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Economic relations between superlarge farming companies and small agricultural producers in Ukraine

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Paper prepared for presentation at the 102th EAAE Seminar ‘*Superlarge Farming Companies: Emergence and Possible Impacts*’, Moscow, Russia, date as in: May 17-18, 2007

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Abstract

The presented research is devoted to issues of development in Ukraine superlarge farming companies, to their relations with small agricultural producers and consequences for small agricultural producers. Research is lead on the basis of official data of the State committee of statistics of Ukraine and results of the survey 2006 that was conducted in 6 regions of the country.

In the first part of the paper are considered the dynamics of increase an amount of superlarge farming companies in Ukraine, their territorial arrangement, specialization of production and other. Also is analyzed the efficiency of superlarge farming companies in comparison with other agricultural enterprises. The attention is also turned on operating conditions of superlarge farming companies concerning the concentration of the huge land areas.

The second part of the document is devoted to the analysis of the smallest agricultural producers in Ukraine. The attention is turned on changes that occur with this category of agricultural producers and to their place in the agrarian market of the country. We investigated their resources and the structure of production.

The final part of the document tells about relations between small agricultural producers and superlarge farming companies, influence of superlarge farming companies on employment and a living standard of rural residents. We have analyzed terms of land lease and prospects of rural residents. Our research is summed up with conclusions.

Key words: superlarge farming companies, private farms, households.

Introduction

In Ukraine, like many other countries there appear more and more superlarge farming companies (SFCs). The areas of SFCs' agricultural lands are more than tens of thousands hectares. SFC occupies the territory of some rural districts, where situated some villages. There live some thousands of rural residents.

The opposites of SFCs are household plots of rural residents. Medium size of such plot is near 1 hectare. There is over 6 million of such household plots in Ukraine. They produce bigger amount of overall agricultural production. But relations that exist between SFCs and households are not researched enough.

The aim is to research the economic relations between households and SFCs, the consequences for producers of agricultural production and to research the influence of SFCs on labor and level of rural residents' income.

In aim to research this issues, with the support of DAR fund (Kiev, Ukraine), there was conducted a survey in 2006 year. Over 400 rural residents were questioned at 6 regions of the country. Respondents were divided at 2 categories: workers of SFCs and workers of household plots. Also the analysis of agricultural companies (including SFCs) was conducted. This analysis contains indices that determined by the form of report №50 of State Statistics Committee of Ukraine.

General information about evolution of SFCs in Ukraine

At the 1 January of 2006 year 8366 Ukraine agricultural companies reported about there statistics. 471 company of that 8366, reported that the area of there farming land is over 5000 hectares. 59 companies reported that the area of there farming land is over 10000 hectares (**Table 1**). Just these companies were the objects of the research.

Table 1. Change of the structure of agricultural companies by there size, years 2001 and 2005

Groups of companies by the area of land, thousands of hectares	2001		2005	
	Amount of companies in group	Average size of 1 company, hectares	Amount of companies in group	Average size of 1 company, hectares
Less 5.0	11802	1620	7895	1585
5.001 – 10.0	497	3142	412	6436
Over 10.001	41	16538	59	18482
Total	12340	1859	8366	1943

Source: This and other tables have been created by authors on the base of the report №50 of State Statistics Committee of Ukraine.

An amount of SFCs increased on 18 companies (or 43.9%) comparing with year 2001. Also increased an average size of one SFC (from 16500 hectares in 2001 to 18500 hectares in 2005). Amount of SFCs increase when the amount of other agricultural enterprises, which have less size than SFCs, miniaturize.

SFCs are located at 17 regions of our country (this is 68% of all regions). Most of SFCs are concentrated at the eastern and southern regions of Ukraine (**Figure 1**). This fact can be explained by the landscape of these regions. The East and the West of Ukraine have steppe landscape with large fields. The western and the northern regions have woodlands, so the amount of SFCs is minimal in these regions.

Most of SFCs were created in Donetsk region (8 SFCs), in Dnipropetrovsk region (7 SFCs), and in Kherson region (6 SFCs). Only 1 SFC was registered in Odessa region, 2-4 SFCs exist in other regions. Average size of SFCs can be from 11 thousands of hectares (in Rivne region) to 65 thousand hectares (in Luhansk region) (**Table 2**). The largest SFCs were created in Donetsk and Luhansk region.

Table 2. Amount and average size of SFCs in regions of Ukraine (Year 2005)

Region	Amount of SFCs	Average size of SFC, hectares
Republic of Crimea	2	12297
c. Kyiv	3	16352
Cherkas'ka	2	19643
Chernihivs'ka	2	17493
Dnipropetrovs'ka	7	15365
Donets'ka	8	27310
Kharkivs'ka	3	11210
Khersons'ka	6	13154
Kirovohrads'ka	3	14348
Kyivs'ka	4	14933
Luhans'ka	2	65401
Mykolaivs'ka	2	24674
Odes'ka	1	11833
Poltavs'ka	5	14027
Rivnens'ka	2	11081
Vinnys'ka	2	23275
Zaporiz'ka	3	13430
Zhytomys'ka	2	15006
Total in Ukraine	59	18482

SFCs have been created by two ways. One way was to increase the area of former collective farms (like agricultural enterprise “Drujba Narodov” LTD in Crimea). Another way was to create agricultural section in trade or industrial enterprise. For example 3 central offices of SFCs were registered in Kyiv (Kiev).

The area of lands, that is cultivated by SFCs occupies the territory of some rural districts, were situated 2-5 villages. There live 1-5 thousand rural residents. Naturally, not all of them can work at SFCs. An average amount of workers of SFC is 731 person. This is in 7.7 times higher than at average agricultural enterprise in Ukraine. The amount of SFCs workers can be from 176 person, in Cherkasy region, to 1665 person, in Vinnytsa region (**Table 3**).

In average 65% of SFC workers are engaged in crops growing. But this indicator is also different in different regions. So in Dnipropetrovsk region 48% of SFC workers are involved in animal husbandry, in Odessa region – 44%. SFCs that is situated in Mykolaiv region almost does not have animal husbandry. Concerning the report data 92% of SFCs’ employees in Mykolaiv region are engaged in crop growing. No wonder that crops growing is more profitable in Ukraine than animal husbandry.

Table 3. An average amount of workers at 1 agriculture enterprise according to the size of enterprise

Region	Size of agriculture enterprises (thousand hectares)			Average
	Less 5.0	5.01-10	Over 10	
Republic of Crimea	139	219	1141	157
Cherkas'ka	93	273	176	99
Chernihivs'ka	87	238	733	96
Dnipropetrovs'ka	110	249	589	139
Donets'ka	74	248	1007	106
Kharkivs'ka	102	231	556	125
Khersons'ka	81	195	303	98
Kirovohrads'ka	75	223	356	86
Kyivs'ka	99	354	1336	115
Luhans'ka	57	162	1409	75
Mykolaivs'ka	79	217	440	97
Odes'ka	102	256	688	116
Poltavs'ka	102	334	647	124
Rivnens'ka	80	387	559	89
Vinnys'ka	91	505	1665	99
Zaporiz'ka	87	165	361	107
Zhytomyrs'ka	62	300	891	66
Total in Ukraine	83	239	731	95

The efficiency of agricultural enterprises according to the size presented in **table 4**. In average amount of employees in SFC for 1 hectare of arable land is less on quarter than in agricultural enterprises with areas of lands less than 5 thousands hectares and is less on 20% comparing with average agriculture enterprise in Ukraine. But comparing with agricultural enterprises with areas of lands from 5.01 to 10 thousands of hectares, average amount of employees in SFC for 1 hectare of arable land is bigger. Annual wages of SFCs' employees are bigger than in smaller agricultural enterprises. When the size of agricultural enterprise increases – increases its efficiency.

Table 4. The efficiency of agricultural enterprises according to the size (Year 2005)

Groups of enterprises according to the area of lands, thousands of hectare	Employees for 1 hectare, person/hectare	Average annual wages of 1 employee, UAH	Expenses of labor for producing 1 unit of output, person-hour/ UAH	Realization of production at the rate of 1 hectare, thousand UAH/hectare	Profit at the rate of 1 hectare UAH/hectare	Share of animal husbandry in realization, %
Less 0.5	15.09	4538	0.037	7.61	13971	50.25
0.501 – 5.0	4.92	3955	0.056	1.34	2611	26.84
5.001 – 10.0	3.71	4929	0.038	1.56	2941	21.70
Over 10.001	3.96	5543	0.027	2.84	5369	12.62
Total	4.89	4203	0.047	1.62	3107	26.84

The clear conclusion that the increase of the size of enterprise leads to the increase of efficiency can't be done using table 4. But there exist the regularity that in less effective enterprises most of employees are involved in animal husbandry. It can be supposed that the decrease of animal husbandry share causes the increase the efficiency of agricultural enterprise.

These regularities don't exist when enterprise has areas of arable lands that are less than 500 hectares. Share of animal husbandry is more than 50% in the structure of their realization. Also, the profit of these small enterprises is in 2.6 times bigger than SFCs' profit. It can be supposed that the size of agricultural enterprise is not the main factor of their efficiency.

The structure of SFCs' lands corresponds to the structure of output. 91.9% of agricultural lands are tillage. The priority of producing crops explains such high percentage of tillage. Shares of hayfields and pasture are considerably less in land structure 1.9% and 4.5% correspondingly. Animal husbandry is less developed in SFCs than crops growing. 0.5% of agricultural lands are perennial crops. It's the lowest percentage (**Table 5**).

Table 5. The structure of land area of average SFC in Ukraine. Year 2005

Indicators	Hectares	%
Agricultural lands	18482	100
Including:		
tillage	16983	91.9
hayfields	351	1.9
pasture	829	4.5
perennial crops	100	0.5
Agricultural lands in lease	16868	91.3

Employing small part of rural residents, SFCs try to cultivate wide areas of land. 1 SFC lease 16.8 thousands hectares of land in average (that is 91.3% of there agricultural lands). Rural residents that live on the territory of rural districts, were exist SFCs, give their lands in lease to SFCs.

76% of all lease contracts were concluded on term from 2 to 5 years. 14% – were concluded on longer term, from 6 to 10 years. And only 8% of all leases were made for 1 year. Terms of these contracts are usual for Ukraine (lease payment is 1% of the sum of the land valuation). Usually payments for lease are paid in kind (crops, other products or services).

So two groups of rural residents can be distinguished on the territories where SFCs function: employees of SFCs and persons who have no labor relations with SFCs. Nevertheless SFCs lease land from the first and the second group. Relations that form between rural residents and SFCs were investigated in survey 2006.

Short characteristic of the smallest agricultural producers and their place in the agricultural economy of Ukraine

A historically formed structure of agriculture in Ukraine can be characterized by the existence of two sectors: household plots and enterprises. Small enterprises, with the area of agricultural lands less than 500 hectares were described earlier. Private farms are smaller by the area of agricultural lands. There were 42.4 thousand farms on the 1 January 2006. Average size of agricultural lands that belong to private farms is 86.2 hectares, including 82.2 hectares of arable lands. Private farms use less than 9% of all agricultural lands of the country and produce near 6% of gross agriculture output (in prices of 2000 year). Profitable products of crop growing predominate in the structure of private farms' production.

The smallest are households. There are over 6 million of households that have 1 hectare of arable lands in average. Households are not legal entities and based on hand labor of an owner and members of his family.

Long time, till 2000 year, great amounts of rural residents were connected with large agricultural enterprises. For most of them the basic places of work were agricultural enterprises. Working at those enterprises, getting low wages (often with delays) and having no opportunities for employment in cities they had to produce more at their household plots. So households increased their share in producing of agricultural output. They produced 60% of all agricultural output in 2005 (55% of gross crops growing output and 66.7% of gross animal husbandry output; prices of 2000 year). Producing of agricultural production is most likely a measure of necessary for survival of rural residents – owners of households in the time of acute crisis in activity of agricultural enterprises.

The reforming of agricultural enterprises that actively began in 2000 year caused the decrease of employees' amount in agricultural enterprises. Managers and owners of those enterprises tried to get rid of unnecessary employees. As the result, now household plots are the basic place of work for most of rural residents. It shall be noted that not only able-bodied rural residents but also pensioners produce production at their household plots.

Households are more oriented at labor-intensive production, such as plant products and animal husbandry that don't require large land areas. Thus, in 2005 year they produced 81.3% of milk, 57.4% of meat, and 93.8% of potatoes and vegetables in Ukraine. Households owned 3.7 millions of cattle, including 2.7 millions of cows, 3.6 millions of pigs, 553.2 thousands of goats, 533.6 thousands of sheep, 455 thousands of hoes (Table 6).

Table 6. Amount of animals in agriculture households on the 1 January 2000

Breed of animals	Total amount of animals in country, thousands	Amount of animals that belong to households, thousands	Shares of animals that belong to households, %
Cattle	6514.1	4022.3	61.7
Including: cows	3635.1	2768.9	76.2
Pigs	7052.8	4450.4	63.1
Goats	757.3	755.2	99.7
Sheep	872.2	603.4	69.2
Hoes	554.8	456.7	82.3

Source: Data by the Ukrainian State Committee on Statistics.

Rural residents haven't enough own lands for such big amount of animals. So they have to buy forage from other producers. Also rural residents own 145.2 thousands of tractors, 11 thousands of combines and 51.2 thousands of lorries. But it's not enough for households. Therefore agricultural enterprises give different services to households, such as harvesting, plough of land.

Rural residents consume great amount of agricultural output and only less part of this output comes on the market. Agricultural enterprises are one of realization channels for households' output. It can be predicted that low level of rural residents' profits will cause continuation of producing output by households. And they will produce a bigger share of gross agricultural output for some period of time.

Relations that exist between the smallest and the largest producers of agricultural production – household plots and SFCs are investigated in the survey of 2006 year. Some main results are below.

Relations between SFCs and rural households

By the results of the survey 2006, 15% of rural residents have labor relations with SFCs. 72% of rural residents that have no relations with SFCs, said that their basic place of work are households. Small part of respondents answered that their basic place of work isn't connected with agriculture (social sphere, building, trade, etc). But almost all rural residents noted that they grow agricultural products at their household plots.

In average, work at household plots ensures over 40% of overall income of rural families. Here are kinds of activities that were mostly named by respondents as activities for trade:

- producing milk products for trade (27% of answers);
- growing fruits and vegetables for trade (25% of answers);
- regular producing meat for trade (18% of answers);
- producing eggs and poultry fowls for trade (16% of answers);

Accordingly, respondents estimate household plots as the most significant source of income (Table 7).

Table 7. Valuation of income sources importance by respondents, % of answers

Source of income	Answers			
	very important source	important source	not important source	have no such source
Household plot	57	26	9	8
Pension	56	9	3	32
Salary	27	23	2	48
Land lease	19	47	25	9
Casual salary	8	11	11	70

Source: survey 2006.

Salary is the most important source of income for those rural residents that are employees of SFCs. Most of rural residents don't think that SFCs is the source of their income.

Third part of residents that don't work at SFCs want to be employees of SFCs. The main reason of that is high level of salary. The reasons of their unemployment are: unwillingness of SFCs' managers to hire new workers, high level of requirements for employees. Only 5% said that they have no enough knowledge for working at SFCs. It can be supposed that their bad qualification is the main barrier on the way to the employment on SFCs.

Among rural residents that have mentioned that their main place of work is SFCs, 90% highly appreciate by their workplace and don't want to lose it. Main reasons for that are high level of salary and social protection. Over half of these employees continue to produce agricultural products at their household plots. They need to produce production not only for additional income, but also to help to the members of their family, which don't work at SFCs. Employees of SFCs noted negative sides of their work. They are: high intensity of the work, high responsibility, very complicated work, etc. No wonder, that the sensibility level of the income higher at the SFCs' employees than at that rural residents that have no labour relations with SFCs (Table 8).

Besides that, trade relations have formed between SFCs and households. SFCs sale forages, seeds, fertilizer and other resources to households, provide services for them. More than 70% of respondents noted, that SFCs sale resources and services to households. 2/3 of them noted that the level of prices is not high. And less then 20% said, that SFCs give help to households.

Table 8. The sensibility of the income by the families of SFCs' employees and other rural residents (% of respondents)

Sensibility level of the income	Employees of SFCs (n=68)	Others (n=376)
Low (not more than food and daily necessities)	32	46
Average (daily necessities, clothing, etc.)	52	48
Comfortable (able to purchase durable)	16	6

Source: survey 2006.

Over 1/3 of respondents sale some part of products they have grown on their household plots. But there weren't SFCs among the channels of their realization. Some respondents have problems with realization, cause they have no organized channels of realization. Respondents would like SFCs to buy their products. That would ensure a reliable channel of realization to households. But SFCs don't need and don't want to bay production of households, cause this production is low quality production and don't correspond to the trade specialization of SFCs.

It can be supposed, that SFCs fulfil social functions by selling resources and services to households. Also it is supposed that SFCs don't have any income from such activities.

According to that there are 2 inferences about rural areas were SFCs function:

1. SFCs are not main employers in rural area and they don't want to employ rural residents.
2. The main kind of activity for rural residents is producing agricultural production in their households. Giving the help to households, SFCs fulfil social functions.

Almost all countrymen (92 %) as those who work in SFCs, and those who does not work in SFCs, lease SFCs the ground areas. Averages rent payments make hardly less than 100 UAH for hectare a year. Among rural residents that lease land areas, 87 % consider, that SFCs should pay more rent. But unanimity on the size of a rent among countrymen it is not observed.

So, more than half employees of SFCs have specified, that the price of a rent that is comprehensible to them is in a range from 1000 up to 1200 UAH for 1 hectare a year. Workers of non-agricultural activities specified the desirable price of a rent as 400-800 UAH for 1 hectare a year. The majority of pensioners named the sum less than 400 UAH for 1 hectare a year. Unemployed rural residents have the highest estimation of agricultural lands. They would like to lease land areas to SFCs at the price that is more than on 1200 UAH for 1 hectare a year (**Table 9**).

Table 9. The most frequent answers concerning a desirable level of a land lease (% of respondents)

Categories of respondents	Level of payment for land leas for 1 hectare of agricultural lands, UAH				
	Less than 400	400-800	800-1000	1000-1200	Over 1200
Employees of SFCs	-	4	32	56	8
Other rural residents	12	48	20	18	2
Pensioners	83	10	3	4	-
Unemployed	4	12	6	10	68

Source: survey 2006.

Rural residents have no unanimity concerning terms of land lease. Many respondents do not accept the existing term of lease. 73 % consider that term of the lease contract should be changed. But 41 % consider that term of lease should be increased, and 59 % consider, that decreased.

Respondents consider that some issues are not settled in lease contracts. Most of rural residents (47%) consider that issues of land are not settled in contracts. These people are interested in problem of land exhaustion. They consider, that lease contracts should contain terms where stipulated the responsibility of SFCs for the deterioration of agricultural lands.

But only 38 % of respondents would like to replace SFCs with other tenant. 41% of them are ready to lease land to other (less large) agricultural enterprise and 46% – to the farmer.

That was traditional for agriculture enterprises to support social objects in rural area. SFCs don't support social objects, this is an opinion of respondents. It concerns objects of entertainment, (cafe, dance floors, etc), medical sphere, education institutions, rural roads, etc.

Most of respondents consider that SFCs should build and finance objects of a rural infrastructure. Among objects that should be financed by SFCs, respondents have named: schools and preschool establishments (82%), roads (79%), institutions of health protection (79%).

Only 16 % of respondents have answered that activity SFCs has improved their existence and a life in rural area. It's mainly those rural residents who work in SFCs. About 37 % of respondents have noted that their life has worsened with the appearance of SFCs. Thus some rural residents connect this deterioration with the deterioration of social objects' functioning, some people – with increased price of gas and electricity, some people – with reduction of their incomes. Some respondents have admitted deterioration of their incomes is caused by that fact, that SFCs don't allow stealing production.

The situation with the future of rural areas is quite complete. More than halves of rural residents want their children to left countryside. Future work in SFCs is seen only to 12% of respondents. They are mainly workers of SFCs.

It can be supposed, that rural residents, who do not work in SFCs have remained outside of activity and sphere of SFCs' interests. They do not depend from SFCs and many of them do not see their future with SFCs.

Conclusions

In rural area of Ukraine, as well as in other countries of the world, have been created SFCs. Many of these companies use the land areas more than 10 thousand in hectares.

Rural residents and SFCs mainly are connected with land lease relations. But rural residents perceive SFCs mainly as alien structures that do not promote improvement of life in village. Many proprietors are not satisfied with terms of land lease and are concerned by the problem of quality reservation leased land areas.

In spite of some participation SFCs in manufacturing of agricultural production by households, it does not remove social intensity in rural area. Respondents not always know about SFCs' help to social objects and not always adequately estimate this help.

Rural residents expect from SFCs more active participation in financing a social infrastructure of village and realization of agricultural production, that was grown up by households. Great activity of SFCs in this direction would promote decrease in social intensity in rural area. But SFCs hardly want and are not ready to incur additional expenses.

Rural residents almost don't depend from SFCs and mainly do not connect their future with SFCs. In turn, SFCs do not aspire to incur the responsibility for employment of rural residents and functioning of rural infrastructure.