INCREASED FARM PRODUCTIVITY
Richard Bower, United Kingdom

Richard Bower comes from a family farm in mid Staffordshire focused on beef farming and growing cereals. The farming roots in the Bower family start with the grandparents who were followed by Richard’s dad Raymond. As the new generation, Richard is aiming to increase the productivity of the farm by embracing new cultivation technology, the strip till system.

Context
The farm with 300 beef cattle spreads to around 300 hectares, with two thirds dedicated to cereals - mainly wheat, oil seed rape, barley and maize. Forty percent of the wheat is used for feeding the animals and all the straw is used for cattle bedding. Oil seed rape and additional wheat is sold to feed merchants.

In 2005 the cultivation technique was changed from conventional ploughing to minimum tillage, bringing a reduction in the fuel usage and the improvement of soil structures. With the correct machinery the strip tillage system is the next step for the business to reduce input costs further, reduce greenhouse gases produced and continue to improve soils for future generations.

Idea
The project involved investing in a complete strip tillage system which would allow R J Bower Ltd to embrace a modern, efficient and very effective way of establishing arable crops.

A Straw Harrow/Rake is used immediately after harvest to control weeds, slugs and manage stubble. The process is fast and efficient and the only process pre sowing the seed is with the strip till seed drill. This non-inversion drilling technique will reduce fuel consumption and greenhouse emissions across the farm. Additionally by maintaining soil structure and leaving some of the previous crop residues on the surface of the soil the risk of soil erosion is greatly reduced.

Location
Staffordshire, England

Programming period
2014-2020

Measure
M04 Investment in physical assets / LEADER

Funding (EUR)
Total budget 22,570€
EAFRD 9,020€
Private 13,550€

Project duration
January 2017 – March 2017

Project beneficiary
R J Bower Ltd

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The final process of the complete strip tillage system is using heavy breaker rolls with a shatter board to help retain moisture, improve any chemical spray contact and decrease slug activity and the need to rely on slug pellets. The rollers complete the system; the operation is fast, efficient and gives crops an uncompromised start.

“The main aim of our project is to make ours and our contract farming holdings more productive; however, we also host visits to the farm such as Young Farmers, National Farmers Union farm walks and farming discussion groups to share ideas about what we do and to continually improve our businesses.”

Outcomes
The outline application was to purchase a brand new strip till seed drill for around €80,000, which was difficult to raise even with a 40% grant. The horsepower requirement for the tractor used to pull the drill was also higher than what is available on the farm. This led to further market investigation. Another type of strip till drill which required lower horsepower from the pulling tractor and which was just as effective was found for €22,570.

The application also included stubble rakes for managing stubbles efficiently after harvest to reduce weeds pre drilling. In addition, to complete the system a heavy breaker roll with shatter boards was also proposed to consolidate the soils post-drilling, rolling the sown fields and speeding up the crop establishment.

After a project review, financial support on the strip till seed drill was granted. From Spring 2017 the Bower’s farm will start their strip till journey.

“On the farm, Dad and I work together, I know I need to earn my place as a partner of the business. My father inherited the farm from my grandparents. I hope to do the same but it isn’t easy. Especially in volatile times.”