Structural change and social security: semi-subsistence farming in Poland, Romania, and Bulgaria

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Results drawn from the project "Sustainability of semi-subsistence farming systems in New Member States and Acceding Countries (S-FARM)", Contract No. 150652-2006 F1SC-DE

European Network for Rural Development

The views expressed are purely those of the presenter. She is not acting on behalf of the European Commission and the following information may not in any circumstance be regarded as stating a position of the European Commission.
Structure of talk

1. Need for structural change
2. S-FARM project
3. Characteristics of semi-subsistence farm households
4. Future prospects
5. Conclusions
1. Need for structural change

Share of agricultural holdings ≤ 4 ESU in 2007

- 80.5% in Poland
- 98.3% in Romania
- 95.6% in Bulgaria

Source: Eurostat.
1. Need for structural change

Share of agricultural holdings operated by farmers $\geq 55$ years in 2007

- 35.1% in Poland
- 66.8% in Romania
- 70.1% in Bulgaria

Source: Eurostat.
1. Need for structural change

Share of agricultural holdings operated by farmers with only practical experience in 2005

61.5% in Poland
92.6% in Romania
94.7% in Bulgaria

Source: Eurostat.
2. S-FARM project

- Financed and coordinated by EC JRC IPTS, AGRILIFE Unit (SUSTAG Action) executed by IAMO and its partners from WAW (Poland), USAMVB (Romania), UNWE (Bulgaria), and Graham Dalton (UK)

- Research questions:
  - What characterises semi-subsistence farm households in Central and South-eastern Europe?
  - Which development strategies could promote them most?
2. S-FARM project

- **Semi-subsistence farm household (SFH):** household operating a farm of size **1 to 4 ESU** marketing part of its agricultural production

- **Surveys** in Poland (N=158), Romania (N=153), and Bulgaria (N=178) in 2007 referring to year 2006

- **Cluster analysis** and **multiobjective linear programming model**
3. Characteristics of SFHs – Typology of households

Source: Own calculation with data from project survey.
3. Characteristics of SFHs - Viability

Note: Viability = net household income / living expenditures
Source: Own calculation with data from project survey.
### 3. Characteristics of SFHs - Income

<table>
<thead>
<tr>
<th></th>
<th>Diversifiers</th>
<th>Pensioners</th>
<th>Farmers</th>
<th>Job-starters</th>
<th>Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net household income (EUR) of which</td>
<td>3,486</td>
<td>1,969</td>
<td>5,413</td>
<td>2,895</td>
<td>3,438</td>
</tr>
<tr>
<td>non-farm</td>
<td>2,350</td>
<td>0</td>
<td>0</td>
<td>1,069</td>
<td>1,233</td>
</tr>
<tr>
<td>social payments</td>
<td>483</td>
<td>1,439</td>
<td>403</td>
<td>589</td>
<td>718</td>
</tr>
<tr>
<td>subsidies</td>
<td>0</td>
<td>0</td>
<td>1,707</td>
<td>100</td>
<td>85</td>
</tr>
</tbody>
</table>

Source: Own calculation with data from project survey.
3. Characteristics of SFHs - Budget

Household income and living expenditures (EUR) in 2006

<table>
<thead>
<tr>
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<td>1,969</td>
<td>5,413</td>
<td>2,895</td>
<td>3,438</td>
</tr>
<tr>
<td>per member</td>
<td>1,059</td>
<td>734</td>
<td>1,633</td>
<td>898</td>
<td>1,096</td>
</tr>
<tr>
<td>Household living expenditures</td>
<td>4,323</td>
<td>2,960</td>
<td>5,244</td>
<td>5,556</td>
<td>4,409</td>
</tr>
<tr>
<td>per member</td>
<td>1,327</td>
<td>1,090</td>
<td>1,523</td>
<td>1,456</td>
<td>1,388</td>
</tr>
</tbody>
</table>

Source: Own calculation with data from project survey.

Poverty lines in 2006 (Davidova 2010):

- Poland 1,867 EUR
- Romania 828 EUR
- Bulgaria 1,022 EUR

Mean consumption expenditure per adult equivalent in 2005 by Eurostat:

- Poland 3,530 EUR
- Romania 1,541 EUR
- Bulgaria 1,798 EUR
3. Characteristics of SFHs - Farming

Agricultural output, variable costs and own use (EUR) in 2006

<table>
<thead>
<tr>
<th></th>
<th>Diversifiers</th>
<th>Pensioners</th>
<th>Farmers</th>
<th>Job-starters</th>
<th>Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural output</td>
<td>3,343</td>
<td>2,212</td>
<td>6,692</td>
<td>4,599</td>
<td>4,258</td>
</tr>
<tr>
<td>Variable costs</td>
<td>590</td>
<td>450</td>
<td>1,680</td>
<td>1,111</td>
<td>883</td>
</tr>
<tr>
<td>Own used</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>agricultural output</td>
<td>2,375</td>
<td>1,230</td>
<td>2,655</td>
<td>1,641</td>
<td>1,016</td>
</tr>
<tr>
<td>per member</td>
<td>708</td>
<td>486</td>
<td>737</td>
<td>464</td>
<td>588</td>
</tr>
</tbody>
</table>

Source: Own calculation with data from project survey.
3. Characteristics of SFHs – Intentions

Future intentions for the farm

- **Diversifiers**: 30% reduce farming, 30% continue as at present, 40% make investments in farming
- **Pensioners**: 40% reduce farming, 20% continue as at present, 40% make investments in farming
- **Farmers**: 20% reduce farming, 50% continue as at present, 30% make investments in farming
- **Job-starters**: 10% reduce farming, 60% continue as at present, 30% make investments in farming

Source: Own calculation with data from project survey.
4. Future prospects
4. Future prospects

Simulated annual credit balance of households in year 2016

Source: Simulation results.
5. Conclusions

- Semi-subsistence is a multi-faceted phenomenon.
- Structural change is possible but semi-subsistence will not diminish in the short term.
- Policy support needs to be finely targeted to household type.
  - Farmers: farm investment support accompanied by extension service
  - Diversifiers: no target group for farm investment or diversification support
  - Pensioners: social policy
  - Job-starters: general and agricultural training, farm investment support accompanied by extension service
Thank you very much!

Publications:

Final report:  

IAAE 2009 poster paper:  
http://purl.umn.edu/51444