

Fourth regional meeting, Wroclaw, 13-14 March 2003

Members present:

Denmark	Finn Rexen, Bioraf Denmark Foundation
Denmark	Michael Rustand, Bornholms Erhvervscenter
Finland	Elina Muuttomaa, TTS Institute
Germany	Jörg Köhn (first day) Innovationsgesellschaft mbH
Germany	Antje Köhn (first day), Innovationsgesellschaft mbH
Latvia	Gundega Lapina, Latvian Technology Centre
Lithuania	Jolanta Urbanavicius, Lithuanian Innovation Centre
Lithuania	Eigirdas Zemaitis, Lithuanian Innovation Centre
Poland	Anna Grzybek, IBMER
Poland	Renata Adamowicz, IBMER
Poland	Jaroslav Osiadacz, IRC West Poland
Sweden	Rolf Olsson, Swedish University of Agricultural Science

Local stakeholders:

Zbigniew Dynak	- Department of the Regional Development, Lower Silesia Marshall Office.
Sabina Lubaczewska	- Polish Society of Wildlife Friends "Pro Natura", Wroclaw.
Grazyna Norbert Extension.	- Lower Silesian District Centre of Agriculture Extension.
Waldemar Janeczek	- Lower Silesian District Centre of Agriculture Extension.
Prof. Mieczyslaw Mieczynski	- Renewable Energy Council (Technical University of Wroclaw).
Wlodzimierz Fast	- Foundation in the Service of Rural Communities.
Dr. Andrzej Vogt	- Chemistry Department, University of Wroclaw.
Prof. Hubert Kolodziej	- Chemistry Department, University of Wroclaw
Joanna Basztura	- Wroclaw Centre for Technology Transfer (Technical University of Wroclaw).
Aldona Kucner	- Wroclaw Centre for Technology Transfer (Technical University of Wroclaw).
Prof. Eugeniusz Kamiński	- Agricultural University of Wroclaw
Dr. Marek Reksa	- Renewable Energy Council (Technical University of Wroclaw).
Jerzy Brach	- „Futurum” Czestochowa
Marcin Szulakowski	- „Futurum” Czestochowa

Thursday 13. March 2003: Stakeholders meeting

10.00 - 10.15: Welcome to Wroclaw. Jaroslav Osiadacz

10.15 - 10.30: Short introduction to Basan. Finn Rexen

10.30 - 11.00: Presentation of WCTT. Professor Jan Koch, Grzegorz Gromada

11.00 - 11.30: Presentation of the region and regional development policy.
Mr. Zbigniew Dynak - Head of department of the regional Development, Lower Silesia Marchall Office.

11.30 - 12.00: Coffee brake

12.00 - 12.30: Programme of sustainable development in the Barycz River valley.
The integrated model project of flood prevention, nature conservation and promotion of extensive agriculture -
Ms. Sabina Lubaczewska, Polish society of Wildlife Friends "Pro Natura", Wroclaw.

12.30 - 13.30: Incentives and barriers concerning innovation and technology transfer in agriculture and agro-industry.
Ms. Grazyna Norbert,

Mr. Waldemar Janeczek - Lower Silesian District Centre of Agriculture Extension.

13.30 - 14.30: Lunch

14.30 - 15.00: How to use the renewable energy resources of the Lower Silesia -

Professor Mieczyslaw Mieczynski - Lower Silesia Renewable Energy Council

15.00 - 15.30: The unemployment and employment in agriculture in Lower Silesia -

Mr. Wlodzimierz Fast - Foundation in the service of Rural Communities.

15.30 - 16.00: Coffee break

16.00 - 16.30: Concept of the Biofuel Energy Centre -

Dr. Andrzej Vogt - Chemistry Department, University of Wroclaw.

16.30 - Visit at the University of Wroclaw -

semi technical scale installation of the bio-fuel Energy Centre

Professor Hubert Kolodziej, Dr. Andrzej Vogt.

Welcome and introduction to Basan



Jaraszlaw Osidiadacz welcomed the participants, and Finn Rexen gave short introduction to the content and objectives of Basan. Lower Silesia is Poland's 7th largest voivodship and the 5th most populated. It has almost 3 million inhabitants and the main industrial sectors are: Mining, textile production, chemical industry and agriculture. In general the soil is fertile, the climate is mild and the farming structure is favourable. Wroclaw has some 600.000 inhabitants, and 5 universities and 3 research institutes are situated in the city.

Region in brief

Area: 19 948 square km
Population: 2 971 100 (urban 72%)
Capital city: Wroclaw

Main sectors: mining, textile, electrical, IT, automotive, construction, chemical, agriculture
Special Economic Zones: 3

Economy

A fundamental characteristic of the Lower Silesian industry is its diversification, protecting it from negative economic and social "jolts", possible during a sector-specific recession.

Natural conditions

The natural conditions of Lower Silesia are very propitious for farming - good soils, rather mild climate and a favorable agrarian structure. The northern and southern parts of Lower Silesia in opposition to culture-changed central part - with its attractive landscape and recognized climatic qualities offer good attractive agro-tourism opportunities.

Presentation of WCTT

Aldona Kucner

WCTT is part of the Wrocław University of Technology. It has as objectives to provide industrial companies with services such as training courses, consultancy, information etc. It has as a main activity to bridge the gap between university know how and industrial experience.

The information services include information on funding opportunities within the EU Framework programmes, and partner search.

The consultancy activities include technical support, one-day visits to companies and support to trans-national technology transfer negotiations as well as assistance to formulation of EU research applications.

WCTT is a regional contact point for the EU research programmes. It is involved in the development of a regional innovation policy, and it also function as an innovation relay centre.

The centre has 900 customers including some of the biggest foreign companies in Poland such as Bosch, Volvo, De Laval, DANFOSS etc.

Presentation of the region and its development policy

Zbigniew Dynak - Regional Development Department of Marshall Office

HISTORY

Lower Silesia is the part of Silesia – a historical region situated in southwest Poland. Division into Lower and Upper Silesia was already made in 13th century, when various regions of Silesia belonged to different princes of the Silesian line of the Polish Piast dynasty. In the 10th century Silesia became part of Poland and remained under Polish rule until 1335, though it was divided into duchies, In the following centuries the Silesian princes accepted the Bohemian and the Austrian sovereignty to pass under the Prussian rule in 1741 and come back to Poland after the Second World War.

ADMINISTRATIVE STATUS

Lower Silesia is one of the 16 regions of Poland, created in January 1999 by the reform of the country's administrative structure. The region is governed, at the provincial level, by self-governing administration, i.e. by the Local Parliament of the Province, with its chairman, and the provincial administrator (wojewoda) as a representative of the State Administration.

Lower Silesia represents not only 1 province but also 26 poviats (counties) and 4 cities enjoying the rights of the poviats (Jelenia Góra, Legnica, Wałbrzych, and Wrocław) and 169 communes (36 municipalities, 53 rural and town communes, 80 rural communes).

GEOGRAPHY

To the south the voivodship is flanked by the picturesque Sudety Mountains, the northern part of the region, situated in the Odra River valley, is called Nizina Śląska (Silesian Lowland). Lower Silesia boasts versatile landscapes ranging from the Sudeten mountains with their complex reliefs, to picturesque foothills to the South, to central lowlands of the Odra valley, to woody hills and unique Milicz Lakes to the North. Scattered with castles and monasteries, abounding with spots of outstanding cultural and natural beauty, this land is attractive even to a very fussy tourist. At the same time, the region is rich in natural resources, offers favourable agricultural conditions and boasts several-century-long industrial tradition. Although badly neglected, the settlement and transport networks are extremely well developed.

The length of the border on the Czech Republic amounts to 432 km and on Germany – 80 km. The neighbouring voivodships include Lubuskie, Wielkopolskie and Opolskie.

The seventh largest region of Poland in area, Dolnośląskie covers approximately 20 thousand square kilometers and is inhabited by almost 3 million people (after Mazowieckie, Śląskie, Wielkopolskie, Małopolskie), making it the fifth largest region in Poland in terms of population.

The population density averages at 149 people per square kilometer, making it the third region in Poland (after Śląskie, Małopolskie).

(Lubuskie-73, Wielkopolskie 113, Opolskie-143, Śląskie-394)

Dolnośląskie is one of the most urbanized regions in Poland (79%)

The region enjoys a strategic location in Poland and in Europe at the ancient crossroads of communication routes leading from the East to the West and from the North to the South.

International, national and regional connections are good, making the voivodship an ideal base for

business and investment.

The regional capital, Wrocław – a dynamic city, is the one of the most rapidly developing cities in Poland. In recent years it has become the regional trade fair centre, as well as an important national financial centre. Other regional industrial centres include: Wałbrzych, Legnica, Lubin, Głogów and Jelenia Góra.

EMPLOYMENT

Dolnośląskie ranks sixth of all regions in Poland in terms of shares of employed (after Mazowieckie, Śląskie, Małopolskie, Wielkopolskie, Łódzkie).

Numbers of employed persons amounted 1 million persons in Lower Silesia (end of 2002). Śląskie ranks second (1,7 million persons) and Wielkopolskie (1,3 million persons) – third in the country in terms of numbers of employed persons.

Lower Silesia's economic structure is characterised by sectoral structure of employed persons. The region has one of Poland's highest shares of employed in services (50,5 per cent of employed persons) and in industry (33,7 per cent of employed persons). Only 15% are employed in agriculture and forestry sector.

Numbers of unemployed persons amounted 270 thou. and unemployment rates – 22,5 per cent in Dolnośląskie (Polish Statistical Office) and 24,1 per cent (by EUROSTAT) - the highest rate in Poland in the end of 2002. Lower rate of unemployment were in Wielkopolskie – 12,5 % and Śląskie – 12,9 %. In comparison with the rest of Poland Dolnośląskie ranks fifth in terms of unemployment rates.

ECONOMY

Dolnośląskie's economic structure is characterised by the large part played by industry in the generation of gross domestic product and diversified nature of the industrial base. The region ranks fourth in Poland in terms of gross domestic product per capita, generating about 7,9 per cent of national GDP.

(Lubuskie - 2,4%, Wielkopolskie - 9,1%, Opolskie - 2,4%, Śląskie- 13,9%)

Dolnośląskie has a strong industrial base which is both diversified and characterised by the existence of high – potential, leading edge sectors.

Lower Silesia has abundant natural resources (hard coal, copper and nickel ores, deposits of building stones).

Dolnośląskie's greatest strength is the diversification of its industrial base, which includes electrical engineering and electronic sector, computers, electrical machinery, motor vehicles, power generation, construction, chemicals. Traditional sectors are as follows: mining, mineral (ores) and rock deposit extraction, textile manufacture, fine porcelain production. Such a variety of sectors gives the region greater economic strength.

ENTREPRENEURSHIP

As at December 2002, almost 275 thousands economic units were registered in Dolnośląskie, including 4,4 thousands companies with foreign participation, giving the region one of the highest figures of firms per head of population in Poland.

The region is characterised by a large number of small businesses (95 per cent of number of registered economic units) and high growth rate of number of companies with foreign participation.

Dolnośląskie generated 10,7 per cent of domestic exports and 6,5 per cent of imports which ranks the voivodship among the leading regions in the national league table of exports and imports. In terms of value of sales the following goods are the region's major exports: manufactured goods (47,3% of total voivodship exports), machines and appliances, transportation equipment (25,9 % of total voivodship exports); imports - machines and appliances, transportation equipment (43,4 % of total voivodship imports), manufactured goods (24,4% of total voivodship imports).

The regional authorities prepare different instruments to support SMEs but they need to apply for means on central level because it is very centralised process.

Lower Silesian Voivodship is one of the most successful regions in Poland in terms of the attraction of foreign direct investment. Total capital investment during the nineties amounted to over 1,5 billion USD.

According to PAIZ, the Polish Agency for Foreign Investment, 170 investors who have invested over 1 million USD each have operations in Lower Silesia.

In terms of invested capital the region's major investors are: the German, the British, the Dutch and the American. They have invested in the following sectors: banking, automotive industry, food processing, machinery and equipment, non-metal goods, chemicals and chemical production, gas

stations, supermarkets and hypermarkets, hotels and restaurants.

The enterprise-favouring climate is appreciated by renowned corporations which have located their investments in Lower Silesia, e.g. ABB, Alstom, Cadbury, General Electric, McCain, Cussons, Siemens, Toyota, Volkswagen and Volvo.

AGRICULTURE

The whole area of the used land amounts to 1 169 228 ha and it makes 58,6% of the whole area of the region. It includes 78,1% of agriculturally used land.

Dolnośląskie Development Strategy

The forthcoming future abounds in challenges. The ones ahead for Lower Silesia do not differ much from those faced by the other regions of Poland, Europe and the world, but we will have to stand up to them on our own.

The challenges pose a very serious threat to those who endeavour to ignore them and a tremendous chance for those who will find a way of meeting them. Six groups of challenges should be deemed particularly important:

- Direct challenges, triggered by the accession into the European Union. The perception of accession is too frequently dominated by the issue of access to structural funds. It seems that, in ten years' time, it will be of secondary importance.
- Progressive challenges, brought about by globalisation. In recent years, globalisation has rapidly changed relations in the world and liberalised capital from government control. The consequences of that phenomenon on the organisation of social and economic life and policy making are and will be very critical and far-fetching.
- Progressive challenges, following from information and communication technologies (I&C). The I&C technologies dramatically transform production methods, services, trade, labour market and habits, while constituting a fundamental component of the so-called new economy.
- Regressive challenges, resulting from the collapse of demographic growth in Europe. Within at least one generation to come, we will see a rapid ageing of native European societies, combined with an increased deficit of labour force. One should expect that, within a decade, a few important trends prevailing over the last 200 years will have been arrested, or even reversed.
- Regressive challenges caused by man's unbalancing nature's order.
- Structural challenges caused by the increasing complexity of social relations.

The determination and activation of development opportunities imbedded in specific regional conditions is the *raison d'être* of voivodeship self-governments. The declaration of the mission and presentation of the vision is aimed at focusing applicable actions.

Lower Silesia is capable of revitalising its old mission – it should be noted that the region used to be an interface by means of which new social, organisational and technological concepts used to be implanted on the Polish soil. The mission of the region could be formulated as follows:

LOWER SILESIA IS A REGION UNITING POLAND WITH EUROPE

The mission of uniting Poland with Europe, referring back to the history and pointing to Lower Silesia's development perspective, requires dynamism and relentless effort. The voivodeship has all the necessary assets for its implementation, however they will have to be skilfully drawn upon with a view toward tough domestic and international, not only European, competition.

The underlying objective of the Strategy is to create a set of conditions making Lower Silesia a place where people may enjoy their peace of mind and live on good terms with people and in harmony with nature. The path to that goal leads through the realisation of five strategic objectives that will determine the basic lines of policy of self-governmental authorities. The objectives are as follows:

- A. Lower Silesian integration,
- B. civilisation revival,
- C. civic society,
- D. innovative economy,
- E. openness to the world.

Only an integrated Lower Silesia can open to the world without any fears of losing its identity; only a

region of firm civilisation foundations may create an innovative economy and participate in its functioning; only a civic society is capable of coping with such transformations and finding satisfaction in living in peace of mind, on good terms with people and in harmony with nature.

DOMAINS OF STRATEGIC ACTIONS

The deliverables of strategic development objectives of the Lower Silesian voivodeship are divided into 13 action domains. They make up four spheres: economic, spatial, social and human resources spheres. Such a description of public life ensures high transparency and ease of identification of problems within various fields of activity as well as linking them to particular objectives provided for in the Strategy. This does not mean, however, that the division proposed is fully disjointed. Some actions may be included in different domains. In our Strategy such actions go to the dominant domain. The detailed strategic plans are formulated in so called sectoral strategies e.g. rural development strategy or Regionall Innovative Strategy (RIS). The last one is now prepared in cooperation with Committee of Scientific Research (KBN).

Spatial sphere

This sphere gives prominence to the issues of regional space modelling. The actions considered here are within three main domains forming a platform for the completion of overlapping objectives regarding ecology, urban planning, economy, tourism and for the development of the Lower Silesian agricultural sector.

Domain of rural areas

The Lower Silesian village is still facing processes of restructuring and adaptation to conditions of market competition. It seems, that due to a high level of urbanisation of the voivodeship, there exists an opportunity for rural areas to develop without a need of emigration of village inhabitants. The development can be mainly based on food production and processing in order to meet the demand of the local market. Mountain areas constitute a separate problem.

Based on the comparison of the five strategies objectives with thirteen domains, a matrix of strategic actions was developed. Practice shows that a matrix-type arrangement is not only capable, but also inspiring.

Even a tentative analysis suggests that the division covered by the matrix is not fully disjointed. This should not, however, be interpreted as a method drawback. Similar actions in various domains and directed at the same objective denotes a need to co-operate (e.g. agrotourism supports recreation and rural development). Actions that refer, within the same domain, to various objectives are a proof of interdependencies (e.g. development of housing in rural areas succours virtually all objectives). While presenting a description of the region's transformation-related issues, which provide details of many of their aspects, the matrix incorporates a concept of sustainable development. The voivodeship self-government must constantly keep this goal in mind. One must not harbour an illusion that the reasonable future of the region will automatically follow from an implementation of a series of priorities. The key priorities of economic development of Lower Silesia are as follows:

- increase competitiveness of voivodship's economy,
- develop small and medium-sized enterprises in order to generate new jobs,
- activate rural areas by modernisation agriculture and the food processing sector,
- develop tourism , which is connected to the development of recreational and spa service.

Increasing the competitiveness of region's economy consist in, on the one hand, technical infrastructure-related actions that condition acquisition of state-of- the-art investments, and, on the other hand, a restructuring of the economy to ensure a modernisation of existing sectors and to increase the share of industry, leading-edge technologies and specialist services.

The matrix of actions in the domain of rural areas contains:

MATRIX OF ACTIONS IN THE SPATIAL SPHERE (VII. RURAL AREAS)

A. Lower Silesian Integration	B. Civilisation Revival	C. Civic Society	D. Innovative Economy	E. Openness to the World
<ol style="list-style-type: none"> 1. aspire to region's self-sufficiency with regard to basic foodstuffs 2. support Lower Silesian agriculture wholesale 3. promote region's high quality agricultural products 4. develop a housing function of rural areas (commuters, pensioners, weekend sojourns) 	<ol style="list-style-type: none"> 1. improve civilisation standards; sanitary conditions, aesthetics, spatial order 2. support the construction and modernisation of rural infrastructure 3. develop a local food processing industry 4. modernize and construct water drainage systems (including food protection and retention systems) 5. return to forms of farming more suitable to mountainous areas (e.g. extensive cattle breeding) 6. activation of areas with former state owned farms 	<ol style="list-style-type: none"> 1. support groups of producers and other forms of rural self-organisation 2. develop an educational system for farmers and people working for the food processing industry 3. ensure counselling and training courses with regard to loans, taxes, legal regulations, marketing, production management, etc. 4. support all actions and initiatives aimed at creating culture 	<ol style="list-style-type: none"> 1. implement a non-immigration and multifunctional rural development organisation 2. modernize agrarian structure 3. develop large-scale agricultural production in the central band of the region 4. develop agrotourism in the northern and southern band 5. produce enriched food oriented at specific market niches (e.g. boutique agriculture) 6. develop non agriculture-based forms of doing business: craft, small manufacturing sector and services (including Internet services) 	<ol style="list-style-type: none"> 1. promote Lower Silesian ecological food abroad 2. implement state-of-the-art agricultural technologies and organisation methods 3. transmit prove cultural standards 4. intensively develop agro-touristic offer oriented at foreign tourists

Majority of these actions are included in The Strategy of Development of Lower Silesia Rural areas which was elaborated in 2001. The regional differentiations justified division into 5 functional subregions due to their natural and socio-economic features. Each subregion was given the set of goals in subregional strategy.

In December 2002 "Regional Program of Agri-food Sector in Dolnoslaskie Region" has been completed. It has been elaborated by the team of scientists, mainly from Academy of Agriculture in Wrocław. The report was ordered by Marshal Office of Dolnoslaskie Voivodeship as the operational step of Rural Areas Development Strategy approved by Sejmik (regional parliament) in May 2001. The report was widely consulted with socio-economic partners in the region. It will be submitted for approval by regional authorities in March 2003.

The programme consists of 9 projects. Some of them are directly connected with the agri-culture or agri-production areas e.g. "Processing and protection of regional food products", "Regional food balance", "Regional food sector accommodation to EU quality standards".

The general conclusions are:

- 1) the regional agri-production potential has been weakened during 90-ties as the result of structural changes in our economy (liquidation of large state farming and food-processing companies, large flow of highly subsidised goods on regional market from EU countries), the absolute priority for regional policy is to stop reduction of production and jobs potential in the region,
- 2) there is the tremendous need to support regional producers and marketing system to promote small scale food industry in the region, through e.g. implementing "good practise", organizing local groups of producers and searching market niches,
- 3) there is the big potential of natural values of the land that should be protected on legal basis and promoted as the base of profitable production and trade sector in the region,
- 4) the cooperation and technology links between regional and external partners should be created as the sustainable development platform assuring improvement of standards,
- 5) the important factor to stimulate regional agri-culture development could be strongest cooperation between scientific-reasearch units and production sector.

One of the financial instruments to realize the program is SAPARD. But as we can observe there is a lack of well prepared projects to be financed especially in food processing and in farming.

Hope that results of BASAN projects will supply our region with the innovative solutions to be implemented in regional agri-business sector.

Incentives and barriers concerning innovation and technology transfer in agriculture and agro-industry

Ms. Grazyna Norbert and Mr. Waldemar Janeczek, Lower Silesian District Centre of Agricultural Extension

The Lower Silesian District Centre of Agricultural Extension Services (DVORD) has many activities with the aim to help farmers in the district. It thus functions as an advisor on rural development, and it is involved in creation of regional and local development strategies. Furthermore the centre monitors the demand and supply for agricultural commodities, and it helps farmers to find additional sources of farm income.

DVORD is also involved in implementation of research results in practical farming and it participates in the planning of agricultural development in the region.

Another important activity is dissemination of information from the EU Commission and training in connection with adjustment of Polish regulations to EU regulations and use of pre-accession support measures.

It was pointed out that the Polish food production has great potentials. There are however a number of serious problems such as:

- Lack of investment capital
- Unstable raw-material supply. The quality may vary considerably
- Lack of strong manufacturers groups
- Low working efficiency in the agro-food industry
- Modernisation of equipment is needed
- Level of safety and quality of food products have to be increased in order to meet EU standards.
- There are problems with the wholesale of agricultural products

Another important issue that needs to be addressed, is the limited availability of post harvest storage facilities and drying equipment for farmed products. There is also a need for a better adaptation to consumers needs, which implies that the general innovation activities have to be increased.

Programme for sustainable development of the Barycz river valley. The integrated project for flood prevention, nature conservation and promotion of extensive agriculture

Ms. Sabina Lubaczewska, Polish society for wildlife friends

Barycz River Valley is situated in the Southwestern part of Poland
A large restoration project has been initiated on some 64 ha of land in the Barycz river valley. An extensive research has been undertaken to estimate the soil composition and quality before the project started. The habitat has been restored, pools and shallow zones recreated and wet meadow reestablished. As one of the results the flood prevention capacity has increased substantially. The interconnected ponds have a water retention capacity of 120 000 m³.

It is necessary to cut the meadow grass regularly. The cut grass is dried to hay, baled and harvested. It is then used as fuel in local schools.

How to use the renewable energy resources in Lower Silesia

Professor Mieczyslaw Mieczynski

It is important to have access to more than one energy source. Not only coal and oil but also wind, solar and biomass energy.

The establishment of small scale village level energy units producing both heat and electricity from

biomass could become very important for local regions. They secure a stable supply of heat and energy, they use locally produced raw-materials, they create new jobs and last but not least they contribute to a reduction of the global CO2 emission.

There is plenty of abandoned land available that could be used for production of biomass. Local individual heating systems based on coal or oil could be substituted by central heat/electricity plants combined with a distribution network for hot water and electricity.

Biorefineries producing vegetable oil for use liquid fuel for engines or heating and straw for burning together with protein rich fodder cakes might be part of a shift towards a more diversified energy supply system.

It will be necessary to:

- Estimate potential raw material sources in small villages and set up a programme for utilisation
- To set up an investment plan in co-operation with local stakeholders and investors – both private and public
- To explore the scientific potential of local universities and companies and establish partnership with foreign countries
- Create a Lower Silesian centre for renewable resources. The centre should be multidisciplinary.

The unemployment and labour markets in rural Lower Silesia

Mr. Włodzimierz Fast

Fundacja w Służbie Wsi (Foundation In The Service Of Rural Communities) was incorporated on 26.05. 2000 and registered at the District Court for the Capital City of Warsaw – Commercial Court, 16th Division under the entry number 5983. The founders act as the Foundation's Board while two executive directors are responsible for day-to-day management of the Foundation. The Foundation is supervised by the Ministry of Agriculture and Rural Development..

The aim of the Foundation is to offer assistance and support to all organisations involved in rural development, in particular:

- to build the understanding of the democratic society,
- to alleviate social differences between ethnic minorities and the rest of the society,
- to support local self-governments,
- to support groups of individuals who launch initiatives in such areas as business, unions, associations, self-government in small towns and rural communities.

In pursuance of its aims and objectives the Foundation employs professional forms of education and dissemination of information to promote and increase the knowledge and skills necessary to combat unemployment.

The Foundation provides assistance in drawing up agricultural and non-agricultural business development projects.

No matter how we approach the technical aspects of economic development in rural areas we must always bear in mind that rural communities are specific. The European Social Fund (one of the three Structural Funds) supports and complements the efforts of member states to combat unemployment, develop labour market and human resources. The fund offers educational opportunities to the unemployed by creating solutions and control measures that may influence relations between education and labour markets; support the presence of women on the labour market; alleviate unemployment by advocating effective unemployment policy and recruitment schemes among

employers; improve the quality of education and vocational programmes in the environmental area and many other fields. The funds are complementary and require co-operation. They complement national and regional efforts and call for co-operation between self-governments (local authorities), central government and EU agencies and non-government organisations in all implementation phases. The agricultural labour market in Lower Silesia should aim at reducing all barriers that may adversely affect improvement projects in the area of employment. The improvement of education in rural communities requires a direct action now.

- Action must be taken to improve the quality and competitiveness of rural human resources including: a focus on young children educational programmes, modernisation of teaching facilities in elementary schools and junior high schools, foreign language teaching programmes, promotion of business education, support of local funding opportunities that may be developed between educational establishments and local business, provision of a better access of students from rural areas to universities, development of extra-mural courses and vocational training to help individuals re-direct and learn new skills; preferential payroll schemes for village school teachers
- Rural labour markets must become more flexible, which requires new legislation and improvement of communication and transportation.
- Non-farming jobs must be encouraged, which relates to improvement of infrastructure, better land management control measures, development of tourist-oriented infrastructure, protection of traditional unskilled jobs and women's labour markets, creation of new brands (farm produce, crafts), encouragement of rural tourism (particularly in the Sudetes mountains), development of rural advisory services (enterprise, business and rural/agri-business).
- A stabilisation of agriculture at the regional level is crucial for the improvement of rural employment in Lower Silesia. The agriculture/farming in Lower Silesia should be able to reach and maintain a market position that reflects local resources. The relationships between producers, wholesale markets/agricultural markets and processors must be effectively supported including a strong promotion of regional products and organic produce/foods.
- Improvement and progress may also be ensured by supporting farmers from remote areas who operate in adverse natural environment. They (Sudenty farmer and the northern powiats [counties]) are still waiting for new legislation to promote and control the form and size of agricultural production and farm diversification policies.

The agriculture in Lower Silesia has its specific aspects. The voivodeship is large, which calls for specialisation in different areas. Farmers should operate in production focus groups to set up market chains and be able to respond to market demands. Farmer co-operation should be encouraged and facilitated. A successful regional development is conditional on efficient and effective rural/agri-business. Processing or food processing industry acts as a co-ordinator of agriculture including rural development. Small and medium produce and food processing enterprises prevail in our voivodeship. They have hardly any choice but join together to face their competitors and be able, for example, to distribute their products. There are certainly opportunities and there is a potential to work with the neighbouring countries. Such projects, however, will not succeed unless different educational programmes are launched in rural areas with an active support of non-government organisations that are unique in their understanding of big problems besetting small communities. The following are a few cures that may help improve the circumstances of the rural communities in Lower Silesia:

- To nominate the programme/project manager. The programme/project developer and co-ordinator. The project agent and facilitator. The supervisor and task manager.
- To identify implementation agencies (regardless of fund sources) to handle the application processing including assessment of applicants/proposals; task supervision and monitoring.

Beneficiaries include (d): producer organisations, processing plants, farmers (farm owners), local authorities (self-government); non-government organisations – in other words: all of them are individuals and companies, citizens and businesses of villages and small towns in our region.

Costs

The above is a very general outline of the problems and issues that follow from academic research

and our observations. The scope of the problem is extensive indeed. So are the funding requirements. An average capital expenditure on a dairy farm project to meet EU environmental requirements will hit 120 thousand A certificate of compliance with EU requirements in the area of food processing may cost about 45 thousand.... These two examples speak for themselves. Money-wise, we are on dangerous and “muddy” ground as we are not able to estimate educational costs let alone the cost of remodelling people’s awareness and understanding. The conclusion is self-evident though. This is not going to be an economy option. There is no way, however, of avoiding or escaping the core issues of the development of Lower Silesia.

The biofuel energy centre

Dr. Andrzej Vogt and professor Hubert Kolodziej

The concept includes the combined production of solid fuel (straw), liquid fuel (rapeseed oil-ethyl ester), biogas and electricity.

Instead of the most common used methyl ester (RME) is produced ethyl ester, which is better from a combustion point of view. Ethyl ester has a lower melting point and a viscosity, which makes it easier to use in combustion engines.

The ethanol for the ester production is obtained from cereal grain, and the byproduct from the fermentation process is utilised for production of biogas. The biogas is together with a byproduct from the esterification – glycerin – used as feedstock for production of electricity and heat. All components are thus used, and there is no waste, except for a minor amount of fertiliser, potassium phosphate.

The biorefinery consists of:

- A fermentation unit and distillery
- A dewater installation to produce 99,8% pure ethanol
- A waste separator
- Agricultural waste processor
- Biogas plant
- Oil press
- Trans-esterification unit – glycerin is produced as by-product.
- Power station to produce electricity and heat from the biogas plant and the glycering

An optimal production size is 30 000 tons of ester pr year. Simultaneously is produced 27 MW of which 6 MW is used a process energy. 30% can be sold as electricity. A plant of this size will cost 60 million zł. 70 workers will be needed. To this can be added the farmers delivering grain and rapeseed to the plant plus maintenance workers and employees in transport companies etc. All in all a biorefinery could become an important asset for a region. It might function as a “locomotive” paving the way for further investments in the area. An additional benefit could be that the raw-materials for the plant may be grown on land that today s abandoned.

40 centres could directly and indirectly employ 450 000 people and lead to a reduction of import of mineral oil with 1,2 million tons.

A pilot plant is being operated at the University of Wroclaw. The Basan members had an opportunity to visit this plant at the end of the meeting.

A semi-industrial plant is under construction approximately 60 km from Wroclaw. It will have a capacity of 9 000 tons of esters pr. Year.

Friday 14. March 2003: Members meeting

- 9.00 - 9.30: Conclusions from first day. Jaroslaw Osiadacz
9.30 - 10.00: Report from Latvia. Gundega Lapina
10.00 - 10.30: Coffee break
10.30 - 11.00: Final conference programme -discussion
11.00 - 11.30: Virtual factories, Finn Rexen, member discussion
11.30 - 12.00: Coffee break
12.00 - 12.30: Support and creation of agro-business in other parts
of the World. Introduction: Finn Rexen. Discussion all
members
12.30 - 13.00: Would a scout function be of any use for the Baltic Sea
area,
and how should it work.
Introduction: Finn Rexen. Discussion all members
13.00 - 14.00: Lunch
14.00 - : General discussion. Members contribution

Conclusions from first day

Jaroslaw Osiadacz

The first days papers revealed that Lower Silesia still has many organisational problems, however the infrastructure is good and the climate is mild and well suited for agricultural productions. A strategy for the agricultural sector is under development.

There were no presentations from the Polish food industry the first day. The reason is that the Polish owned food factories are very small and local oriented. There are however a number of large food industries in Lower Silesia, but they are all owned by multinational companies (Cargill, Mc. Caine etc.).

In general the agricultural production in Lower Silesia is not very intensive, and there are many forests. In the middle of the region is an area with good soil, which may be transformed into modern intensive agriculture.

The first day there were three presentations on renewable energy. Growing of biomass for energy is considered to be a good opportunity for the region. There are some industrially polluted land areas that can not be used for food production, but are well suited for production of energy crops.

Other presentations dealt with socio-economic issues such as unemployment rates and ways to overcome unemployment in the rural areas, and sustainable development.

Report from Latvia

Gundega Lapina

The Latvian country report was distributed to the members, and Gundega Lapina gave an overview over the content:

Latvia has 2,37 million inhabitants, of which 30 % are Russians. Agriculture and forestry account for 4,4 % of the GDP. Approximately 32 % of the population live in rural areas, and the share of population employed in the agriculture is 15,3 %, which is less than in Lithuania and Poland, but more than in Estonia.

Approximately 21 % of the agricultural land is today abandoned. 55 % is arable land and 23 % are meadows and grazing land. The main crops are cereal grain and potatoes. There are 86 grain processing plants, 3 oil extraction plants, two sugar factories and one starch factory.

In general the agricultural production is too fragmented, and the average size of farms is too small for an effective production. The income is low – 75 % of country average. The government has as one of its objectives to improve the economic growth in rural areas.

The Latvian University of Agriculture is the main agro-food research and education organisation. It has a research staff of 168 persons.

Concerning the two virtual factories: Lupines are an interesting crop for Latvian agriculture. Production of lupins has gone down, however both climate and soil conditions are well suited for lupines, and there is plenty of abandoned land that could be used for lupine production. All in all there should be no major technical obstacles against implementation of the Basan lupine business plan in Latvia. Furthermore there seems not to be any major obstacles for the Vita Wheat virtual factory to become a reality in Latvia.

The virtual factories and the business plans and the questionnaires are meant as tools that should be used in revealing the real barriers for establishment of new business in the Baltic Sea region.

The idea is to present the business plans to local authorities and potential investors and ask them to treat the projects as real life projects, and give us their opinion about them. And most important: give an indication of the local barriers.

We have already made good use of the questionnaires, but it seems more difficult to persuade the local stakeholders to evaluate the virtual factories concept.

Maybe it is because it can be rather time consuming to go through the business plans and come up with answers. Perhaps it might be easier to find local experts to evaluate the projects, if it was possible to pay a small fee for the work. Gundega Lapina has already demonstrated that this has worked effectively in Latvia.

Basan still has some 7.000 € left on the "external consultants" account, which might be used for evaluation of the virtual factory concepts by local external experts.

The Basan members are encouraged to find local experts, who can carry out an analysis of the two projects and identify eventual local barriers against an implementation of the projects. Basan may pay a reasonable fee for the work.

Please inform the secretariat, when you have identified a person (persons), who has the right capabilities and is willing to do the job.

Rolf Olsson and Elina Muuttomaa mentioned that there is no interest for lupins in their areas due to the climate and therefore the lupin factory concept is not relevant for their regions.

Concerning the **questionnaires** Michael Rustand pointed out that the experience from Bornholm has shown that it is much more effective to visit the local stakeholders and interview them on the basis of the questionnaires than just sending out the questionnaires.

Jaroslaw Osiadacz felt that it might be better to follow the example from Bornholm and interview say 10 stakeholders on the basis of the questionnaires than to send out the questionnaires to a larger number of stakeholders.

Rexen presented the latest version of the programme and pointed out that contributions from Lithuania and Estonia are still missing, either in the form of speakers or regional products for the exhibition. Magdalena Rogulska will arrange for an exhibition of moulded wood products from Poland, and Jaroslaw Osiadacz and Rolf Olsson will find products from Lower Silesia and local Swedish products.

Basan members were asked to come up with a list of clusters from their region to the next regional meeting in Umeå. (both production clusters and research clusters).

Basan member was asked to come up with at least 10 participants each to the conference

Creation of agrobusiness in other parts of the World

Rexen presented a paper on the creation of agro-business in USA. The complete text was distributed to members before the meeting. The table below gives an overview over a number of development schemes from USA.

Funding	Target group	Service offered	Achieved	
21.st Century companies years	Private Members fee Service fee	Farmers and Co-ops. (1000 members)	Own entrepreneur Scouting Financing establishing	8 new in three
Value Added Centre established	Public	Small businesses	Technical and commercialisation support Pilot plant facilities	Commercial holding company
New Uses Council	Private and public	Companies, farmers org. universities	Establishes strategies Info. service	

State agencies				
AARCC years:	Public (revolving fund)	Farmers and SME's	Create private/public partnership (pre-commercial)	After 3 60 projects 3000 jobs
VADG	Public	Farmers and SME's	Financial support Feasibility studies Working capital	

In the following discussion it was pointed out that there in most Baltic Sea regions is a lack of local entrepreneurial spirit amongst farmers, and that it most often is very difficult to raise capital for new agro-industrial projects.

Besides it seems to be difficult to find farmers, who are interested in agro-business. There are however examples of co-operatives of farmers, who have established agro-businesses in all the Baltic Sea regions.

It was a general feeling that the EU regional funds could be better utilised. They are distributed to local applicants, and it is often so that those, who can promise most new jobs will be selected. There is seldom an overall strategy for the spending. It would no doubt be "better value for money" if the region had established an overall strategy and selected priority areas in accordance with this strategy. For instance the ACAP scheme from USA might be used as an inspiration. This scheme has as objective to engage small rural communities actively in economic development efforts in agro-industries. According to this scheme the regional authority should set up a list of assets and drawbacks in the community and on the basis of this it will, in co-operation with local stakeholders, farmers and industries, create a strategy for the region as a whole. The strategy should serve as a basis for the priority setting.

It was during the discussion several times mentioned that the Baltic Sea farmers were lacking entrepreneurial skill, it was however also pointed out that the younger generation has a quite different attitude to innovation and new technology. They are better educated and more willing to learn and accept new technologies.

Companies interested in establishing new agro-industrial activities in rural areas will often require a guaranteed raw-material supply, both quantitatively and qualitatively. And therefore they will wish to sign contracts with farmers on delivery of raw-materials. Often farmers are very reluctant to sign such contracts, as they are suspicious, and do not trust that they will get their money. It was mentioned that the local authorities should guarantee the payment in some way, e.g. through an insurance scheme, perhaps based on regional funds.

Scout function

Rexen reminded about the many suggestions for business opportunities that have been sent out to Basan members, and he mentioned that so far there has been only a few feedbacks.

It seems to be obvious that it is not enough only to send out a short description of new business opportunity. It has to be followed up by a more elaborate description for those who have expressed an interest.

Rexen presented the following suggestion, sent to members beforehand, for a set-up of a scout function and also work plan for handling a given proposal.

The commercially interesting projects should be described in such a way that the commercial potential is clearly seen, and interested local stakeholders should be identified, before any action towards commercialisation is taken.

The following four-step procedure is suggested.

Four action steps

- Phase 1: Selection
- Phase 2: Preparation for commercialisation
- Phase 3: Business plan
- Phase 4: Options for commercialising

Phase 1. Selection

A description of the new business opportunity is distributed to the involved innovation centres for consideration. If interest is expressed from stakeholders in one or more of the regions, the project manager is contacted, and the project is transferred to phase 2.

Phase 2. Preparation for commercialisation

The technological level of the new concept is evaluated Phase 2.. Has the process been finally developed, or are additional laboratory and/pilot plan experiments still needed?

A preliminary feasibility study, including market estimates and production costs, is carried out. And the technology potential is stipulated.

The intellectual property rights are discussed with the project manager. If not already done, a (European) patent application is filed.

A development service contract between the project manager, one or more regional research centre(s) with the appropriate pilot plant facilities and expertise, and the local stakeholder(s) is prepared. The contract details the work to be done leading to start up. It covers items such as due diligence, test marketing, engineering, financing. The work performed during the due diligence phase helps define the risks and solutions to problems.

Finally a comprehensive commercialisation report is prepared. The report should include:

- A review of the technical feasibility of the technology
- An assessment of the level of competition in the intended market
- An objective estimate of the market need for the technology
- A review of industry trends that affect the commercial viability of the technology

Phase 3. Business plan

It will be considered how best to commercialise the new venture: Either to licence the technology to an existing company, initiate a joint venture, or start a new company to commercialise the new technology in the target market. The business plan should be tailored to the most appropriate approach.

The business plan is set up in accordance with the recommendations given by the Commission (LIFT, Preparing a technology Business Plan, 2000)

- Executive summary
- The market
- The product
- The business and its trading position
- Marketing strategy
- Manufacturing
- Forecast of sales, cash flow and break even
- Management and control of the business
- The required financing package

Phase 4. Options for commercialising

The options available are licensing to an existing company, arranging a joint venture or strategic alliance with a major corporation in the field or creating a new start-up company to commercialise the technology.

A license agreement will generally include an income-producing license, which usually provides for an up-front payment and on-going royalties based on sale. License negotiations do not always result in an agreement, and even in the case of a positive outcome of the negotiations, the period of time between the start of negotiations and the realisation of the first royalty income can be long, rarely under two years

Joint ventures and strategic alliances will often offer a small company the best route to commercialise the technology in the target market. Such alliances are as varied in form as are the technologies themselves and must be negotiated based upon both the technical and marketing expertise of the two partners.

The last option, to create a start-up company, may be the most complicated and effort-consuming, but presumably also the most profitable on a longer term.

In the following discussion it was agreed that a scout function could be very useful. A triangle network should be established consisting of:

1. Innovation centres: Knowledge about local conditions and opportunities
2. Research and Development Centre: Research facilities, technological and scientific knowledge
3. Scout function: Access to international know how and business opportunities

Any other business

Food Technology Conference in Murcia in Spain in the month of May

Next meeting

Next meeting will take place in Umeå in Sweden on 25-26 of June 2003