
International Perspective Farm Business Management in Kazakhstan

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Seeding 38,300 acres in 15 days

Farm business management guru Gary Pike has a rule-of-thumb to maximize investment in seeding equipment—each foot width should seed 100 acres. Accordingly, a 50 foot air-seeder should cover 5,000 acres to maximize return on capital and minimize fixed cost. The reality is, according to Pike, the average Canadian grain farmer is producing a mere 40 to 50 acres per foot width of seeding capacity.

With this in mind, I calculated the efficiency of the corporate farm in Kazakhstan where I'm contracted as a research agronomist. This 38,300 acre farm has ten seeding units with five Russian hoe-press drills and five North American air-seeders. Their units produce about 350 feet of seeding capacity. Compared to Pike's ideal, this makes 109.4 acres per foot width. On top of that, they seeded the entire farm in 15 days – finishing May 30th! How did they do it?



The farm has five x 41 foot air-seeders. One Morris with a Versatile tractor, one Bourgault and three John Deere units.



Al Scholz, with the farm's agronomist



The farm has five x 30 foot Russian hoe-press drills pulled by Kirovets tractors

For starters, this operation was previously a Soviet state farm and the operational methods have not changed very much. There are approximately 100 employees which makes it easier to run the equipment 24-hours a day. On average, they seed 2,500 acres a day, even with breakdowns.

It also helped that there was no rain from May 15th to May 30th, which is unusual, so there were no hold ups in the seeding process – although it's desperately dry and as a result, emergence is only fair to poor.

As well, they use very little fertilizer – some is pre-applied in early spring and usually none is applied with the seed. So they fill up the tanks with grain and keep the tractors moving at a good speed. The average field size is 1,100 acres and usually two fields were seeded per day.

The management style appears to be “one-size-fits-all,” a carry-over from previous times. There are a few standard herbicides pre-purchased in bulk but there are hardly any individual field management practices.

Weed control will be a major challenge as the fields are full of some of the most difficult species – field bindweed, wild buckwheat, leafy spurge, Russian knapweed, sow thistle and quack grass. Ten year average wheat yields for Northern Kazakhstan range 15-18 bu/acre compared 29-38 bu/ac in Canada, despite similar precipitation and deeper, richer soils.

Gary Pike's observations of management excellence in maximizing seeding equipment may be correct – but he would be the first to admit that excellence in all aspects is critical for profits. It's the weakest link in the management sequence that determines the end result, and in Kazakhstan agriculture the weakest link is the lack of diversity in farm management.

Despite that, getting 38,300 acres seeded in only 15 days is quite impressive. Imagine their potential if Kazakhstan farmers work to improve their farm business management techniques.

More next week ...

Al Scholz is working as a research agronomist on a 5,200 ha [12,300 acre] demonstration farm in Northern Kazakhstan from May to October 2010. See his Blog for more information at www.awellfedworld.com/blog.