

Salient Points of Lectures on Wheat By Asif Sharif

PQNK Organic-Plus Wheat Production

Important Note: For a more comprehensive grasp of the concept, please listen the lectures repeatedly.

Preparation¹. After implementing laser levelling, rip the hardpan layer by deep ploughing and then carry out a water-washing process to leach the salts downwards. If pH value of the soil exceeds 8, use sulfuric acid². For every acre, prepare a solution by diluting ten litres of sulfuric acid in 200 litres of water. Install a tap on this 200-litre drum and gradually distribute the solution across the field while irrigating. This will facilitate the conversion of chemicals into salts, moving them beyond the root zone. Finally make 42 inches wide beds (can be more or less depending upon the size of the tractor).

Five lines per bed are recommended for wheat cultivation. Mulch can be either 'live' or 'dead,' with a preference for live mulch, provided it remains shorter than the primary crop³. Remember, PQNK is an inclusive and conclusive production process⁴ that relies 100% on Natural Algorithms for Soil Fertility and Plant Protection, enabling circular production. It is a self-sustainable process that doesn't require any external inputs except for seed. Here are some of the key points extracted from the lectures. However, please note that this checklist is not a substitute for listening to the lectures. To fully understand the concepts, it is essential to listen to the lectures multiple times.

1. Ideal spacing = 9" x 9". Seed potential is best exploited when planted at an accurate distance.
2. Desired plant population/acre in PQNK = 62000 with average tillers / plant = 35.
3. One seed **may** produce 80 – 85 tillers if enough space is provided.
4. On average, a PQNK panicle has 76 large grains; other has 60 small grains.
5. **One kg European wheat = 11000 to 12000 grains** (as it takes 9+ months till harvest).

¹ <https://youtu.be/naklRXVA7cE?si=305EuFcP6xPIJjX> (Part I)
<https://youtu.be/XHwdjn6cG4k?si=b-L4-wwiXPmXfHeG> (Part II)

² <https://www.youtube.com/watch?v=naklRXVA7cE>

³ Last year (2023), in addition to mixing radish and mustard seeds, I also added 10 kg/acre of mung bean seeds / acre. As the growing season for mung beans was over, it caused mung beans to die off a few weeks after germination. However, its fallen leaves provided mulch that played a role in regulating soil temperature during extreme weather. Regarding the challenge of trimming the wheat plants without affecting the mung beans, the solution was grazing by sheep and goats. Interestingly, they mostly seemed to find the mung bean plants unappealing and left them untouched

⁴ www.youtube.com/watch?v=jfsWeoPoj58

6. In European climates, the wheat crop benefits from a prolonged growing season that spans from September to August, facilitating the development of large grains.
7. In our region, the shorter window for growth, characterised by a brief spring season followed by early summers, results in grain size reduction.
8. Grains per kg in local conditions; none PQNK = **24000 to 28000**.
9. **PQNK; one kg wheat = 17000 – 27000 grains approximately.**
10. Carryout germination test before sowing any seed.
11. Wheat seed has 15 days of food packaging inside it.
12. **Hardpan** compaction = 400 to 450 psi (average); thickness = 12-14 inches in most fields.
13. A fractured hardpan offers more space to roots hence they grow deeper.
14. Longer roots access resources below and enhance its resilience against lodging in storms.
15. ***If sowing is done in the 3rd week of September (recommended in PQNK) then due hot conditions the plant would start vegetative growth instead of making tillers. Pruning is the Solution; you may have to do it thrice. Ensure the crop doesn't grow taller than 6-8 inches. Grazing with goats or sheep is the preferred method, with the goal of achieving 35 tillers by the start of January. I plan to sow my next wheat crop in the third week of September and aim to keep its height below 8 inches until the end of December. To manage this, I intend to use continuous sheep grazing, which I've observed to be more effective than goat grazing⁵. If necessary, I'll also use a brush cutter.***
16. One may use Rotavator without touching the ground. Mulcher is another option.
17. ***If you can get 62000 plants with 35 tillers each, then the potential is more than 100 mounds.***
18. Don't let the height be more than **8-10 inches till the end of January**.
19. Very first crop on PQNK may require foliar spray of 2% NPK if the crop color is yellowish.

⁵ Sheep graze close to the ground in a uniform pattern, resulting in shorter, even grass. Goats, on the other hand, are browsers and tend to graze less uniformly and more aggressively, leading to greater disturbance of vegetation and soil. Sheep have smaller, more delicate hooves, which cause less impact on the soil. In contrast, goats have larger, harder hooves and more active behavior, leading to more noticeable soil wear and field unevenness. Additionally, goats' tendency to browse at different heights and uproot plants causes more damage to the landscape, whereas sheep are less likely to cause significant soil erosion unless they are overgrazed.

20. Foliar application of 2% NPK is easier and better.
21. It should be done in the evening or morning to give it 30-45 min for absorption by the leaves.
22. Remember, fertilizers attract sucking insects.
23. The predominant fertilizer of choice by a farmer is DAP, which contains Phosphate along with urea. The Phosphate component transforms into Calcium Phosphate and becomes inaccessible within a week or ten days. Meanwhile, Urea, the other constituent of DAP, retains its effectiveness for a mere 8 -10 days. Consequently, there appears to be no rationale for spending on these fertilizers. Furthermore, nature provides an abundant supply of all the nutrients that plants require without any risk of depletion. This assertion is supported by the fact that plants have thrived on this planet for the past 400 million years.
24. Plants were designed by Nature to nourish all life forms on our planet, and they've sustained the diverse forms of life on Earth for millions of years. It is strange that humanity has deviated from this natural order by attempting to provide sustenance to plants through the use of fertilizers and pesticides. This practice contradicts the fundamental laws of nature. Actually farmers are influenced by the marketing strategies of fertilizer and pesticide companies that have, in a sense, 'brainwashed' us. The truth is, plants do not need external inputs to thrive. Nature has already equipped the soil with all the essential nutrients in a sustainable form for plants. Our role is to let nature function freely, without harming the soil microbes, which act as mother for plants or 'nurturers,' converting these natural resources into an available form. These nurturing organisms provide plants with a well-balanced diet, ensuring their health and optimizing yield. In return, plants offer nutrient-dense and gluten-free wheat.
25. A conventional farmer typically uses 50 kg of seed and few bags of chemical fertilizer to get 60 small grains per panicle. In contrast, a PQNK farmer uses only 5-10 kg of seed without any fertilizer and achieves 76 large grains per panicle.
26. Very first PQNK crop has a tendency to go yellowish. Be vigilant. If it happens, do fertigation Phosphate and urea. However, foliar application of 2% NPK is easier and better. Recommended time for spray is early morning or evening.

27. The following PQNK model has balanced nutrition. Its price in international market is 600\$ (per ton) as it is termed as 'Super Organic' (organic wheat price is 400\$ and normal price is 200\$)⁶.

28. Multi cropping in wheat is recommended i.e. reddish, vegetables, sugarcane and mustard.

29. Peas is a good companion of wheat.

30. How to implement Lucerne and Wheat intercropping? In this voice message, Dr. Asif Sharif addresses a suggestion from a PQNK farmer.

<https://drive.google.com/file/d/1mjVkC8q7dgsDFi89lvBwhSLarSmokWKy/view?usp=sharing>

31. Weight of PQNK grain is double i.e. 8 gm vs 4 gm of conventional wheat.



32.



33. Spikes farming starts after about 100 days. Filling of grains takes another 15-20 days.

34. Time from sowing to harvesting is 160 days.

35. If low temperature tenure is about 4 to 4 ½ months, then production is much better.

36. In case of early heat wave (as happened in Feb, 22) plant maize on both sides of beds⁷.

Given below are key messages shared in the PQNK groups about wheat crops, along with selected screenshots from Dr Asif Sharif's presentations. For a comprehensive understanding of the process, it is highly recommended to listen carefully to the lectures.

⁶ https://www.indexmundi.com/commodities/?commodity=wheat&months=360#google_vignette

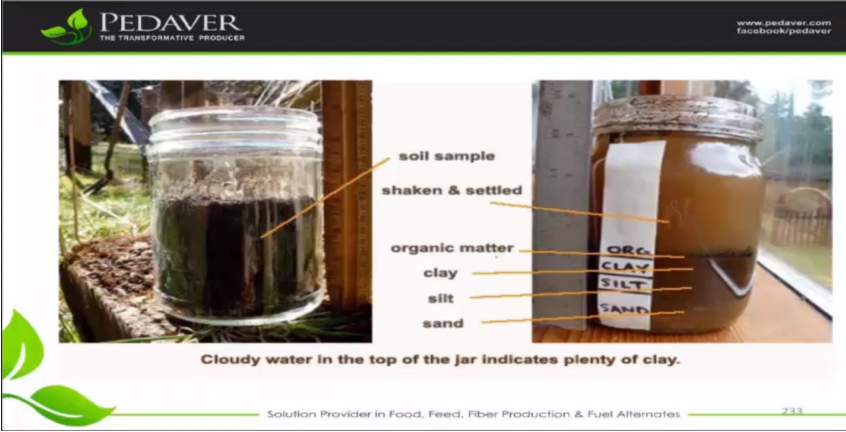
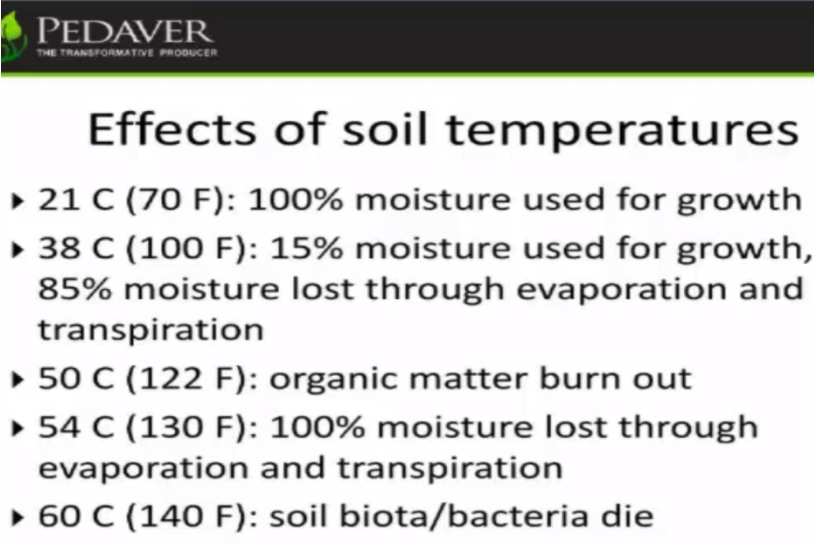
⁷ <https://www.youtube.com/watch?v=snAZ0hdYecc&feature=youtu.be>

Links to several lectures are also provided below. These insightful talks are invaluable for farmers and will significantly aid in the cultivation of various crops, including wheat.

Date	Author / Subject	Text
08/09/23	Dr Asif Sharif; Pruning of wheat	Pruning of wheat serves two purposes. • To increase tillers per plant. • Suppressing overgrowth of weeds. Our target should be having 1.5 million panicles per acre, it will give us 70 plus mounds yield. Make sure all PQNK steps are followed including mulching, it is essential to save crops from early heatwave.
26/11/23	Mulching	The only two things to be careful of when using live mulch is: - Whether the mulch might outgrow the crops, taking away the sunlight. Or - When they are both forming tubers and take each other's space in the soil. Alfalfa can reach a height of 2 feet, while wheat can grow to over 4 feet. Thus, Alfalfa cannot grow higher than wheat, but it needs to be cut before planting wheat. Moreover, Alfalfa does not grow in winter, so wheat will overshadow it, and it will start growing again after the harvest of the wheat.
06/12/23	Acre Dimension	One acre is 198 x 220 feet. There can be 40 beds on the width side and 44 on the length side. So the running length of all beds is $220 \times 40 = 8,800$ Running Feet. Ideally we need 2 million wheat heads that comes to $2,000,000$ divided by $8,800 = 227$ tillers per running feet. If we get 60 seeds per head (which is the minimum average), we get $120,000,000$ seeds per acre. And if 22,000 seeds make 1 kg we are talking about 5,454 kg of wheat per acre. And that is 136 mounds. Our national average is 28 mounds.
07/12/23	Dr Asif Sharif	Sequel to the wheat: Tillers are additional stems that develop off of the main shoot of the plant. Primary tillers form in the axils of the first four or more true leaves of the main stem. Secondary tillers may develop

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		from the base of primary tillers if conditions favor tiller development. Wheat generally begins to tiller after two or three leaves develop on seedlings, and about one new tiller emerges with each additional leaf. The first tiller emerges in the junction of the first leaf (or coleoptile) as the second, third or fourth leaves emerge. The next tiller develops in the second leaf junction one phyllochron (the time interval between the appearances of successive leaf tips) later, and so on. Secondary tillers develop in leaf junctions of primary tillers. Not all tillers in wheat plants produce seeds equally. The tillers that emerge later in the season may not have enough time to develop and mature before the end of the growing season, and therefore may not produce seeds.
Sep, 2023	Question by a member and Reply by Dr Asif Sharif	Sir, my query is regarding any possible one time alteration in the sequence of steps involved in transitioning to the PQNK Model, which you have comprehensively explained repeatedly. My inquiry pertains to the possibility of eliminating the waiting time after 'water wash' (in a special case only) by reordering the steps. What if the 'water washing with sulfuric acid' is performed at the end just after sowing wheat on the beds? While I understand this may not 'wash' the entire field uniformly, it could potentially allow the farmer to advance his sowing date by a few days by not waiting for the field to dry out so that the tractor can move in to make beds. Is it simply a matter of 'gaining few days' vs 'inconsistent water wash' or there are some other considerations/ disadvantages as well? Reply by Dr Asif Sharif Sulphuric acid is not an un-harmful substance. It is needed to break the salt crystals so that the salt can leech down with the water. But it is harmful for the microorganisms and plants. We chose from the two worst the best. I hope you now understand that you cannot change the order. But, why would you want to do this in the first place? When you break the hardpan, the water will disappear within hours. When

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		the sun is shining on the land, it will soon be ready to make the beds. Moreover, we advise to sow the wheat between half September and half October.
	Furrow leveling is a preferred option (Q & A)	"Respected sir, why do we need laser levelling of huge plots? Why don't we ensure levelling of water channels as after a few crops we will not be watering any more or rarely will water the crops?" Reply by Dr Asif Sharif "You are correct. We have been advocating for this all along. We recommend using longer fields for more efficient planting and harvesting. The length of the fields should be increased with minimal soil shifting. Furrow levelling is a preferred option; however, we have not yet developed a machine that can laser level furrows exclusively. In a small-scale farm operation, this can be easily accomplished, similar to how we level watercourses. In a well-managed PQNK farm, irrigation will not be necessary once the soil has matured."
	Ideal Soil composition	What should be in soil? ▶ Water & vapours 25% - overall ▶ Air 25% - overall ▶ Organic matter 5% - we have about 0.5% ▶ Sand (largest) 40% - dry soil ▶ Silt (finer) 25% - dry soil ▶ Clay (finest) 25% - dry soil ▶ When sand, silt, clay, and humus are each present in mentioned quantities, it is a good loam

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	Jar Test to know soil composition	 Cloudy water in the top of the jar indicates plenty of clay.
	Water consumed / wasted vs Soil temp	 Effects of soil temperatures ▶ 21 C (70 F): 100% moisture used for growth ▶ 38 C (100 F): 15% moisture used for growth, 85% moisture lost through evaporation and transpiration ▶ 50 C (122 F): organic matter burn out ▶ 54 C (130 F): 100% moisture lost through evaporation and transpiration ▶ 60 C (140 F): soil biota/bacteria die
11 Oct 2021	Wheat production on Paradoxical Agriculture	https://www.youtube.com/watch?v=04Yx3A12fLs by Dr Asif Sharif

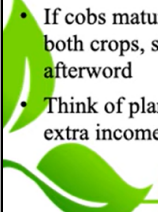
Date	Author / Subject	Text																																																																						
		Wheat yield estimation PQNK vs Conventional update Dec 1, 2022 <table><tr><th>Description</th><th>1</th><th>2</th><th>3</th><th>4</th><th colspan="2">Conventional</th></tr><tr><td>Plants per acre</td><td>60,083</td><td>50,000</td><td>40,000</td><td>30,000</td><td>80,000</td><td>120,000</td></tr><tr><td>Panicles per plant</td><td>25</td><td>20</td><td>20</td><td>20</td><td>5</td><td>5</td></tr><tr><td>Panicles per acre</td><td>1,502,069</td><td>1,000,000</td><td>800,000</td><td>600,000</td><td>400,000</td><td>600,000</td></tr><tr><td>Seeds per Panicle</td><td>80</td><td>80</td><td>80</td><td>80</td><td>60</td><td>60</td></tr><tr><td>Total seed per acre</td><td>120,165,517</td><td>80,000,000</td><td>64,000,000</td><td>48,000,000</td><td>24,000,000</td><td>36,000,000</td></tr><tr><td>Grains per Kg</td><td>22,000</td><td>22,000</td><td>22,000</td><td>22,000</td><td>25,000</td><td>25,000</td></tr><tr><td>Yield per acre Kg</td><td>5,462</td><td>3,636</td><td>2,909</td><td>2,182</td><td>960</td><td>1,440</td></tr><tr><td>Yield per acre mound</td><td>137</td><td>91</td><td>73</td><td>55</td><td>24</td><td>36</td></tr><tr><td>Yield per acre ton</td><td>5.46</td><td>3.64</td><td>2.91</td><td>2.18</td><td>0.96</td><td>1.44</td></tr></table> The numbers 1 to 4 stand for the variation in the number of Plants and tillers when on PQNK. This depends on how the seed was planted and how well the pruning was done.	Description	1	2	3	4	Conventional		Plants per acre	60,083	50,000	40,000	30,000	80,000	120,000	Panicles per plant	25	20	20	20	5	5	Panicles per acre	1,502,069	1,000,000	800,000	600,000	400,000	600,000	Seeds per Panicle	80	80	80	80	60	60	Total seed per acre	120,165,517	80,000,000	64,000,000	48,000,000	24,000,000	36,000,000	Grains per Kg	22,000	22,000	22,000	22,000	25,000	25,000	Yield per acre Kg	5,462	3,636	2,909	2,182	960	1,440	Yield per acre mound	137	91	73	55	24	36	Yield per acre ton	5.46	3.64	2.91	2.18	0.96	1.44
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4 Feb 2023	Protection; extreme temp	https://www.youtube.com/watch?v=snAZ0hdYecc&feature=youtu.be Protect wheat crop from extreme temperatures																																																																						
Oct, 2021	Organic plus wheat	https://www.youtube.com/watch?v=mqqcWINS8wI Organic plus wheat production without purchased inputs - Paradoxical Agriculture PQNK																																																																						
26 Feb 2023	Syphon Tubes	https://www.youtube.com/watch?v=PWm3dFR8B48																																																																						
20 Feb 2023	Why be concerned with soil life	https://www.youtube.com/watch?v=h5-Tbj80Jrs																																																																						
5 Feb 2023	crops without irrigations	https://www.youtube.com/watch?v=ru-gB_Qu14Y																																																																						
11 Feb 2021	Irrigation under PQNK process	https://www.youtube.com/watch?v=qm8_HARR8nY																																																																						

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11 Jan 2020	From where to take extra profit	https://www.youtube.com/watch?v=ox1iC-YfemI
11 Jan 2020	Hybrid and GMO vs Heirloom: Selection	https://www.youtube.com/watch?v=drwEMChgswc
11 Jan 2020	Uniformity in production	https://www.youtube.com/watch?v=K49KK-IRr7A
11 Jan 2020	Seed placement with low soil disturbance	https://www.youtube.com/watch?v=7HK6CVpvtDg
7 Jan 2020	Crop establishment	https://www.youtube.com/watch?v=jRnGk_xfblo
16 Mar 2023	Weight of PQNK wheat head is double than conventional	www.youtube.com/watch?v=KKVuxAVRbug
4 Mar 2023	Crop in Crop and Crop after Crop	www.youtube.com/watch?v=HsPj4T133kY&t=661s
4 Mar 2023	The use of high TDS water on PQNK for crop production	www.youtube.com/watch?v=JAajpGjldLU&t=140s
1 Mar 2023	PQNK save crops in extreme weathers	www.youtube.com/watch?v=aloLoAfeiMs
28 Feb 2023	PQNK is inclusive and conclusive production system	www.youtube.com/watch?v=jfsWeoPoj58

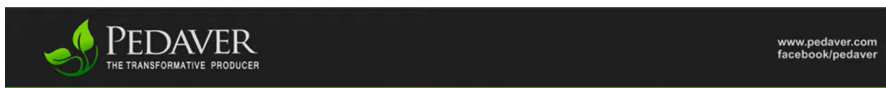
Date	Author / Subject	Text
26 Feb 2023	Application of water through Syphon Tubes - part of water management	www.youtube.com/watch?v=PWm3dFR8B48
21 Feb 2023	Soil test is designed to create demand for Fertilizer	www.youtube.com/watch?v=qLOMSXMkYsk
22 Feb 2023	Appreciate the abundance in nature	www.youtube.com/watch?v=jn4elet_pCY
20 Feb 2023	Why be concerned with soil life?	www.youtube.com/watch?v=h5-Tbj80Jrs
11 Feb 2023	Hardpan is one of the worst restrictions for functioning of soil system	www.youtube.com/watch?v=abNlxdVBLA
5 Feb 2023	We can grow crops without irrigations	www.youtube.com/watch?v=ru-gB_Qu14Y
4 Feb 2023	Wheat & Corn combo - protect your crops from extreme temp	www.youtube.com/watch?v=snAZ0hdYecc
23 Dec 2022	PQNK is the latest	www.youtube.com/watch?v=WQFcfD4GW0o

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	scientific under-standing	
23 Dec 2022	Agrochemicals is the biggest and most destructive scam of all times	www.youtube.com/watch?v=bIOZ8pZcvVM&t=376s
23 Dec 2022	How do we demolish the natural provision & protection system?	www.youtube.com/watch?v=h9TWczY0YE8
21 Dec 2022	Five levels of crop production	www.youtube.com/watch?v=bmyt7FWPs68&t=1s
16 Dec 2022	PQNK is probiotic	www.youtube.com/watch?v=R9go2vTdhis
14 Dec 2022	From rice to wheat and other crops	www.youtube.com/watch?v=pOkca1PZiSA
22 Jan 2023	Yield gained Food lost	www.youtube.com/watch?v=3sFkwgt7DKM
15 Jan 2023	Planting wheat and canola on PQNK with no-till precision planter	www.youtube.com/watch?v=Q4WCoHAUTZc
12 Jan 2023	Soil is living if we let it breathe	www.youtube.com/watch?v=PpsDNAo-xNs
6 Jan 2023	Gut biology is dependent	www.youtube.com/watch?v=PxJvcCjrPjI&t=346s

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	on Soil biology	
3 Jan 2023	Q & A about PQNK	www.youtube.com/watch?v=bLKf-Z3mPDo&t=1259s
30 Dec 2022	Basic farming essentials	https://www.youtube.com/watch?v=7bghW4w1JSI Pakistan, the land of prosperity; 'Gold Sparrow'
29 Dec 2022	Type of organic mulch in PQNK	www.youtube.com/watch?v=Hk1QAIRQdfQ
28 Dec 2022	Natural provision and protection system	www.youtube.com/watch?v=---dbCDWIIGA
27 Dec 2022	Skills set required in agriculture	www.youtube.com/watch?v=eTGdDzWUddg
4 Mar 2023	Crop in Crop and Crop after Crop	www.youtube.com/watch?v=HsPj4T133kY&t=661s
25 Jul 2023	Predators in support of PQNK	https://www.youtube.com/watch?v=fkqv-liG7VU

Date	Author / Subject	Text
		  Corn  in Wheat - Garlic • Weather cycles are erratically changing, disrupting crops • 1st week of February and temperature is touching 30C • Wheat crop is already forming ears (Spikes), with heat they will premature, grains will shrivel and we will have lower yield. Grain weight may drop to 30,000 seeds per Kg in place of 17,000 (PQNK). Onion & Garlic is forming bulbs • We have to act fast. Plant corn on both sides of the bed to shade wheat, onion & garlic. Use ethanol to help plants withstand higher than usual temperatures to form bigger bulbs • Small farmers, those can harvest manually, will have additional income, which will cover the wheat yield loss • Large farmers, who use combine for harvesting, may collect corn stalk manually and harvest the wheat with combine harvester • If cobs mature at the same time of wheat, harvester can harvest both crops, simultaneously and grains can be separated afterward • Think of planting alternate crops in wheat and other crops to get extra income, use power of your imagination, sky is the limit     Think smart, use PQNK to overcome weather manipulations

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		Raised bed, No-Till, Precision planting is the End-to-End solution: 1. No runoff water, no loss of topsoil 2. Total water absorption 3. No surface and capillary evaporation water loss 4. Maximum water use efficiency, <u>better than drip</u> 5. <u>No need for tillage & agrochemicals</u> 6. <u>Very low cost of production</u> 7. <u>Times better yield</u> 8. <u>Higher export quality organic plus produce</u> www.facebook.com/pedaver





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Telegram Group Link:
<http://t.me/pakpqnk>

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