



### **SADC Land Assessment: Outside activity: (1.5 Hours)**

Identify potential resources that may be useful for your farming operation, or that you would like more information about such as wells, land uses, buildings etc. Look for areas that may be identified as resource concerns. Do you think this would be a good farm to lease?

#### ***Measure field slope***

Take turns using a clinometer, your smart phone, or a hand made measuring device to measure slopes. The steeper the slope the more likely erosion and runoff will be concerns.

Once you have a good idea of how to use the tools, measure the 'test slope' and write down the percent slope below.

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#### ***Determine pace***

Knowing your pace is a very useful tool you always have with you when walking a farm. You can measure the length and width of a field, get an estimate on how long a slope or a building is, or plot out what a specific growing area might look like.

Walk back and forth between the established 50-foot length. Always start with the same foot. Count how many steps it takes you to get from one set of flags to the next. Divide 50 by the number of steps you took to determine your pace.

Example: It took Dave 25 steps to go 50 feet.  $50 \text{ feet} / 25 \text{ steps} = 2 \text{ feet/step}$ .

Your pace: 50 feet / \_\_\_\_\_ Steps = \_\_\_\_\_ feet/step

Now use your pace to estimate the unknown length:

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#### ***Determine field aspect***

Field aspect is the direction of the slope to a compass direction. Use the compass and fact sheet to determine the aspect of the slope is the slope facing: (Circle one)

North Northeast East Southeast South Southwest West Northwest

Bonus: What is the slope in degrees?

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***Infiltration rate***

Infiltration rate is a measure of how quickly water moves into the soil. Follow the directions in the attached NRCS infiltration document.

***Penetrometer***

A penetrometer is a tool that can be used to measure layers in the soil that are restrictive to plant growth. It can also be used to find compaction in subsurface soil layers. A wire flag, section of rebar, or any similar metal rod can be used to find restrictive layers in the soil. Find an area of relatively undisturbed soil (by the stream, in a hedgerow) and measure depth to a restrictive layer. Measure the same in a cropped area. Document your results below.

Hedgerow or other uncultivated soil

Tilled field

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Bulk Density

See the NRCS fact sheet