

The System of Wheat Intensification

- An easy opportunity to increase wheat yields in Afghanistan



Traditional broadcasting method

- 50% weeds
- Half yields
- More pests/diseases

System of Wheat Intensification

- No weeds,
- More pest resistance
- Double yields
- High quality grains
- Lesser cost/volume
- Improve soil quality



The guiding principles of the System of Wheat Intensification (SWI)

1. Prepare furrows to sow seeds in rows

- It is easy to use rakes to make furrows
- It is easy to clean weeds when plants are grown in rows
- Most farmers have rakes used for collecting weeds
- The rakes need to be calibrated at least at 25 cm spacing to allow furrowing at same distance



2. Sow seeds carefully in rows

- Seeds can be sown by hands
- Drum seeders can be used to sow seeds as well
- After sowing cover the seeds with a leveler by animal



3. Use rotary weeders to clean the weeds

- Use first rotary weeding when plants are 6-8 cm tall
- Weeding must be done before the weeds emerge
- Second weeding should be done after 10-14 days later.
- Weeder should be operated when the soil are soft, not hard.
- Weeder will aerate the soil which will improve the soil quality
- Two times weeding will be sufficient. After that the field will be fully covered by plants



4. Apply manure or compost to improve the soil quality

- During land preparation apply as much manure/compost as possible
- Application of manure as well as soil aeration caused by rotary weeding will improve the soil biology, increasing the availability of nutrients for plants and ultimately wheat yields. This will reduce the need for chemical fertilizers

