



CEI Training Manual No. 3.2

for

Senior Management

13 Case Studies

**What Ukrainian Livestock Farmers
on the CEI Study Tour Learned**

Center for Economic Initiatives (CEI)

USAID Grant #121-G-00-99-00728-00

Phone: 513-831-6741

E-mail: lcole@ukrainebiz.com

April 2002

What Ukrainian Livestock Farmers on the CEI Study Tour Learned

Anatoliy Gatsko

Director, Gagarin Agricultural Company, Zmiyov District, Kharkiv Oblast
5,000 Hectares (2985 arable)
1,147 cows, 1,000 poultry, 300 pigs
Avg. 5 liters/cow @ 80 Kopeks/liter

Presentation

We learned how to properly grow corn. We plan to significantly increase the amount of corn we grow next year.

No-till farming is growing in popularity in the U.S. Now that we understand it and how to plant using this technique we plan to switch to no-till. In the U.S. you are currently averaging 30 liters of gas per hectare in equipment use. In Ukraine we average 100 liters per hectare. Our process consists of plow, cultivate, and till two times. It was proven to us on this tour that tilling is unnecessary. That will allow us to save 70 liters of gas or 105 Hryvna per hectare.

We learned that we should be feeding our dairy cows based on their milk output. We record everything manually but we think our records are as good as in the U.S. We'll switch to feed based on the milk volume of each cow to see if we can get immediate improvements. We'll need a mixing machine like we saw at Purina Mills in the future but until we can buy one we'll mix manually. We'll also begin making our own mixer like we saw at Karla Farms to mix corn, soy, and protein.

We currently have a mix of breeds in our herd that are Holsteins and Semintals. Now that we've seen the difference in production we plan to switch to Holsteins and try to create a pure breed.

We also want to develop an educational facility and program to teach at the local school. We'll start specialized courses in driving tractors and milking techniques. This will help solve the shortage of people on the farm and will give us a chance to train specialists. We'll need the Tech Center in Kharkiv to gain access to the technology.

We will use cow trainers for barns allowing us to reduce our expenses – fewer people standing around.

I helped set up an association in the Rayon. Right now it runs like all Ukraine associations, one for all. It will be reorganized into specialties; dairy, cattle, pigs, grain.

Based on what we saw in the U.S., we need to greatly improve the lifespan of our equipment. We will implement maintenance programs like the ones we saw in use.

We will begin using a milk substitute for calves. We'll also need to develop a retail outlet like what we saw at Young's in order to accomplish this.

Farm labor teams are unnecessarily large in Ukraine. We will reduce the size of them and reassign those people to retail, processing or other farm activity after thoroughly training them.

We will reposition refueling stations on the farm. As a result of all these changes above, we anticipate a 20% improvement in profitability (300-400 tons of milk) and fuel savings of 80 tons of diesel fuel.

Petro Kaverzin

Director, Slobozhanshchina Ltd., Dergachi District, Kharkiv Oblast
2,400 Hectares
370 milk cows, 220 heifers, 190 calves
Avg. 8 liters/cow at 75 Kopeks/liter
170 employees (30 dairy)

Presentation

My view of the U.S. has changed significantly. I had never been to a capitalistic country before. We were brought up differently and taught that America was a country of total unemployment and drug users. My task when I get home will be to tell people how you live and work in the U.S.

I have three changes I want to make upon return to Kharkiv. First is to change the structure of crops planted in the fields. In Ukraine we plant a lot of forage, barley, spring wheat. We give little acreage for feed crops. Feed corn makes up only about 5% of our fields. In animal breeding I saw some critical points. Cattle breeding is not profitable in Ukraine. In the U.S., farmers do not sell grains; they use their own grown grains to feed their animals. Ukraine has a tremendous potential to duplicate this and reduce their costs. Changing to 40% feed grains for planting in the fields will double the milk from our farm alone.

The second element is no-till crop planting. The U.S. tour made a believer out of nearly all of us. We can use this method and reap at least some of the benefits. We have no capital to apply herbicides so weeds take over early. As a group we calculated the savings from eliminating 2-3 disk and plow operations will be enough to pay for herbicides. It will still save us 30% in time and expense even after we buy the herbicides.

We learned about mid-row treatment of corn to increase production and early harvest. We'll use herbicides to get growth of early corn. We now also know to ask for the days to harvest when we buy the seeds.

We all really liked the robots at the Knigge Farm. The farm had a high level of organization. One family managed all those cows. It is a lot to think about in terms of productivity improvements and reductions needed.

Based on the visit it is very clear to all the participants that we must change our feed to increase dairy yields. We need an association or cooperative like MMPA that I will start working on when I get home. And finally, we need to split our large farms into smaller more specialized farms that focus on individual elements such as cattle breeding or dairy operations.

Tetiana Kholod

Chief Economist, Nadia Ltd., Kegichyovka District, Kharkiv Oblast
3,503 Hectares
250 cows, 103 pigs, some poultry
3 employees

Presentation

There were numerous lessons I learned on the tour. First, Ukraine recently abandoned haylage and preparation of feed. I now understand how important it is and will begin an education program when I return. We used to dump haylage; there was neither timing nor technology for us to understand. As a result, feed got worse. Now I know what to do to make it successful and improve the feed.

The U.S. has no complex way to prepare bales of hay. It is simply blown into large plastic bags and stored in convenient locations on the farm. We intend to purchase and use the machine that bags haylage the way they do in the U.S. It will improve productivity of our herd by 36% and reduce the cost of feed 8%-10%. This should help Ukraine farmers tremendously.

I plan to teach our employees to sex chicks in the first day by use of examining wing feathers. This will save us time and expense. We were taught this method at Mt. Healthy Hatcheries. Even wing feathers mean they are females, and uneven length of feathers means they are male.

In Ukraine, the pen size for farrowing sows is twice the size of that in the U.S. When I return I will reduce the size on our farm by one-half. Such a reduction will allow us to increase the size of our herd because of the additional stalls.

I want to create a program in Ukraine aimed at creating pure bred pigs. We are currently working with Poltava University. Now that we have seen what the U.S. is capable of we will try to use that knowledge in our program. U.S. weans piglets at 16 days and it is 30 days for Ukraine. We will reduce the weaning to 16 days and monitor to see if there are any genetic defects. If not, it will allow us to increase productivity and herd size to 13,000.

I was really impressed with American general organization of labor, the partnerships between science and producers, and the level of marketing for nearly everything in the U.S.

It is time for us to invest. We'll sell our barley and wheat in order to buy herbicides. Most Ukrainians never realized how important the herbicides were to increased productivity. We can now show them the difference. Our cows will have to remain without sufficient feed until we change our approach. We made no investment in equipment, no investment in pure breeds, and we sold all our crops for other purposes.

If we can implement everything I have outlined we can improve farm productivity by 4.4% next year. 1,500 tons of silage can be saved at 35 Hryvna per ton. Haylage only runs about 10-15 Hryvna per ton. Use of haylage, if preserved properly, can make big saving on our farms.

Svitlana Kolesnyk

Co-Owner, Private Incubation Station, Kupyansk District, Kharkiv Oblast
500 Hectares
14,500 poultry (Quail, Ducks, Geese, Chickens)

Presentation

I was amazed by American friendliness. We were made comfortable at every stop.

In the U.S., children are taught to manage a farm very early in childhood. They have organizations like the 4-H that helps provide education. In Ukraine the transition to managing happens after the parent's death.

U.S. farms are very specialized; they play one game not 25. As a result, it rules out or minimizes the risk of losing the game.

The free market mechanism in the U.S. helps promote agriculture. Producers have guaranteed sales or guaranteed prices. That creates stable markets. In addition, there is a great deal of cooperation between producers and American universities that is very important in solving problems.

In America farmers are protected by your Department of Agriculture. Our Minister of Agriculture is much different. There is so much more support for farmers here in the U.S. and it helps make them more competitive.

When I return home I plan to train children on how to manage a poultry farm. I'll set a small section of our farm aside for such education.

I've also learned how important it is to grow your own feed so I'll set up a greenhouse to grow green onions and wheat sprouts for the chickens.

I want to maximize our potential the way you do in America. I will make managerial changes, renovate and use better equipment, improve the different stages of the hatchery, and implement veterinarian work including vaccinations. We'll also improve the ventilation and infection presentation practices to follow that of Americans. And, based on what I saw in the U.S., we'll sell our 500 ducks and get laying hens. This could be a big future for us.

We'll also try using the compost from the poultry on our farm. If it works we'll sell it to local individuals to increase our revenues. I learned that Americans try to use everything or sell it for a profit. We have to change our thinking.

We will create a relationship with the livestock institute in Borke to create a closed circle – egg to table operation. Our hatching takes 5 months and we've always asked ourselves what to do during the other 7 months. Having seen Park Farms and Tyson we can close the circle to make the whole year productive.

We are interested in improving the survivability. At Mt. Healthy we learned that by vaccinating the embryos at day 1 increases the survivability from 80% to 94%-95%. We'll search for data in Ukraine to see if anything like the machines we saw in the U.S. are available. I have access to some loans from the government and we could use it to obtain the equipment. We are also interested in the egg washing machine (Mt. Healthy Hatchery) that is used to clean the eggs before they go in the incubators. We will get additional information and possibly add that piece of equipment to our capital requirements plans.

Leonid Lysachenko

Chairman, Zarya Agricultural Company, Chuguev District, Kharkiv Oblast
5,106 Hectares (3,000 arable)
600 cattle, 300 hogs, 300 geese

Avg. 5 liters/cow (4.3% fat) at 80 Kopeks/liter

Presentation

We must change the system of producing feed in Ukraine. Our farm will switch to 40% to 50% corn and soybeans if the science is available to get the appropriate yields. We learned from the Russians who specialize in barley and oats, neither of which is popular in the U.S. Our first experience with corn was to crush it and turn it into a powder. Now we know we should not have been doing that. We were shown very graphically that corn should be rolled not ground.

We learned that we need to add vitamin supplements and provide free choice feeding. We should let livestock eat all they want. In Ukraine we limit access to feed in order to control growth. Our pastures are used with shepherds, and if we use fencing or hedges to control roaming we can reduce our expense.

We will make a calf barn like we saw at Purina Mills with slotted floors and improve the micro-climate. This will give us healthier herds with fewer diseases. It will require us to renovate our old buildings.

We will build pure breed herds for milking or for feed cattle purposes. We saw the advantages while on the tour and the results were spectacular.

We will create an association like MMPA to give the supplier some market power. We can immediately organize 16 farms. Our current dairy has capacity limits so we could sell the excess to others.

We will begin to grow leaner pigs. Not for sala but for meat. The U.S. standard is 0.2 inches of back fat to 0.4 inches of back fat for meat. We could get a premium for that amount of lean meat.

Feed corn will be increased on the farm by 25% to 30%. In two years it should produce a 25% improvement in milk output and a 10%-15% improvement in beef (600-700 kg growth/day now).

Mykola Lysenko

General Director, Slobozhanskiy OJSC, Chuguev District, Kharkiv Oblast

8,300 Hectares (4,150 arable)

65,000 hogs, 3,500 cows (900 milked)

Avg. 15 liters/cow

1,500 employees

Presentation

The friendliness, hospitality, and graciousness of Americans were outstanding.

The U.S. has a very high degree of organization focusing on timing and quality. We can and should learn from them.

The U.S. pays a great deal of attention to the training of its youth. Upon return I'll try to implement a student education program. We have 1,300 students at three schools and 300 in nursery schools.

We will change the structure of our fields for crop acreage. Our farm uses corn and soy for swine but also use barley and corn. Last year we planted 40 hectares of corn and we will now plant 200 to 250 hectares next year. Ukraine government still recommends barley as the main ingredient (60%). Our fields will be 30% winter wheat, 30% barley, all for feed, and 30% corn. We will work on educating Rayon officials on the benefits of corn and soy.

We are purchasing a 10,000 ton capacity grain storage bin. We will increase its capacity to 30,000 tons based on what we saw in the U.S. We need to create more silage in order to reduce our cost of feeding our herd. We saw a lot of ways to improve storage while in the U.S. and how they use their storage to reduce the amount of feed they have to buy.

We will renovate and restructure next year. The U.S. uses gravity feed for their manure lagoons and Ukraine uses a flushing system. Based on what we learned on the tour, we will switch our lagoons over to the gravity feed method.

On our farm we currently milk 85% of our cows with milk pails. The U.S. uses auto-milkers. Based on the increased productivity and less manpower required we have ordered new auto-milking systems from DeLaval.

Increasing the use of corn for feed will improve weight gain by 30% and speed up the growth rate. Our current net profit is \$2.2 million U.S. and it will increase by 10%-12% as a direct result of my visit to the U.S. (\$220,000 to \$264,000).

Discussions with technologists in the U.S. on specific standards should have included in the tour the Agricultural Director for the Oblast.

Vitaliy Rovchak

Deputy Director Feed Production, Vostok Cooperative, Izyum District, Kharkiv Oblast
2,500 Hectares (2,000 arable)
1,800 milkers, 1826 heifers, 442 calves, 15 bulls, 600 beef cattle
Avg. 12 liters/cow @ 85 Kopeks/liter
529 employees with 85 seasonal

Presentation

The most important thing we learned was the preparation and storage of feed and silage. We cannot make improvements this year based on what we learned on the tour because we have already prepared feed and silage for this year.

We will purchase a baler for silage and haylage – we'll compare American versus German equipment manufacturers.

In the grain storage bins we will install gas burners to regulate air and humidity – we saw this at its best at Karla Farms and at Glencarin Farms.

We will look for Kharkiv adjusted soy seeds. Soy is a prime source of protein as we learned in the U.S. and needs to be added to Ukraine diets. We will plant next year if the climate can accommodate. We are using sunflower meal as a primary source of protein. Soy will become a prime element of our crop rotation.

The U.S. uses no-till farming. Ukraine still tills their fields. We used to plow 30 cm and now only do 12 cm. We will stick with low till because it is easier on our equipment and overall operations.

We learned a great deal from the OARDC about composting technology. By implementing a similar process we can minimize the area of composting and control weed seeds effectively. Tischenko needs to develop a machine for fluffing in order to utilize this process.

We plan to process our milk into ice cream for the Rayon the way Young's Jersey Dairy does.

I learned how to do embryo transfers. We can use one cow as an incubator to give birth for another cow like we saw at Mohrfield Holsteins. The success rate in Ukraine is 70%-80% and Mohrfield gets 90%.

We will sow our own corn. This year we bought 6 rail cars (570 Hryvna per ton) at 30 tons each car. Growing our own corn will allow us to eliminate this all together next year.

Anatoliy Rovnyy

Director, Krasnopavlovsky Farm, Permovaisky District, Kharkiv Oblast
2,500 Hectares
350 cows (107 milk) and 300 pigs
Avg. 11 liters/cow @ 60 Kopeks/liter
43 employees

Presentation

Based on what we observed on the tour I believe the success in the U.S. is based on attitude, pure breeds, feed, and the good conditions of the animals.

I wanted to see why everything works so well in the U.S. I believe we saw pure breed animals that produce excellent results and developed over generations.

Americans do things on time with quality as their main concern.

I learned how to prepare and store feed on the farm. We can use this to reduce our costs next year.

Balancing feeds is important. We saw how to prepare feed properly in the U.S. We also need to add vitamins and minerals. We used to have companies that produced combined feeds and they are now all out of business.

We have 1,100 poultry. Based on what we saw at Tyson and Park Farms we will increase the number of poultry to 10,000 – 15,000. Park Farms egg to table is a great example of what is now a potential for us. We never dealt with sales before, everything went to the administration. I think we now know enough to exploit the opportunity to market and develop outlets.

We will no longer grow sunflowers to sell. We'll now process into oil and use the shells to feed the cattle.

We will package our flour in smaller sizes and make a special flour for pancakes, etc. We saw this in the U.S. markets and know it will sell well in Ukraine.

Like so many U.S. farms we intend to diversify. We will install a production line for mushrooms, both canned and packaged. In the summer we can process vegetables to increase revenues.

We will publish in newspapers based on my experience and views of improving farm life and yields. We will also train children in our schools in the care of animals.

I expect profitability increases to be 10% - 15% next year based on what we learned here. We had a 56% profit level until 1995 and since then everything tanked.

Volodymyr Ryzhenko

Chief Veterinarian/VP Production, Ohocheye JSC, Novovodolazhsky District, Kharkiv Oblast
2,000 Hectares (1,800 arable)
110,000 chickens, 360 cows
Avg. 11 liters/cow @ 95 Kopeks/liter
28 employees

Presentation

I was amazed that you can make that much money by only processing soy and corn as at ADM. I was shocked that you can divide soy and corn into components. I was impressed by the hydroponics garden and the fish that grow to adulthood in 6 months versus 3 years in the wild.

I learned a lot about American business management techniques and the importance of no-waste production. Americans use everything.

From MMPA we learned that a cooperative can help protect profitability of farmers and help them to get maximum prices. In Ukraine the processors have all the market power and a cooperative would help balance the market power. In Kharkiv, the chicken association has been in existence for 1 ½ months. We need to help it succeed.

From the OARDC we learned we can improve manure use by composting. We'll need a compost turner to make it happen. We sell manure with 50% moisture now and can really expand our market if we can dry it the way OARDC did.

Park Farms had an impressive educational organization. We will duplicate the process to teach our children, show them how to see an ugly chicken as something beautiful. We can give 30,000 chickens to farmers and teach them how to grow them. We can advertise at the gate to the farm and work with all our local schools.

Seventy to eighty percent of our eggs are sold wholesale. We handle 70,000 to 80,000 eggs per day. I think we can get a 30% increase in production by marketing. We will need to find a processing plant to handle the capacity. We can slaughter but have to sell right away since there are no large wholesale buyers in the area. We can sell live birds during 1 month. As productivity increases we will be selling the older birds first. We've learned to find customers and work with them concentrating on the end product. Meat in the refrigerator is easier than feeding a bird.

We need to find new managers to learn no-till farming and the use of corn. We will not need the number of employees we currently have – we have 150 people doing the job 4 people do in the U.S.

Alexandr Sorokin

Deputy Director of Livestock, Dovzhik Ltd., Zolochiv District, Kharkiv Oblast
4,134 Hectares (3,800 arable)
530 cows
Avg. 5.5 liters/cow @ 75 Kopeks/liter

Presentation

I experienced some cultural shock here. Everyone is always smiling and happy. I liked everything we saw, some more than others. There were seven areas I was most impressed with:

1. Industriousness of everyone – they all liked what they were doing
2. Park Farms and Tyson – both were overwhelming
3. Chicago Mercantile Exchange – it establishes prices in a civilized manner
4. Karla Farms – I've never been so well received anywhere and seen such technology
5. Greenacre Farms – my first introduction to organic farming
6. Knigge Farm – who would have thought robots could milk cows
7. MMPA – a balance of market power for producers

I was surprised that we only saw corn and soy in all the fields we went past and on the farms we visited. I thought there was more grain produced on U.S. farms.

We will plant soy for use as feed next year. We'll need help with how to convert it to feed. We can increase milk productivity by adding soy into the feed for the Holstein herd.

We'll increase the size of our Holstein herd. Ukraine loses 20%-25% of its calves whereas the U.S. only loses less than 5%. Calves are kept in separate containers not in contact with each other. We'll develop a similar type of isolation for use in Ukraine.

Lagoons or composting are used for manure. We will implement composting when we return to Kharkiv.

We will start a beef herd when I return to Kharkiv. The cost is minimal to grow Angus beef and it can increase profitability by 25%.

Volodymyr Tatarenkov

Chairman of the Board, Kievskaya Rus Farm, Peremovaisky District, Kharkiv Oblast
1,600 Hectares (970 arable)
500 pigs, 2,400 geese

Presentation

I learned a lot about self respect. On nearly every farm and at every plant we visited they had the American flag on display. When I return I will put out the Ukraine flag to build pride in self and country.

I plan to have a “Meet the Media” session including the Rayon news and TV stations. I will share impressions with people to dispel old stereotypes. I’ll talk about how Americans work and how their work is purposeful. Work creates material assets for family and community.

I plan to meet with the chief of the Rayon administration. Again, I will share my opinions and describe the Ohio Dept. of Agriculture functions. I help organize schools and will introduce programs for younger children to foster self-respect, love for work, and respect for their parents,

I will create an association of farmers and cooperatives. These can be used to enforce laws and maintain order in the marketplace.

I plan to pursue what I have been doing. I will work with individual farms in conjunction with Duchochyev University in reorganizing farming methods to increase productivity – make everyone contribute to net profit and provide incentives to increase production.

I will introduce new methods for tillage using a scientific approach for soil, equipment, etc. Note, this was not taught on the MTM Tour but some methods of soil treatment and equipment maintenance that was part of the tour will be incorporated.

I will increase crop rotation increasing the use of soy and corn. We cannot increase the yield of our livestock without the use of corn and soy. America confirmed that fact.

In raising piglets we can see U.S. farms are now on the right track. We will encourage Kharkiv farms to focus on elite breeds.

We have a lot of unused space that will be converted for poultry. We’ll keep them on the floor. There is very little capital required except for the chicks.

We will introduce processing on a small scale. The combined efforts will result in a 30% revenue increase and a net profit increase of 30%.

Leonid Tishchenko

Deputy Rector, Kharkiv State Technical University of Agriculture, Kharkiv District, Kharkiv Oblast
Chairman, Kharkiv State Technical University of Agriculture

Presentation

I have a more scientific approach than the other participants. I will provide an awareness about what we’ve seen.

We need to provide training to heighten specifications for farmers along the stages of science and education. We need to show the interrelation among science and education to get progress. The U.S. is best at this.

We have 70 people in our Science & Technology School. Our design bureau should be reorganized to design equipment that is vital to farmers and which would be efficient for farms with small production. We got a lot of good details and will reproduce it.

Dairy farming in U.S. is better than what we have now. We currently deal with repair and maintenance of existing equipment. We have a great opportunity to help the producers to create equipment they need to move forward. The University should be the center of technological innovation in the region.

I will inform the Rayon that they need to be more statistical and introduce forecasting for the farmers benefit. Farmers should have an opportunity for easier education.

More than 500 of our students go on internship to other countries. They work for 6 months to one year. What could be more convenient? CEI can help facilitate making such a connection in the U.S.

In the area of machining, the university needs to create a feeder for livestock – computer controlled to change feed amounts based on dairy milk output. We need to develop processing lines like we saw at Tyson and Park Farms. We need to develop a cow trainer and plastic tubing for air circulation in enclosed barns. There is a whole world of new items we can lead the nation in developing.

I will emphasize the macro approach and the systematic approach to education using the information I gained on the tour.

Sergiy Zaika

General Manager, Promin Private Agricultural Enterprise, Krasnograd district, Kobzovka village
Kharkiv Oblast

2,526 cows (858 milk), 2,739 hogs, 24,180 chicken

6,680 hectares (5,682 arable)

485 employees (250 dairy)

Presentation

I want to plant soybeans. The U.S. uses 50% soy while Ukraine uses meat bone or fish bone meal for nutritional supplements. We can reduce our additive expense by 67% by doing this.

I am the General Manager of Promin. I will experiment with U.S. crop rotation using corn, soy, hay, and alfalfa.

I learned a lot about staying with what you know. We used to have the best corn in the area but tried to do without herbicides last year. We had a terrible yield. I learned to pay attention to the growing cycle on this tour and to appreciate the value of herbicides.

I will purchase a machine for plastic bagging haylage like we saw on most U.S. farms. This is the most efficient I've seen. In Ukraine we use trench storage but spoilage is high reducing the value as a feed.

In Ukraine we change the feed for each season; in the U.S. they keep the same mix year round. We will switch to the U.S. method with the higher protein content to increase weight gain and output.

I will break the herd into smaller units and use feed lot practices.

We will rebuild our facilities using U.S. technology for the reconstructing the barns and the manure removal.

We will use lagoons adding treatment to eliminate some of the current problems in waste removal. We will buy a composter like the one at OARDC. It will allow us to make the improvements needed to avoid problems with our environmental regulators. I have seen two ways we can make immediate improvements.

As a result of making the improvements observed in the U.S. we will:

1. By using soy reduce our expenses by 67% (3000 Hryvna for bone meal and fishbone meal down to 1000 Hryvna)
2. Will sell soy to processors, 2 tons additive for 1 ton sold (will be more profitable than sunflowers). The soy fields will be the basis for winter wheat followed by corn.
3. We will see a 10% - 15% productivity increase by implementing everything I want to change when I go home.