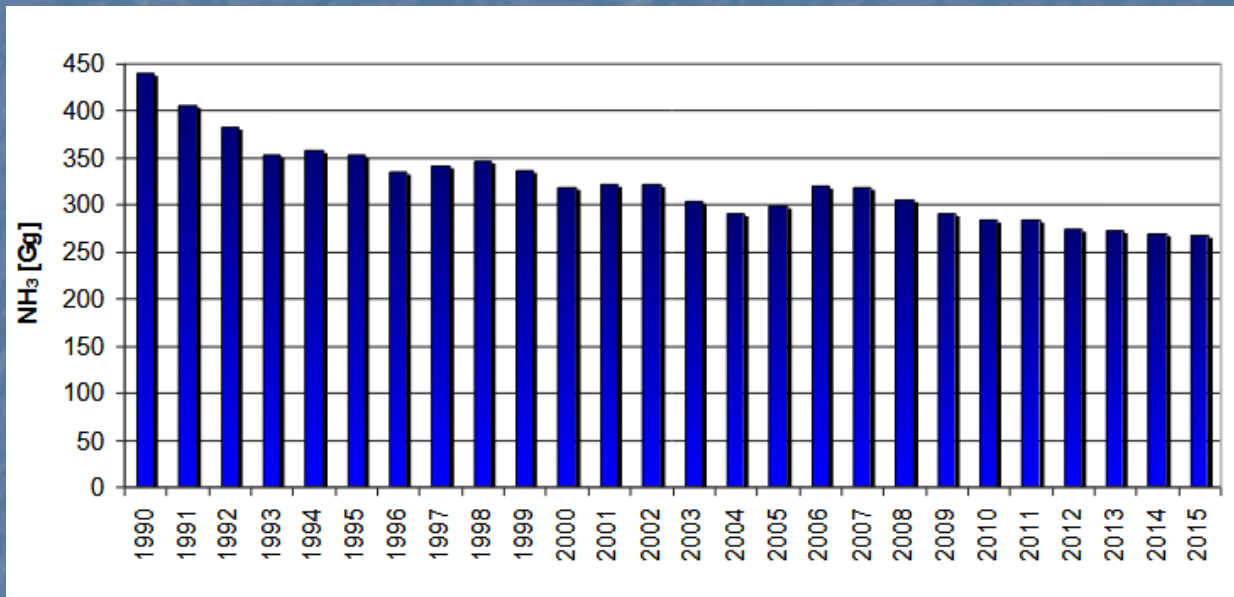
In 2007-2013 over 67 thousand training courses were carried out by ODRs, *inter alia*, related to the use of EU funds, the Code of good agricultural practices, eco-production and generation of highest quality agricultural products and food. Over 1.1 million farmers (with their families) participated in them.

Some requirements concerning good agricultural practices are already included in Polish legal acts and regulations [5-17].

Ammonia emission in Poland

The agricultural advisory system contributes to the reduction of ammonia emission in Poland.

It is only one of the many measures undertaken to reduce ammonia emissions (by around 36% over 25 years).



Ammonia
emission trend
in Poland [24]

Reduction from 413.7 Gg NH₃ in 1990 to 265.1 Gg NH₃ in 2015.
The main ammonia emission source is still agriculture
(97% of the total annual NH₃ emission in Poland).

Reference

1. Act of 22 October 2004 on agricultural advisory units (OJ 2004 No 251, item 2507 as amended)
2. Regulation of the Minister of Agriculture and Rural Development of 23 October 2015 on detailed methods for carrying out training courses and complementary training as well as exams and complementary exams (OJ 2015 item 1821)
3. Act of 7 March 2007 on supporting the development of rural areas with the contribution of funds from the European Agricultural Fund for Rural Development under the Rural Development Programme for 2007-2013 (OJ 2007 No 64, item 427 as amended)
4. Act of 20 February 2015 on supporting the development of rural areas with the contribution of funds from the European Agricultural Fund for Rural Development under the Rural Development Programme for 2014-2020 (OJ 2015 item 349 as amended)
5. Promulgation of the Minister of Agriculture and Rural Development of 15 December 2016 on the change of the list of provisions set by European legislation taking account of national legal acts implementing that legislation (MP 2016 item 1248)
6. Regulation of the Minister of Agriculture and Rural Development of 9 March 2015 on standards for good agriculture principles meeting environmental protection requirements (OJ 2015 item 344 as amended)
7. Regulation of the Council of Ministers of 20 July 2004 on detailed requirements for granting financial support for agri-environmental undertakings and improvement of livestock well-being covered by the rural development plan (OJ 2004 No 174 item 1809 as amended)
8. Regulation of the Minister of Agriculture and Rural Development of 15 February 2010 on requirements for keeping farm animal species for which EU legislation provides certain protection standards (OJ 2010 No 56 item 344 as amended)
9. Regulation of the Minister of Agriculture and Rural Development of 28 June 2010 on minimum requirements for keeping species of farm animals other than those for which protection standards have been set in the EU legislation (consolidated text OJ 2017 item 127)
10. [Act on 10 July 2007 on fertilisers and fertilisation (consolidated text OJ 2017 item 668)]
11. Regulation of the Minister of Agriculture and Rural Development of 16 April 2008 on detailed rules for using fertilizers and conducting training courses on their use (consolidated text OJ 2014 item 393)
12. Act of 7 July 1994 – Construction Law (consolidated text OJ 2016 items 290, 961, 1165, 1250)
13. Regulation of the Minister of Agriculture and Rural Development of 7 October 1997 on technical requirements for agricultural buildings and for their location (consolidated text: OJ 2014 item 81)
14. Act of 18 July 2001 – Water Law (consolidated text: OJ 2015 item 469, as amended)
15. Act of 27 April 2001 - Environmental Protection Law (consolidated text: O.J. of 2017 item 519)
16. Regulation of the Minister of the Environment of 27 August 2014 on the types of installations likely to cause significant pollution of different nature elements or environment as a whole (consolidated text: 2015 items 469, 2295)
17. Act of 25 June 2009 on organic farming (consolidated text: OJ 2015 item 497, OJ 2016 items 1001, 1579)
18. Materials of the Ministry of Agriculture and Rural Development <http://www.minrol.gov.pl>
19. Materials of the State Agricultural Advisory Centre (CDR) <http://www.cdr.gov.pl>
20. Mazowiecki Agricultural Advisory Centre <http://www.modr.mazowsze.pl>
21. Pomorski Agricultural Advisory Centre <http://www.podr.pl>
22. Code on Good Agricultural Practice. Ministry of Agriculture and Rural Development/Ministry of the Environment, Warsaw 2014
23. Code on Odour Abatement. Ministry of the Environment, Warsaw 2016
24. POLAND'S INFORMATIVE INVENTORY REPORT 2017. Institute of Environmental Protection-National Research Institute (IOS-PIB)/National Centre for Emissions Management (KOBiZE)

Thank you for your attention!

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