A good soil structure is of great importance for crop production. Good soil structure for plant growth requires the presence of pores for storage of plant available water, pores for the transmission of water and air, and pores in which roots can grow. Rooting, water supply and nutrient uptake are factors affected by the soil structure.

Positive factors
• Plant root production
• Organic material
• Drying of the soil profile

Negative factors
• Bare non-frozen soil
• Number of passages in the field
• Subsoil compaction

The index has been evaluated with very promising results in a project called 4T located in southern Sweden. The aim of the project was to explain the difference in yield levels between neighboring farms. 14 farms were divided into 7 pairs. The farms in every pair are located closely together and have similar farming properties (soil, weather etc.). Historically one of the farms has high yields (good farm) and the other average yield for the area (average farm). The “good farms” had in most cases a higher Farming System Index and “better” physical properties than the corresponding “average farm”. The table shows the result from pair 3.

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