

# 3<sup>rd</sup> group research Alternative energy production, rural economy

Leonardo da Vinci Partnership project C.A.S.E.S. WORK

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### 3 group

- Group leader VšĮ Žinių kodas (LITHUANIA)
- Pathways: Inspirational development CIC (UNITED KINGDOM)
- Agrupamento de Escolas de Arganil (PORTUGAL)
- SEEDS SEE beyonD borderS (ICELAND)

## Alternative energy

#### Common types:

- Solar;
- Wind;
- Geothermal;
- Biofuel and ethanol;
- Nuclear binding;
- Hydrogen.

#### New concepts:

- Algae fuel;
- Biomass briquettes;
- Biogas digestion;
- Biological Hydrogen Production;
- Floating wind farms.

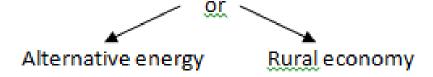
## Rural economy

## **Rural economics** is the study of rural economies, including:

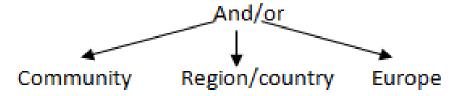
- farm and non-farm industry;
- economic growth, development, and change;
- size and spatial distribution of production and household units and interregional trade;
- land use<sup>;</sup>
- housing and non-housing as to supply and demand;
- migration and (de)population;
- Finance;
- government policies as to development, investment, regulation, and transportation;
- general-equilibrium and welfare analysis, for example, system interdependencies and rural-urban income disparities.

#### Framework of the research

- Introduction of chosen collaborative/social enterprise (good practice):
  - a. Name, legal status;
  - b. Size (how many people works there/are involved in activities);
  - c. When was it established;
  - d. Who established it;
- Activities:
  - a. Purpose, strategy;
  - b. Main reasons for establishment, need and necessity;
  - c. Description of activities:



- d. Development / action plans, achievements, innovative solutions;
- e. Significance to:



## Good practice examples

United Kingdom





CAE POST is charity and social enterprise
 organisation that provides work and training for
 people with disabilities or disadvantaged in the
 job market.



www.caepost.co.uk



#### **Activities**

- Runs a commercial scale recycling centre in partnership with Powys County Council;
- Operates kerbside, bring-site and commercial recycling collections in Powys and beyond;
- Works closely with the schools and communities to spread the message of social inclusion and sustainability.



## Materials Recycling Facility (MRF)

- Materials Recycling Facility is run by Cae Post Recycling under a long term contract in partnership with Powys County Council.
- PCC deliver recyclable materials from their kerbside collection which uses a 'two bag' system.
- Cae Post delivers materials to the MRF from their own kerbside collection, from plastic bring-site collections and from trade and schools collection vehicles.
- At the MRF, Cae Post process, sort and bale the materials for onward sale to re-processors.



## Significance to community

- Recognises the power of community engagement, both in supporting environmental sustainability as well as developing opportunities for people with special needs.
- Through initiatives such as Powys County Council 'adopt-a-site' The Wasteless Society and Powys
  Zero Waste, a wide range of community groups in Powys and surrounding counties are becoming engaged in recycling activities.
- Aims to work closely with community groups to help them achieve their objectives.



- A Community Interest Company based in Bishops Castle, Shropshire;
- Set up by local people, for local people;
- Relies on enthusiastic team of trained volunteers.



#### **Activities**

- Helps people to understand how they use energy identify where they can save money.
- Offers advice on insulation grants, Feed-In Tariffs (FITs), the Renewable Heat Incentive (RHI) and has a directory of local suppliers.
- Runs Household Energy Service (HES)
   providing independent energy advice for
   homes, for businesses and community
   buildings.



## The Home Energy Survey

- Each client is given a carbon statement for their household, and energy-saving tips as part of the survey.
- All possible guidance will be given to help individuals reduce their impact on the environment, whilst at the same time giving them more comfortable homes and helping them save money.
- The Home Energy Survey costs £50 for a typical 3 bedroomed home.

## Performing The Home Energy Survey (Loption)

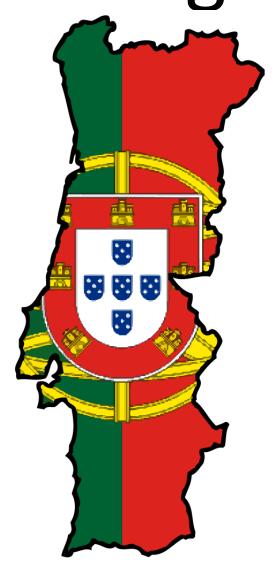
- 1. Trained volunteer surveyors visit homes to carry out survey.
- 2. Expert energy officers write a comprehensive report for the property highlighting where cost savings can be made and specific energy saving suggestions.

## Significance for community

 average savings of 29% carbon per household and average savings of £380 off fuel bills per household assisted

#### Good practice examples

## Portugal



#### The TransSerrano

#### The Beginning and the Purpose

- ✓ Established in August 16, 1999 (with a capital of 5,000 €) by three young entrepreneurs who had recently arrived in the region from Lisbon and could not find work.
- ✓ They aim to avoid the disappearance of mountain culture and nature, implementing programs and services for participants to interact with the local culture and environment, maximizing the traditional economic activities.



#### **Activities**

- They organize promotional activities and team-building for companies such as:
- Challengers
- Canoeing: descent of the Mondego's river;
- Orientation Games
- Paintball;
- Jeep tours;
- Bridges ropes and obstacles;
- Climbing wall and sliding;
- Traditional games;
- Peddy papers;
- Programs and ethnographic assets such as manufacturing workshop homemade bread and goat cheese, wine, olive oil, cherries;
- Team-building activities to foster teamwork.
- ACCOMMODATIONS:
- Have agreements with hotels in the Center: Arganil, Buçaco, Condeixa, Coimbra, Gois, Lousã, Luso, Penacova, among others.

### Facilities, Supports and Difficulties

- ✓ They had several grants over the years from IEFP, Leader II and Leader +, ADIBER and support of CCDRC within the Schist's Villages.
- ✓ The premises were, in the beginning leased, but in 2010 they acquired the Quinta dos Sanches in Góis with the company's own funds and is where the registered office is nowadays.
- ✓ The major constraints are the result of continuous and increasing fuel prices that inhibit the arrival of more tourists to the region, resulting from the economic crisis and the fact that they are far from the place where most of their customers come (big cities and abroad).

### Lousitânea Association Location and Facilities

- ✓ The association Lousitânea, is located in the schist's village Aigra Nova and belongs to the parish of Gois, municipality of Góis on Coimbra's district.
- ✓ In the village Aigra Nova nothing belongs to the association. All areas of the village are lent or given by individuals to the Lousitânea in order to develop their work.
- ✓ The main space, where is located of the office and "Shop Schist's Village", belongs to the Improvement Commission of the village. However, Lousitânea uses through a partnership protocol, so that they can develop the full scope of the work, since Improvement commission had no capacity to do so.
- ✓ The remaining spaces that Lousitânea occupies, particularly with the Interpretive Centers (spaces visiting groups) belong to individuals and are rented or loaned to the association.

## The Beginning

The Lousitânea was founded 10 years ago (December 2003). It was founded by a group of citizens of the municipalities located in Serra da Lousã focusing with particularity in the counties of Castanheira de Pera, Lousã and Góis.

The initial idea was forming an association, nonprofit and acting in the geographic space of the Serra da Lousã, to work in nature conservation and enhancement of cultural heritage. There was no prior organization in this working area. Municipalities worked independent, unrelated projects in the theme of the Serra.

The first association funds came from the founders and allowed the costs of incorporation.

### **Projects**

- ✓ Project Management Network of River Beaches in Pinhal Interior;
- ✓ Animation and Implementation of actions under the program of "Schist's Villages";
- √ "Future Choices";
- ✓ Pinus Verde: Valorization of Agriculture Goods in "Schist's Villages" Territory.
- ✓ In addition, Lousitânea has established protocols with schools and universities to conduct internships.

## **Improvement Commission of Soito's Village**Localization

The village of Soito (Colmeal-Gois), is located at an altitude of 423 meters, about 500 meters from the river Ceira, on the road between Gois and Fajão. At about 20km of Gois.

The Soito is one of the oldest villages of the parish Colmeal, stating that at the time of its creation, in 1560, has reportedly already inhabited 6 houses.

Over the years it has lost much of its population mainly through emigration.

## Improvement Commission

☐ The Improvement Commission of Soito, was officially incorporated on 12 October 1954.
☐ The goals were:
☐ The close relations between members seeking to establish greater solidarity between them;
☐ Competing by all means in their power for the improvement and enhancement of the Soito's Village, always acting in agreement and cooperation with the respective administrative;
Practice, in general, all acts which are intended to aggrandizement the association and its prestige.

### Improvement Commission

- Despite the willingness of the partners, the fact that the village had few residents and the majority of members lived outside, only allowed to maintain some traditions as the festivities in honor of the village's saint patron Saint Peter.
- ☐ After the settling of some foreign residents the Commission gained more dynamism;
- Besides the full-time foreign residents, the village began receiving seasonal residents, initially, of Portuguese origin, and currently from 5 nationalities. Apart from different nationalities, cultures and social level is also wide from doctors, engineers, architects, manual workers, state employees, etc..

### Improvement Commission

Most houses in the village were recovered according to the characteristics of the site and at this time, there are, practically, no abandoned houses;
 The streets were all arranged and water distribution was updated;
 The chapel of the village was recovered;
 The oven of the village has been revitalized and is used regularly;
 There is a cafe;
 It was created a museum with some village's spoils;
 The old traditions are revitalized but new traditions are created as: Pizza Night, Trade Market, Races Festival, etc..

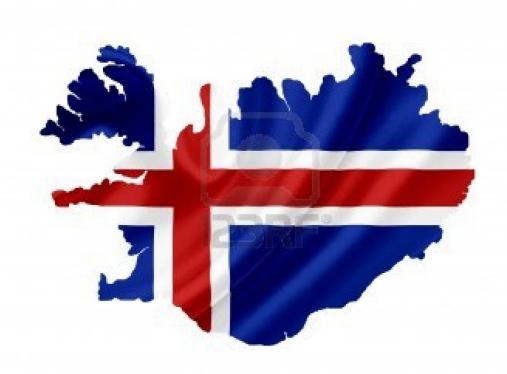
## Conclusion – Soito's Village

The improvement of infrastructures in a isolated place has led to the settling of more residents;
The full-time residents has 8 children;
Most of the commission's activities are made with money raised among members and raised in some parties;
On weekends, regularly, there are about 20 to 30 people in the village;
There is great cooperation among most the residents given the little support from the official institutions. Thus, the lack of assistance in the village is filled by the regular presence of two residents with training in medicine (general practitioner and a neurosurgeon). The village children are taught by a resident who had trained for the purpose.

#### Conclusion

- □Currently most of the villages in the interior suffers from desertification;
- ☐ The few residents of most villages are elderly;
  - ☐ They have security problems due to isolation;
  - ☐ Medical care is far and is deficient;
  - ☐ Transport is not regular.

## Good practice examples Iceland



## Good practice examples Lithuania



## Wind power plant 2009

#### Smalininkai town community (Jurbarkas district).

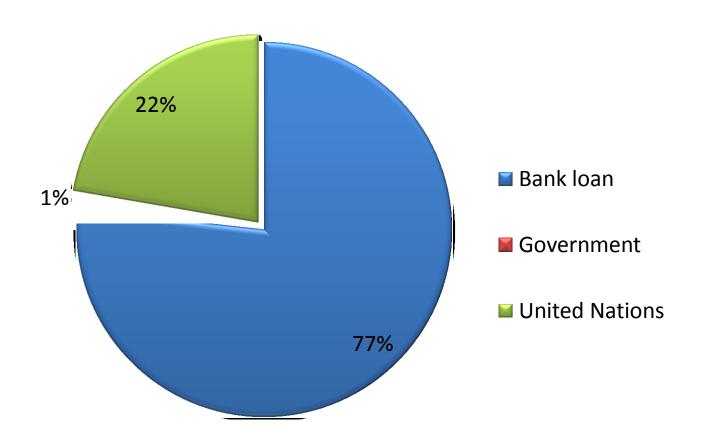
- Community leader Vanda Stonienė.
- The infrastructure of the town needed investments.





## **Project funding**

**TOTAL 356 233EUR** 



#### **Activities**

Smalininkai

One wind power plant;

 Produced electricity is sold to national electricity company VST;

Planed profit –

30 000 - 60 000 Eur / year;

 Agreement with bank: smaller loan payouts (in smaller amounts and longer time period);

 Wind power plant will pay off in 5 -7 years.

### Significance

#### **Community level:**

Profit is assigned for improving town infrastructure:

- 1. Illumination of streets;
- 2. Funding youth projects;
- 3. Taking care of parks and other public places.

#### Region/country level:

This was the **first example** of community initiative towards alternative energy source and investments.



## Birštonas. "EKO MIESTAS" project. CONCERTO:



- European union "CONCERTO" program for helping communities to develop innovative sustainable energy solutions, based on increasing the effectiveness and economical value of renewable energy usage.
- The first community in Lithuania and in Baltic countries decided to develop "EKO MIESTAS" (eco city) conception and started to manage international demonstrative project "ECO-life".

#### Goals:

- Install AEI in energy producing (2 MW biofuel boiler, solar collectors);
- Increase effectiveness of cogeneration (100 kW power plant);
- Reduce gas emission, which causes greenhouse effect (by creating community with zero gas emission);
- Modernize public buildings and apartments to higher then standard energy using level;

#### **Activities**

#### Renewed:

- 13 apartment buildings;
- 3 public buildings;

TOTAL 25,5 thousands square meters.

#### **Modernized:**

- Central heating distribution system;
- Streets illumination system.

#### **Installed:**

- 500 m<sup>2</sup> of solar collectors for heating the water;
- 1,5 kW solar photoelectric;
- 2 MW biofuel boiler and economizer in heating system;
- Combined heat and power plant;
- Advanced metering system (users can see how much energy they use);

## Significance

#### **Community level:**

- Profit for all residents (lower costs);
- Knowledge of efficient energy usage;
- Illumination of streets.

#### Region/country level:

 This was the first eco city project. The community is trying to become one of good practice examples in Lithuania and to attract more tourists, scientists.