

Tailoring recommendations for conservation agriculture to farmers based on their landscape preferences

Problem

Farmers have different preferences and motivations when it comes to their choice of practices. Not all farmers will apply conservation agriculture (CA) practices in the same way, and with the same visions for their farm. Promoting the uptake of CA practices among farmers can be challenging.

Solution

Recommending CA practices (reduced tillage, direct seeding, leaving residues, growing cover crops, integrating diverse crop types) needs to be tailored to different farmer groups. Results from the ConServeTerra WP2 Q-study show that farmers across cereal-producing regions of Morocco, Spain and Tunisia can be split into three groups depending on their landscape preferences: pro-intensive CA, pro-diversity and pro-yield.

Practical recommendation

To encourage the uptake of CA practices in a way that speaks to farmers' priorities, but also furthers a vision of holistic and healthy landscapes that work for people, production and nature, extension agents can engage farmers according to their characteristics and preferences as outlined in Table 1.

Photos of healthy, productive landscapes, as opposed to individual practices, can be used as visual aids when engaging farmers. CA benefits may be integrated into these materials to emphasize the benefit of CA at the Mediterranean landscape scale.



Picture 1. Tunisian landscape
(Photo: Harun Cicek)



Picture 2. CA Wheat harvest, Tunisia
(Photo: Hatem Cheikh M'hamed, ICARDA)



Picture 3. No-till fields with legumes
(Photo: Bahri Dagdas International Agricultural Research Institute)

Table 1: Farmer characteristics, preferences and recommendations for advisory services

Group	Characteristics	Preferences	What to recommend
Pro-intensive CA	<ul style="list-style-type: none"> ● Small, medium and large farms ● Reduced tillage with direct seeding OR mechanized conventional tillage 	<ul style="list-style-type: none"> ● Like to see farmer exchange and training ● Like modernization, intensification and increased efficiency ● Appreciate direct seeding for reducing time and fuel costs ● Don't like use of animals for labour 	<ul style="list-style-type: none"> ● For those practicing CA already, emphasize the wider set of benefits, e.g. the potential of reduced soil disturbance for increased soil micro-organisms and on-farm biodiversity ● This can lead to uptake of additional agroecological practices e.g. reducing herbicide application and planting mixtures ● For those not practicing CA but interested, seek to engage them in trials on parts of their farm
Pro-diversity	<ul style="list-style-type: none"> ● Small farms with mixed crops and horticulture ● Small to large organic farms 	<ul style="list-style-type: none"> ● Like to see diverse crop mixtures, on-farm biodiversity (e.g. pollinators) ● Don't like to see large monocultures or areas of highly intensive, homogenous fields ● Don't like to see use of pesticides 	<ul style="list-style-type: none"> ● Emphasize that CA can be applied flexibly with the goal of increasing biodiversity, that it is not just about intensification or industrial agriculture ● Offer strategies for weed suppression without tillage or with strategic tillage, such as assessing weed types and planting forage crops ● For smallholders, raise awareness that direct seeders are available to rent through extension agents, research trials, service providers and associations.
Pro-yield	<ul style="list-style-type: none"> ● Small, medium and large conventional farms ● Practicing tillage 	<ul style="list-style-type: none"> ● Like to see highly productive, neat and tidy, efficient landscapes ● Sceptical of reducing tillage due to perceived lower yields and messiness related to ecological practices 	<ul style="list-style-type: none"> ● Emphasize that CA practices can be highly productive with good and sustained yields, especially throughout drought years ● Emphasize the cost-saving and potential increased profit margin of reduced tillage, plus the return on investment where farmers have the capital to purchase seeders ● Emphasize that CA can be implemented as part of neat, tidy, efficient and productive landscapes & show examples (photos or farm visits)

Further information

Weblinks

- Check the Organic Farm Knowledge platform for more practical recommendations.
- Q-Methodology

About this practice abstract and ConServeTerra

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