International Scientific Conference summarizing a research project "THE ROLE OF SMALL FARMS IN THE SUSTAINABLE DEVELOPMENT OF THE FOOD SECTOR IN CENTRAL AND EASTERN EUROPE", funded by the National Agency for Academic Exchange – Internatio-nal Academic Partnerships on 10-11 September 2021 in Poznań

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Empirical Evidence on Sustainability of Small Farms in Lithuania

Under Agreement regarding Partnership for the joint implementation of the Programme, entitled „The role of small farms in the sustainable development of agri-food sector in the coutries of Central and Eastern Europe" under the International Academic Partnership Programme announced by the Polish National Agency for Academic Exchange (2019–2021)

CONTENT OF THE PRESENTATION

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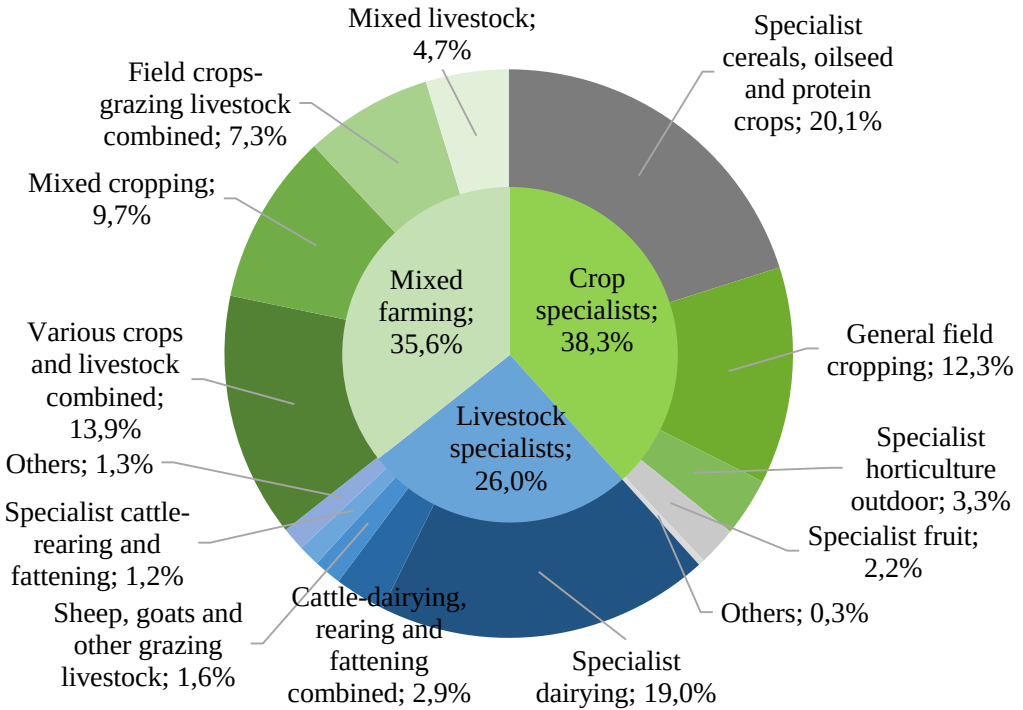
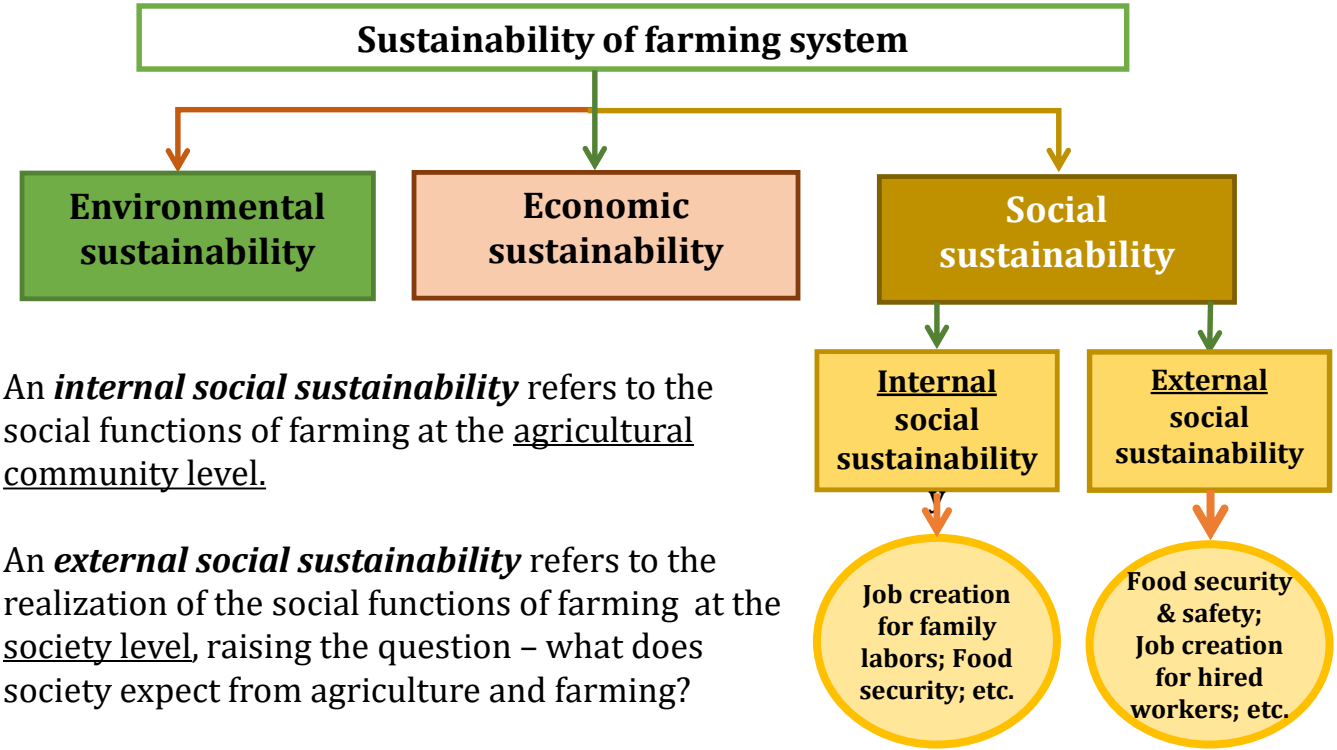
Context: Small farms in Lithuania

- 2016 farms up to 10 ha accounted for almost 82% of all farms and 15% of UAA.
- If we consider farms **up to 20 ha** as small, then their relative weight increases to almost 85% and 24%, respectively.
- Economically small farms vary according to their **specialization** (i.e. what they raise or what animals they keep) – whether the farm is dominated by one activity or not.



Source - calculated by the authors according to the Farm Structure Survey 2016

Theoretical background: decomposition of overall sustainability of farming system into component and attributes



An ***internal social sustainability*** refers to the social functions of farming at the agricultural community level.

An ***external social sustainability*** refers to the realization of the social functions of farming at the society level, raising the question – what does society expect from agriculture and farming?

Source: Vitunskienė V., Vinciūnienė V. (2015). Socialinės dimensijos integravimas į žemės ūkio darnumo vertinimą: Lietuvos atvejis // Darnaus vystymosi problemos ir jų sprendimai Lietuvoje: monografija. ISBN 978-609-449-091-0, p. 305-339.

Methodological background: main variables in the analysis

Dimensions		Data base
Social sustainability	*% of farms whose household consumes less and more than 50% of the final production* *% of farms whose household's nutritional needs are satisfied at different level* *Forms of involvement in farm activities of farm holders (%)* *% of farms with hired workers* *% of farms with constant and temporary hired workers*	Small Farm survey, 2019*
Economic sustainability	*% of small farms selling more or less than 50 % of final production by farm type* *Main distribution channels of small farms* *Proportions of raw materials / processed products sold by small farms* *Types of agricultural inputs supply* *Types of investment on farm level* *Type of relation with the market when selling food or agricultural products* *Distribution channels allowing to reach higher price*	Small Farm survey, 2019

*A survey of small farms was conducted in 2019. *Sample size - 1002 small farms*

Small farm definition: in this case, small farms classified into two additional classes, i.e.: very small farms with less than EUR 8 000 of Standart Output (SO), and medium-small farms from EUR 8 000 to less than EUR 25 000 of SO. Moreover, the criterion of the physical farm size under hectares of the utilized agricultural area (UAA) was applied in this analysis, and its cut-off threshold determination based on the analysis of the relationship between economic and physical size of farms (aprox. up to 25 ha) (Vitunskienė, Droždz, Bendoraitytė, Sapa, 2020).

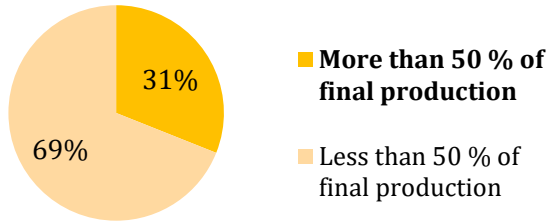
Data source: data collected for the study under the international FAMFAR Project „The role of the small farms of the sustainable development of agri-food sector in the countries of Central and Eastern Europe“ financed by the Polish Agency for Academic Exchange, agreement no. PPI/APM/2018/1/00011/U/001

Role of small-scale farming in enhancing food security at fam‘s household level

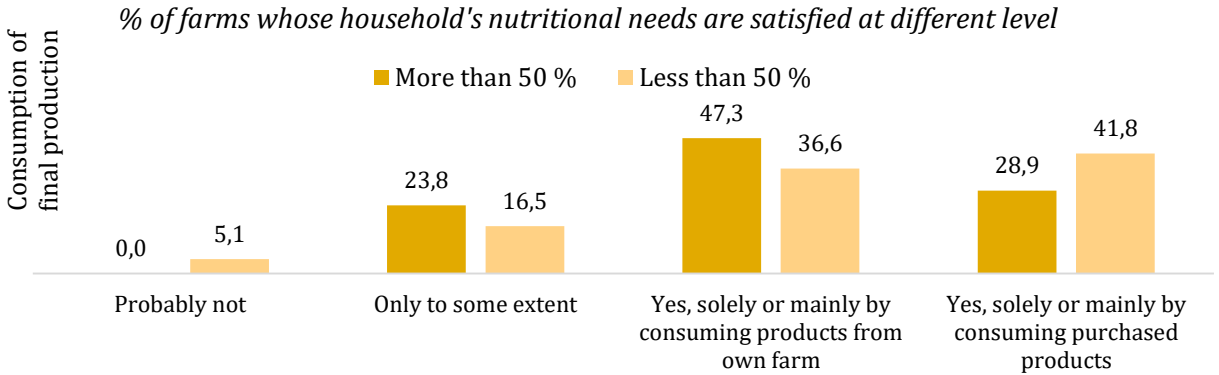
Internal social sustainability in ensuring food self-sufficiency

~30% of small farms consume more than half of final production, these households are more likely to fulfill their nutritional needs mainly by production of their farms

% of farms whose household consumes less and more than 50% of the final production



% of farms whose household's nutritional needs are satisfied at different level



Source: own calculations based on Small Farm survey, 2019

Contribution of small-scale farming for ensuring employment of family farms workforce

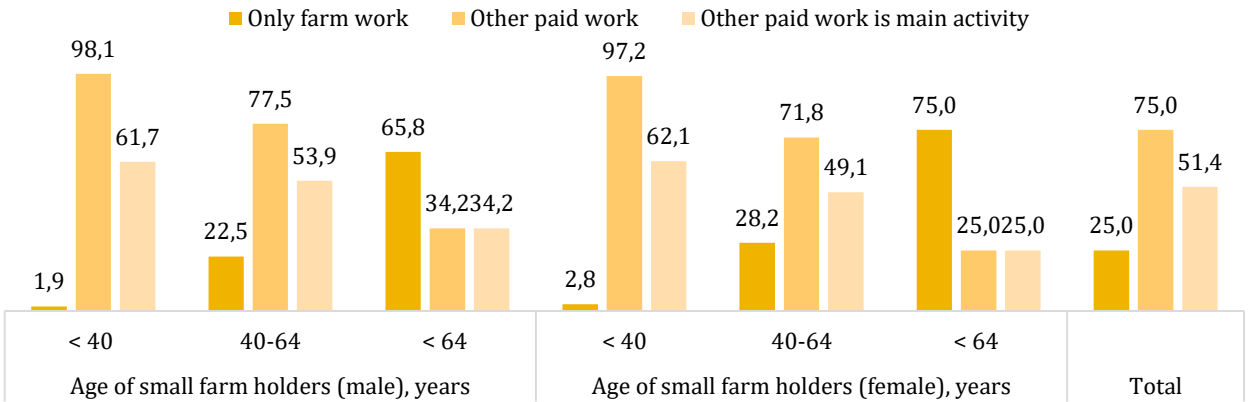
Internal social sustainability in achieving productive employment

For ¼ of farm holders farming is the only and main activity and ½ have other paid work which is their main activity.

Farming in small farms can be understood as:

- main or additional activity,
- a way to prepare food or to
- supplement the household budget
- Simply as an attribute of lifestyle.

Forms of involvement in farm activities of farm holders (%)



Source: own calculations based on Small Farm survey, 2019

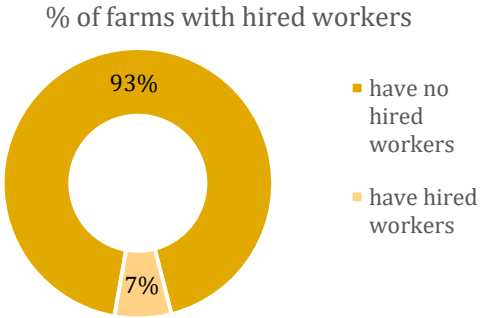
Contribution of small-scale farming for ensuring employment of hired workforce

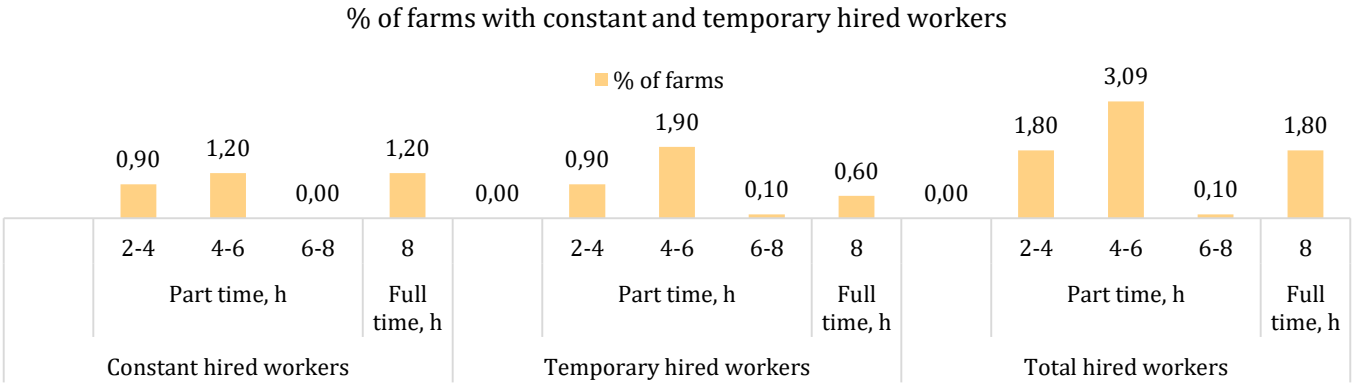
External social sustainability in achieving productive employment

Only 7% of small farm have hired workers, ½ of them are hired for constant jobs and ½ for temporary jobs.

Most small farms have only 1 hired worker

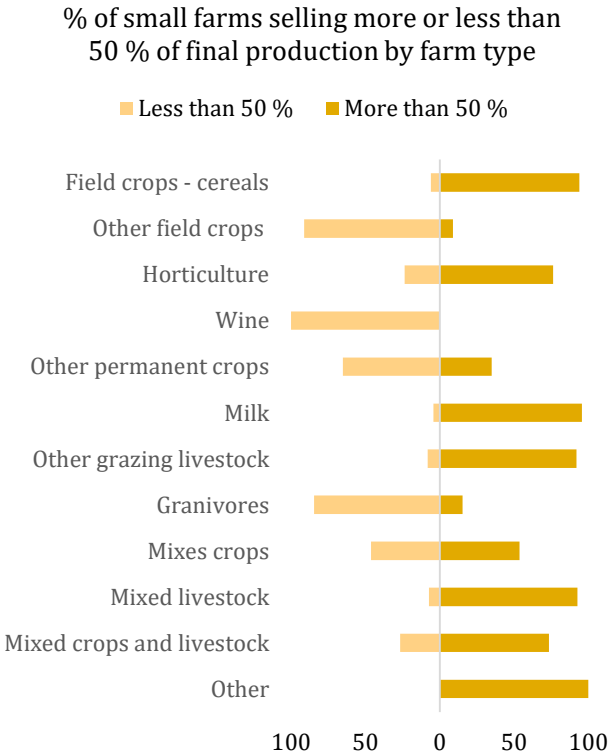
Most hired workers (~75%) are hired for part time jobs.





Source: own calculations based on Small Farm survey, 2019

Participating of small-scale farms in agri-food markets

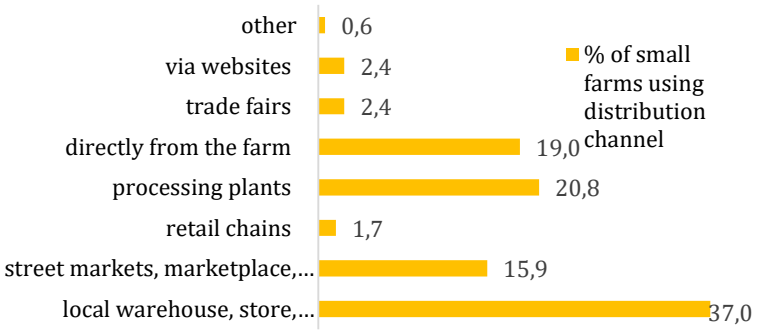


External social sustainability in ensuring food security

~70% of small farms in Lithuania sell more than half of their final production.

Distribution channels of small farms focus more on close environment – local stores, warehouses, direct sales from the farm (~56%)

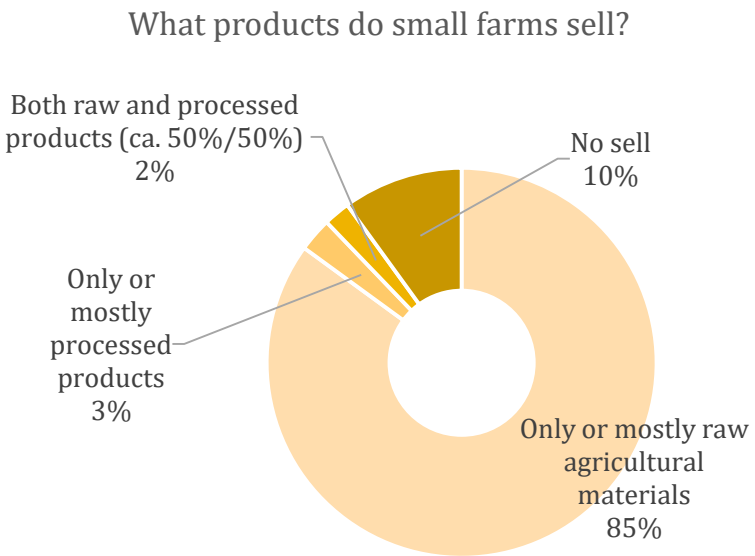
Main distribution channels of small farms



Source: own calculations based on Small Farm survey, 2019

Proportions of raw materials / processed products sold by small farms

85% of small farms in Lithuania sell **low value-added raw agricultural products**.



Source: a survey of the small farms (N=1002)

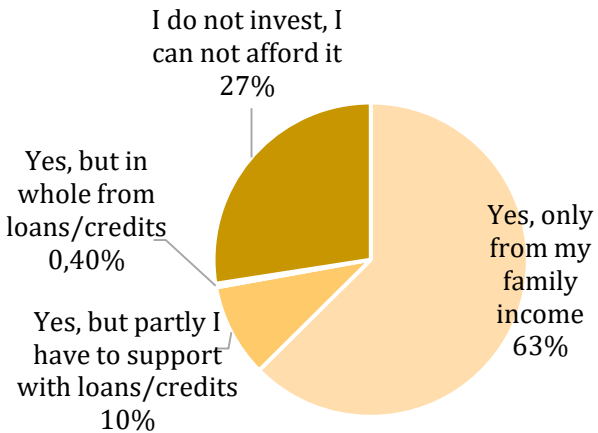
Investment and types of agricultural inputs supply in small-scale farming

~63% of small farms in Lithuania invest family income in farm development.

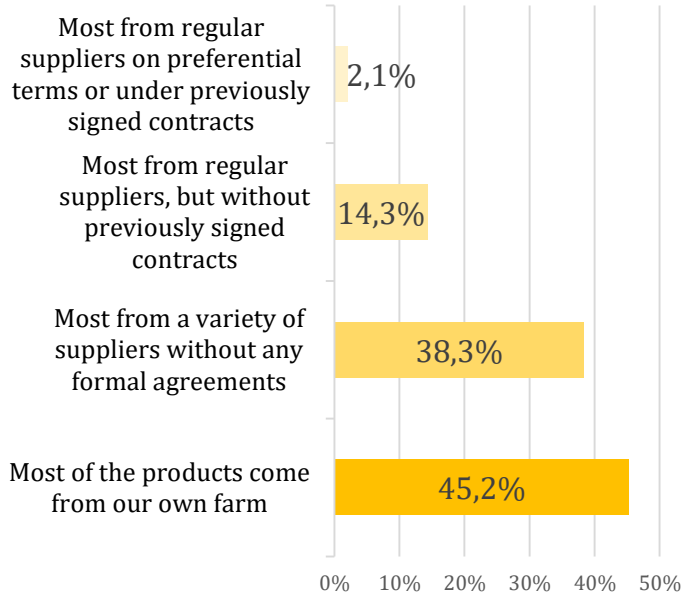
About ¼ can not afford investment in farm activities

~45% of agricultural inputs come from own farm

Do you invest money in the maintenance or development of farm?



Types of agricultural inputs supply



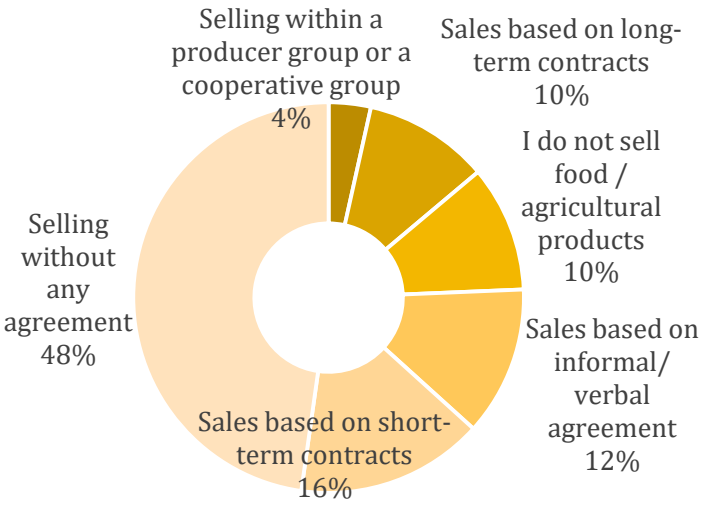
Source: a survey of the small farms (N=1002)

Type of relations with the market of Lithuanian small farms

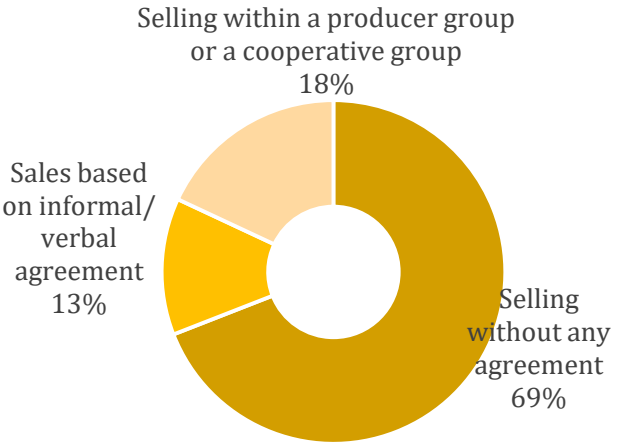
Almost ½ of small farms in Lithuania sell own production without any agreements.

2/3 of small farms gets higher product price while selling personally.

Type of relation with the market when selling food or agricultural products



Distribution channels allowing to reach higher price



Source: a survey of the small farms (N=1002)

Conclusions

- Due to the multi-dimensional nature small farms can contribute to the economic, environmental and social sustainability of agriculture and rural areas and become key actors in achieving the SDGs.
- Small farms contribute to the Food security goals in the rural areas on two levels – ensuring internal and external social sustainability. I.e. 30% of small farms consume more than ½ of final production and ensure nutritional needs of farm household. The 70% of small farms sell their final production to market contributing to ensure nutritional needs for society.
- In implementing 8th SDG Decent work and economic growth small farms contribute ensuring internal and external social sustainability creating job opportunities in rural areas. At internal level farmers of small farms self-create their workplace in the farms as well as at external level have hired workers.
- The level of vertical and horizontal integration of the small farms in Lithuania is very low. 70% of small farms in Lithuania sell more than half of their final production. But these are the low value added products sold directly to the consumers. ½ of them self supply required inputs.

Thank You for Your attention!